Cash for Women’s Empowerment? A Mixed-Methods Evaluation of the Government of Zambia’s Child Grant Program

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Summary. —

The empowerment of women, broadly defined, is an often-cited objective and benefit of social cash transfer programs in developing countries. Despite the promise and potential of cash transfers to empower women, the evidence supporting this outcome is mixed. In addition, there is little evidence from programs at scale in sub-Saharan Africa. We conducted a mixed-methods evaluation of the Government of Zambia’s Child Grant Program, a poverty-targeted, unconditional transfer given to mothers or primary caregivers of young children aged zero to five. The quantitative component was a four-year longitudinal clustered-randomized control trial in three rural districts, and the qualitative component was a one-time data collection involving in-depth interviews with women and their partners stratified on marital status and program participation. Our study found that women in beneficiary households were making more sole or joint decisions (across five out of nine domains); however, impacts translated into relatively modest increases in the number of decision domains a woman is involved in, on average by 0.34 (or a 6% increase over a baseline mean of 5.3). Qualitatively, we found that changes in intrahousehold relationships were limited by entrenched gender norms, which indicate men as heads of household and primary decision makers. However, women’s narratives showed the transfer increased financial empowerment as they were able to retain control over transfers for household investment and savings for emergencies. We highlight methodological challenges in using intrahousehold decision making as the primary indicator to measure empowerment. Results show potential for unconditional cash transfer programs to improve the financial and intrahousehold status of female beneficiaries, however it is likely additional design components are need for transformational change.

Keywords

cash transfers; women’s empowerment; decision making; Zambia; Africa

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1. INTRODUCTION

The “empowerment of women,” broadly defined, is an often-cited objective and benefit of social cash transfer (SCT) programs in developing countries. Many programs are designed specifically to place resources in the hands of women (versus men) based on the assumption that cash will not only empower women but also result in the accrual of human capital and child-specific benefits to households in ways that would not occur if men received the cash. Thus, targeting women is not only expected to make programs gender sensitive but is also often a key component necessary to achieve overall program goals (Doss, 2013). Although the design of SCTs varies significantly, the idea that “just giving cash” to women can create meaningful change is attractive, particularly since the coverage of SCTs has increased exponentially in the recent past. For example, according to The State of Social Safety Nets 2015, the average developing country has approximately 20 social safety nets of various designs, benefiting 1.9 billion recipients globally (World Bank, 2015). Specific to this paper, the number of unconditional cash transfers (UCTs) in Africa has nearly doubled since 2010, increasing from 21 to 40 countries (out of 48 countries total) over a four-year period (World Bank, 2015). Therefore, as a policy instrument, SCTs are attractive for actors interested in promoting women’s empowerment, particularly in cases where SCTs are poverty-targeted and institutionalized as long-term government programing.

Despite the promise and potential of SCTs to empower women, the evidence supporting this outcome is mixed. For example, van den Bold, Quisumbing, and Gillespie (2013) summarize quantitative and qualitative evidence on SCTs and other economic-based interventions with the potential to empower women in developing settings. Using inclusive definitions of empowerment, their findings indicate that although qualitative evidence on conditional cash transfers (CCTs), largely from Latin America and the Caribbean (LAC), generally points to positive impacts, quantitative results are mixed. In addition, due to the mixed results and the paucity of evidence from UCTs, the authors state that few conclusions can be drawn around their ability to meet the objective of empowering women. Therefore, it is unclear what assumptions can be drawn in the context of Africa, where gender dynamics and poverty are markedly different from LAC and where government programing is predominantly unconditional. Further, given the potential for publication bias, where publication of non-impacts may not be pursued, one could draw the conclusion that in the context of UCTs, the assumption of positive impacts on women’s empowerment is not supported.

However, there may be exceptions to these generalizations. SCTs encompass a multitude of program designs, going far beyond basic considerations around targeting and conditions. For example, some SCTs include nutrition trainings or other components, such as delivery of cash through mobile money or financial institutions (e.g., preprogramed ATM cards), which may build women’s knowledge, social capital, or interaction with formal institutions and thus provide additional pathways for gender-related impacts. In addition, there are a number of research challenges which make drawing conclusions across studies difficult, starting with the definition and measurement of “empowerment.” Although most researchers ascribe to some version of Kabeer’s (2001) definition—“the expansion in people’s ability to make strategic life choices in a context where this ability was previously denied to them”—this

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concept combines several themes rather than a single focus. Further, it includes the dynamic expansion of options, choice, control, or power, which is difficult to operationalize, particularly in empirical work. In fact, there is little consensus on the domains of empowerment (socio-cultural, economic, familial, legal, political, and psychological) at different levels of aggregation found across the development literature (Malhotra, Schuler, & Boender, 2002). Therefore, it is not surprising that there is an ongoing debate as to whether or not traditional empirical direct measures of empowerment, including women’s decision-making indicators, are meaningful measures that can show responsiveness to interventions (Bishop & Bowman, 2014; Carter et al., 2014; Peterman, Schwab, Roy, Hidrobo, & Gilligan, 2015). Finally, as empowerment is a process rather than a static state (women’s status), evaluations must be conducted over a sufficient time span, which is often a luxury in development research, where there may be pressure to show impacts and program results to political actors and funders.

We conducted a mixed-methods evaluation of the Government of Zambia’s Child Grant Program (CGP), a poverty-targeted UCT given to mothers or primary caregivers of young children aged zero to five at enrollment. The quantitative component was a four-year longitudinal clustered-randomized control trial (cRCT) among 2,519 households in three rural districts. The qualitative component was a onetime set of in-depth interviews (IDIs), conducted in Kaputa District after the conclusion of the cRCT, involving women and their partners stratified on marital status, program participation and changes in decision making over the impact evaluation panel period. We examined impacts on women’s household decision making and explored, through qualitative work, how the program affected overall intrahousehold dynamics. We found that women in beneficiary households were making more sole or joint decisions (across five out of nine domains); however, impacts translated into relatively modest increases in the number of decision domains a woman is involved in, on average by 0.34 (a 6% increase over the baseline mean). Qualitatively, we found that changes in intrahousehold relationships were limited by entrenched gender norms, which indicate men as heads of household and primary decision makers. However, women’s narratives showed the transfer increased financial empowerment as they were able to retain control over transfers for household investment and savings for emergencies.

This paper contributes to the literature by adding to the scarce mixed-methods evidence around women’s empowerment and UCTs in Africa. The evaluation is of particular interest, as it uses a large-scale, government-run program, instead of temporary pilot program implemented by a nongovernmental organization. In addition, we are able to make conclusions based on a relatively long period of program receipt (four years), therefore overcoming limitations of other studies, which may examine only shorter-term impacts. Finally, the combination of quantitative and qualitative data allow us to interrogate the concept of women’s empowerment and assess if quantitative measures of decision making, commonly used in the literature to proxy for bargaining power, are likely to capture the intended concept assigned by researchers.
2. THEORETICAL FRAMING AND REVIEW OF LITERATURE

Our analysis was guided by economic theories of intrahousehold bargaining and resource allocation, which have been utilized to examine and test production and consumption decisions in household allocation as well as inform the determinants of household decision-making processes (Doss, 2013). There are several channels through which an SCT could affect a woman’s decision-making power (in relation to her spouse or other household members), including changes due to increasing availability of cash transferred directly to the woman, or increased social networks, mobility or knowledge, in the case the SCT is paired with additional training, information or contact with other services (health or financial). In the case of a UCT without co-responsibilities or other program components, we expect her position to be affected purely by the potential economic and financial gains from extra cash.

Impacts of cash transfers on women’s empowerment outcomes have been reviewed elsewhere (van den Bold et al., 2013) and there is considerable literature, particularly within the LAC CCTs; thus, we do not conduct a comprehensive review here. However, since there have been relatively few evaluations of UCTs in Africa, we provide a brief review of existing published and gray literature from these regional and typology specific programs, with a particular focus on decision-making outcomes. A mixed-methods evaluation of the Kenya Hunger Safety Net Programme, where approximately 75% of named beneficiaries are women, found mixed results on women’s social and economic empowerment after two years (Oxford Policy Management (OPM), 2012). Although the program increased the proportion of women making primary decisions regarding household budgets and increased their role in household income generation (specifically petty trading and small businesses), there were also qualitative reports of increased tension between spouses. Mixed results were also found in a quantitative assessment of the Government Child Support Grant (CSG) in Soweto, one of the poorest urban wards in Johannesburg, South Africa (Patel & Hochfeld, 2011). Findings suggested that the CSG supported women’s ability to control and allocate resources, thus playing an essential role in improving overall household food security. However, women remained responsible for care functions of their household, and there was little overall transformation of gender relations, leading authors to suggest that programs like the CSG need to work “in concert with other public policies” to achieve a gender-transformative effect. A follow-up quantitative study of the CSG in the same area confirmed the importance of the additional income support women received and it’s linkages to improved financial decision-making power, as well as in other domains related to children, albeit to a lesser extent (Patel, Knijn, & Van Wei, 2015). Finally, Peterman et al. (2015) measured the impact of a cash and food transfer program, over 18 months given to mothers and primary caregivers of young children aged three to five attending community-run preschools in Northern Uganda. Results indicated weakly significant impacts on sole and joint decision-making totals (aggregating six decision-making domains) driven by cash rather than food transfers, indicating that cash may have changed household dynamics in a way that food (traditionally under woman’s domain) did not. However, authors also find large variations in how women are ranked in terms of decision making depending on how indicators are constructed, suggesting that questionnaire wording and indicator aggregation decisions are important determinants of ultimate results. Therefore, although UCTs have
been shown to impact on some quantitative measures of decision making, studies overall highlight important limitations of cash-only interventions in making transformational change.

3. PROGRAM AND SETTING

The Zambian Ministry of Community Development, Mother and Child Health began implementing the CGP in 2010 in the districts of Kalabo, Shangombo, and Kaputa. Together, the districts are some of the most remote in the country, with Kalabo and Shangombo located in the Western Province near the Angolan border and Kaputa located in the Northern Province on the border with the Democratic Republic of Congo. These areas also represent some of the poorest in the country, with high rates of mortality, morbidity, and stunting and wasting of children under the age of five. The overall goal of the program was to reduce extreme poverty and curb the intergenerational transfer of poverty (American Institutes for Research (AIR), 2011).\(^1\) The CGP is geographically targeted, meaning that in eligible areas any household with a child from the age of zero to five years can qualify to be a beneficiary. The program functions at the community-level with assistance from existing Community Welfare Assistance Committees (CWACs), comprising of approximately 10 members elected by communities who alongside village leaders were responsible for assistance in enrollment, information and awareness raising and grievance mechanisms. Cash transfers were distributed bimonthly through a local pay-point manager of 120 Zambian kwacha (ZMW) rebased (approximately US $24), given to the primary female adult or caregiver of the child. This amount was calculated to be equal to the amount needed to purchase one meal per day for all household members and represents, on average, 27\% of baseline household expenditure. As previously mentioned, there were no coresponsibilities to receiving cash, and no additional program components implemented as part of the CGP. Analysis shows that after 48 months, the CGP had a positive impact on a range of human capital– and poverty-related domains, including increased consumption, food security, school enrollment of children, investment in productive activities, and reduced poverty, among others (American Institutes for Research (AIR), 2015). In addition, operational results indicate that implementation was successful, with beneficiaries receiving full transfer amounts, at regular intervals, with little community-level stigma attached to beneficiary status (American Institutes for Research (AIR), 2015). In 2013, the combined reach of the CGP and a similar transfer scheme applying a labor-constrained targeting model (Multiple Categorical Targeted Grant) with operation in geographically distinct areas, was 61,000 households in 19 districts, with a planned doubling in case load in 2014 (Quarles van Ufford et al. 2016).

According to the United Nations’ most recent Human Development Index, Zambia ranks low on overall human development at 163 out of a total of 186 rankings (United Nations Development Programme (UNDP), 2013). This rank remains unchanged when examining the Gender Inequality Index, which measures a set of gender-specific indicators such as the

\(^1\)According to the CGP operations manual, the specific objectives of the program are as follows: (1) supplement, and not replace, household income, (2) increase the number of children enrolled in and attending primary school, (3) reduce the rate of mortality and morbidity of children under age five, (4) reduce stunting and wasting among children under age five, (5) increase the number of households having a second meal per day, and (6) increase the number of households owning assets such as livestock.
male-to-female population ratio with any secondary education or participation in the labor force. According to the 2013–14 Demographic and Health Surveys (DHS), the median age at first marriage for Zambian women aged 20–49 was 18.7 and the total fertility rate for the three years preceding the survey was 5.3 births per woman, with 29% of young women aged 15–19 already mothers or pregnant with their first child (Central Statistical Office (CSO) [Zambia] & ICF International, 2014). These statistics vary greatly between rural and urban; for example, rural women have on average three more births compared to urban women. Moreover, 47% of ever-married women aged 15–49 reported having experienced intimate partner physical, sexual, or emotional violence, indicating entrenchment of norms that marginalize women.

Norms surrounding gender and gender inequalities in Zambia have been linked to the perpetuation of poverty, through limiting women’s engagement in certain types of labor and economic activities, particularly those with the greatest economic payoffs (Cole, Puskur, Rajaratnam, & Zulu, 2015). Gendered division in labor and employment stemmed from historical Christian colonial ideologies which placed men as the “breadwinner” and women as the “housewife” and have contributed to women’s exclusion from preferred employment positions (Evans, 2015). In some cases, catalyzed by economic necessity, this landscape is changing, as women engage in activities which were previously viewed as beyond their capabilities, however women remain responsible for the majority of unpaid care work and significant gendered beliefs exist surrounding women’s role within the household (Evans, 2014).

4. DATA AND EVALUATION DESIGN

(a) Quantitative data and evaluation design

The CGP impact evaluation was designed as a cRCT since the Zambian government was not able to immediately scale up the program due to financial and human resource constraints. The study design included two levels of randomization: (1) at the community level and (2) at the household level. In the first step of the randomization, 30 CWACs per district (out of roughly 100 CWACs in each of the three districts) were selected randomly by lottery to appear in the study. Further, of 90 total CWACs, half (45) were randomly assigned to treatment status (to receive the CGP) and the remaining half (45) were randomly assigned to the control status (or delayed entry group). As the Ministry lacked sufficient funds to roll out the program to all communities in the three target districts, randomization was deemed to be a fair and ethical way to determine the order in which communities received the program. The lottery was conducted publicly by the Ministry with representatives from all three target districts, in collaboration with the research team. This determination was made after the baseline survey had been administered within the study sample, to ensure unbiased implementation of the survey as well as transparency in allocation to treatment arm. To select the baseline sample, all eligible households (limited to those with a young child aged zero to three) within the 90 CWACs were identified, and 28 households per CWAC were then randomly sampled for inclusion in the study. This led to a randomly selected, representative sample of 2,519 households and 14,565 individuals. The sample was powered to be able to detect impacts on child anthropometry (subgroup of children age zero to five),
accounting for attrition and nonresponse rates. The baseline survey was conducted in collaboration with Zambian survey firm Palm Associates during October–November 2010. Four follow-up surveys on the baseline household were subsequently collected after 24, 30, 36, and 48 months. This analysis excludes the 30-month follow-up as it was a shorter survey with the objective of assessing the impact of the program on consumption smoothing during the harvest season and is therefore less comparable across all indicators utilized here. Ethical review of the impact evaluation was obtained by American Institutes for Research (AIR) in Washington, DC, and the University of Zambia’s Research Ethics Committee; informed consent was obtained from all study participants.

The survey instrument contains questions on a wide variety of topics ranging from consumption to productive activities to early child development to socioeconomic status and is meant to measure comprehensive impacts of the CGP across sectors. The instruments also have a module on women’s empowerment, saving, and future expectations that contains intrahousehold decision-making questions asked of the primary female (CGP beneficiary) in each household. Our analysis sample comprises all female respondents to the women’s empowerment module who answered at least one of the decision-making questions in each one of the four data collection waves we consider in our analysis. As shown in Appendix Table 7, of the 2,492 female respondents at baseline, 444 were excluded either because the household could not be contacted at one or more follow-up waves (household attrition, 291 cases or 11.7% of the baseline sample) or because the individual answering the women’s empowerment module was not the same person in all the follow-up interviews (individual attrition, 153 cases or 6.1% of the baseline sample). We restricted the sample to allow the measurement of impacts over time among the same women to be able to accounting for their baseline level of decision-making power. Further, of the 2,049 full panel women, 17 additional respondents were excluded because they have missing information for the set of control variables we use in the regression analysis. The final balanced panel sample has 2,031 observations for each wave and a total combined sample of 8,124 observations.

As household and individual attrition are potential concerns for both the internal and external validity of the study, we conducted attrition analysis for the panel sample. We investigated overall attrition by comparing the percentage lost to follow-up in the treatment group versus the control group over the 48-month panel. If attrition is correlated with treatment, it could raise the concern that we are estimating a biased program impact; however, our results show that 19.3% and 17.7% of individual women were lost to follow-up in the treatment and control group, respectively, with a p-value difference of 0.33. Further, we investigated the potential of differential attrition by comparing attrition levels by background characteristic (Appendix Table 8) and by decision-making outcomes (Appendix Table 9).

2. In actuality, any household with a child aged zero to five residing in treatment areas was eligible to receive the program, however for the purposes of the longitudinal survey, the choice was made to restrict the baseline sample to households with a child aged zero to three.
3. Full survey instruments and technical reports are publicly available on the Transfer Project website: http://www.cpc.unc.edu/projects/transfer.
4. Further, household-level attrition can be broken down into the following: 169 non-contact due to migration out of the area or temporary absence (6.8% of the baseline sample), 31 refusal (1.2% of the baseline sample) and 91 due to other reasons (3.7% of the baseline sample).
5. For the sake of comparison, we maintain the same number of observations between adjusted and unadjusted models.
Table 9). Column 8 of both tables shows that there are no significant differences across 12 control indicators and 20 decision-making outcomes, indicating that it is unlikely differential attrition is a concern for our analysis. Despite this, it is important to note that overall, older, more educated women, living in the Kaputa district and with higher composite sole or joint decision making are more likely to be lost to follow-up—thus limiting the generalizability of our results. To further assess the potential influence of attrition on our findings we calculate Lee (2009) bounds on the potential treatment effect given extreme assumptions on attrition bias and report the results in Section 6.3.

(b) Qualitative data collection

The qualitative component consisted of 30 IDIs with women and 10 IDIs with male partners or other decision makers in the household of the women interviewed, collected at one point in time in the Kaputa District. The women and their partners were purposefully sampled from the longitudinal quantitative sample stratified on three indicators: (1) marital status (married and cohabiting versus unmarried)\(^6\), (2) changes in quantitative measures of decision making over time (as a proxy for changes in women’s empowerment), and (3) treatment or control group. Interviews among CGP beneficiaries versus control accounted for approximately three-quarters of the households and one-quarter of the IDIs, respectively. Since beneficiaries had been receiving transfers for four or more years at the time of fieldwork, it was particularly important to conduct interviews with non-beneficiaries in order to examine any underlying differences in responses. Interviews were conducted in villages in rural areas accessible at the time of fieldwork, ranging from 0.5 km to 60 km from Kaputa’s district center. The ages of women interviewed ranged from 23 to 70 years (measured at the end of the 48-month impact evaluation). A listing of women’s IDIs, including stratifying characteristics is included in the Appendix Table 10.

As the qualitative work was initiated after analysis of the quantitative survey had started, the specific objectives were as follows: (1) to provide contextual information regarding gendered decision-making norms within the evaluation sample, (2) to triangulate findings from the quantitative evaluation and (3) to provide critique and reflection on the use of decision-making indicators, as included in the quantitative evaluation, as a proxy for women’s empowerment. The protocols for qualitative work were developed based on existing literature and examples of field protocols from similar studies examining gendered impacts of cash transfers (Buller, Hidrobo, Peterman, & Heise, 2016; Peterman et al., 2015). The semi-structured interview guide consists primarily of open-ended questions, probes, and follow-ups, with questions covering thematic areas around gender norms and activities, economic empowerment, decision making, and the impact of the CGP on intrahousehold relationships. Our objective in selecting these topics was not only to explore pathways and triangulate quantitative results but also to investigate how women and men view and conceptualize “empowerment.” Additionally, a participatory ranking was used for women and men to categorize 12 household decisions as “most important,” “moderately important,” and “least important.” In this exercise, respondents were asked to place index cards with

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\(^6\)Initially, we planned to sample never-married women; however, since the sample sizes of these typologies were low in the qualitative CWACs, we decided only to include married women versus widowed, divorced, and separated women (currently unmarried).
pictures of common household decisions in one of the three categories, providing information on men’s and women’s views of what decisions are most important in a household. Interviews lasting approximately two hours each were conducted in local languages by local female qualitative specialists with native proficiency in the language, voice recorded, and transcribed into English. Care was taken to ensure that respondents felt comfortable and free to discuss sensitive topics with the research team. Consequently, all interviews were conducted in privacy, in particular, women and their partners were not interviewed in each other’s presence and IDIs were conducted at separate times. Interviews took place over a period of two weeks in June 2015 (approximately seven months after the last round of the quantitative survey). The qualitative work was approved by AIR’s Institutional Review Board in Washington, DC.

5. METHODOLOGY AND KEY INDICATORS

(a) Quantitative

We used the successful randomization at baseline, combined with an analysis of covariance (ANCOVA), to conduct an intent-to-treat (ITT) analysis. The point estimates of the autocorrelations of our key indicators range from 0.006 to 0.467, with a median of 0.14 (see Appendix Table 11). Such levels of autocorrelation are considered “low”; power can be enhanced by running ANCOVA analysis instead of the more common difference-in-differences (DID) approach (McKenzie, 2012). DID may overcorrect for baseline imbalances if autocorrelation is low, while ANCOVA results in a more efficient estimation of impact as it controls for actual baseline value. As we have three measures of outcomes at follow-ups (24, 36, and 48 months), following McKenzie (2012) we combined all follow-up waves and ran an ANCOVA model on a pooled panel sample. We estimated the average treatment effect using the following model:

\[
Y_{ijt} = \alpha + \beta_T \text{Treat}_j + \rho Y_{ij0} + \gamma D_{ij} + \epsilon_{ijt}
\]  

where \( Y_{ijt} \) is the decision-making outcome of interest for woman \( i \) from cluster \( j \) at time \( t \) (24, 36, or 48 months) and \( Y_{ij0} \) is the decision-making outcome of interest at baseline. \( \text{Treat}_j \) is an indicator that equals 1 if cluster \( j \) is in a CGP community, and \( \beta_T \) represents the ITT estimator, or the effect of being assigned to a CGP community. In all models, we control for \( D_{ij} \), an indicator for the level of stratification or district at baseline. We ran ordinary least squares (OLS) regressions, clustering standard errors at the CWAC level; however, our estimates of binary outcomes are robust to use of probit models, which we report in Appendix Tables 12 and 13 for comparison. Stata version 14.1 was used for all statistical analysis.

Our main outcome measure, women’s intrahousehold decision making, is modeled after questions from the DHS and has been utilized as a direct measure of women’s empowerment across dozens of developing countries. In all waves, we asked women who in the household generally has the final say across nine different domains:

1. If a child is not feeling well, who decides whether to seek treatment?
2. If a child does not want to go to school, who would decide whether s/he must go?
3. Who decides how the money you usually earn will be used?
4. Who decides how the money your partner earns will be used?
5. Who decides about making major household purchases?
6. Who decides about making purchases for daily household needs?
7. Who decides about purchasing children’s clothes or shoes?
8. Who decides about visits to your family or friends?
9. Who decides whether you [respondent] should seek treatment if you are feeling sick?

For each question, there are four possible answers: (1) respondent alone, (2) husband/partner alone, (3) respondent and partner jointly, or (4) other member in the household. We constructed two indicators for each decision-making domain: (1) a sole decision-making binary indicator that equals 1 if the female respondent alone makes the decision and 0 otherwise and (2) a sole or joint decision-making binary indicator that equals 1 if the female respondent makes the decision alone or jointly with her partner and 0 otherwise. We also constructed two additional composite measures that give 1 point for each time the female indicates having sole or sole/joint decision-making power across all applicable domains. These composite measures range from zero to nine. In cases where a particular decision is not applicable (e.g., child schooling decisions when no children of school age reside in the household), the woman does not appear in the analysis for that particular domain and was dropped from the composite analysis. As we are testing impacts across a large number of decision domain outcomes, due to the possibility of overstating significance of impacts due to chance, we focus primarily on the composite measures and present underlying domains to illustrate the likely underlying source of impacts on the composite indicators.

Given the success of the randomization (Tables 1 and 2), it was not necessary to control for additional baseline characteristics to obtain unbiased ITT estimates. However, we present both unadjusted (Eqn (1)) and adjusted estimates to control further for minor differences between CGP and control samples at baseline. Our baseline control indicators are woman’s age (years), indicator for whether woman has completed primary education or more (7 years or more), marital status indicators (whether the woman is married or cohabiting), household demographics (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditure (ZMW), and indicators for district of residence. Means and baseline balance for these indicators are shown in Table 1 and described in more detail below.

(b) Qualitative

The first step to analyzing qualitative data is to develop a coding structure that helps to systematically categorize information. A coding structure was used to code data under four key topics: (1) household structure, (2) decision making, (3) experience with the transfer,
and (4) empowerment and wellbeing, which aligned with the primary topics outlined in the interview guides. Key quotes were selected from IDIs meant to represent majority opinion or, alternatively, cases of outliers according to topics. Periodic discussions around emerging findings were held with the quantitative analysts to ensure findings were being explored and triangulated between the two sets of complementary data. Qualitative data were coded using the analysis software package NVivo 10 by two qualitative specialists at AIR. An interrater reliability test was performed to ensure that data were captured and coded in NVivo consistently. To do so, researchers conducted a coding comparison by selecting one transcript to be coded by both researchers within the established coding scheme. The test confirmed that a high level of consistency existed among researchers in interpretation of data and clarity of the coding scheme.

6. RESULTS

(a) Sample descriptives and context

Table 1 reports background characteristics at baseline of women and their households, pooled and by treatment arm. The mean age of women respondents was approximately 29 years old. Over 70% of women were either married or cohabiting, and the remaining 30% were either divorced, separated, widowed, or had never been married. Women in the sample had very low levels of education—less than 30% had 7 or more years of education, meaning over three-quarters of the sample did not complete primary school. The mean household size was 5.6, and because of the eligibility requirement of the program, on average households had two children aged zero to five. As expected, households in the sample were very poor; at baseline they had a mean monthly per capita expenditure of 40 ZMW (approximately US $8), which is below the 2010 extreme poverty line for the country (90.5 ZMW, approximately US$18.1).

Table 2 shows that at baseline women made 3.7 out of 9 decisions solely and 5.3 out of 9 decisions solely or jointly. The means of sole decision-making indicators ranged from a low of 34% for decisions on partner’s income to a high of 55% for decisions on children’s health. The means of the sole or joint decision-making indicators ranged from a low of 54%, again corresponding to decisions on partner’s income, to a high of 70% for decisions on children’s health. As shown in both Tables 1 and 2, individual and household characteristics as well as means of the decision-making indicators were balanced at baseline between the treatment and the control respondents, suggesting that randomization was successful and appropriate for estimating unbiased treatment effects.

Qualitative evidence confirms that households were poor, with many having up to 10 or 11 members, including extended family and orphans or vulnerable children. Traditional perceptions of gender roles were near universal among the men and women interviewed. Both sexes unanimously agreed that in Zambia, the head of the household is a man. A variety of explanations were provided, including that the man is typically older and the main breadwinner. Religion was frequently mentioned as the justification for men’s superior status, with both male and female respondents stating that God made man first or that the Bible says that the man is the head of the house. Both women and men strongly believed that
women can only be the head of the house if they are widowed, unmarried, or their husbands are absent for some other reason.

“[Men should be] the one who needs to feed the family, provide clothing, and give leadership in raising children.” ~Male, age 56 (beneficiary)

“Even in the laws of Zambia, a woman is like a steering wheel, and us (the men) are the ones to drive them in everything.” ~Male, age 53 (beneficiary) “In my household, I am the head because I don’t have any other person to be the head. I am a widow. I don’t have anyone to rule me.” ~Female, widow, age 72 (beneficiary)

Respondents also had strong ideas about the gendered nature of activities and responsibilities held by women and men. Despite men being seen as “responsible” for the household, the burden of income-generating work falls on the woman, often regardless of whether or not a husband is in the household. While some respondents reported that men were also involved in fishing or piecework activities, this was not the case for the majority of households. In addition, both men and women asserted that women and children were almost exclusively in charge of household chores, including cooking, cleaning, washing clothes, fetching water, and looking after younger children. Cooking occupied the majority of women’s time in the house, taking between 2 and 4 h a day; washing clothes was also similarly time intensive, though it is not a daily chore. There was striking inequality in terms of expectations for caretaking in the home, with most women being expected to not only contribute to farming and small business activities but also to bear the burden of being wholly in charge of household activities and childcare.

“Selling the farm produce is my job; my husband refuses to sell. He totally refuses to go to the market; he says it’s business for women.” ~Female, married, age 35 (beneficiary)

“My husband does not do any of the house chores; he refuses. He says I move around a lot looking for food for you then again you want me to clean. No!” ~Female, married, age 47 (beneficiary) “House chores like cooking and washing, cleaning the house, it is a woman’s job. So, it is my wife who does it mostly. I do not help her.” ~Male, age 56 (beneficiary)

For the majority of household decision domains, the more important the decision was ranked, the more likely married respondents were to identify the male as the primary decision maker. For savings, which was consistently ranked as “most important,” the majority of men reported themselves as the decision maker in this domain; however, most women described themselves as responsible for keeping or being in charge of their savings. Women reported themselves as in charge of decisions regarding child clothing/shoes, domestic chores, food choice, and daily purchases as well as their own health and income. All married women interviewed stated that decisions on their partners’ incomes and major purchases were both made by their husbands; only unmarried women reported making decisions on major purchases. The majority of men and women agreed that it is best to make
decisions together to avoid discord in the household, while expressing the belief that the husband’s opinions matter most in the end when making decisions.

“For a place to be called home people should be able to work together; otherwise it is not a home... You can never have peace when you are making decisions alone.” ~Female, married, age 24 (beneficiary)

“It is not good to make decisions alone because the spouse might not be in support and you may end up having problems in a home. You don’t have to command one another; it is good to talk and agree. It gives respect.” ~Male, age 35 (nonbeneficiary).

Almost no disagreements over decision making were reported by unmarried women or by men (partners of married women), who were, for the most part, both breadwinners and decision makers in their households. However, married women mentioned disagreements in a number of areas, including decisions regarding what crops the household was cultivating; which of the household members worked on the farms and how often; as well as when, where and by whom their goods or products should be sold. Ultimately, although these women expressed their disapproval or opinions on the matter, the majority of disagreements described ended in their husbands having their way. Regardless, most women expressed satisfaction with their level of influence in decision making, ascribing this to tradition and the way of Zambian life. Further, women justified the amount of work by explaining that their children and other household members (excluding men) assisted them in their tasks. However, upon further probing, married women conveyed their frustration that activities are not shared equally within the household and that they do not have enough say in decisions, particularly those related to money. Although men described a similar preference for joint decision making as their wives, they stated there had not been instances of disagreement about activities in the home.

“It is okay because that is the traditional way. I have my area of influence, and he has his.” ~Woman, married, age 31 (nonbeneficiary)

“There is nothing he can help me with in terms of the activities I do. He would refuse if I told him, so there is nothing I can even propose to change.” ~Woman, married, age 41 (nonbeneficiary)

A key objective of the qualitative work was to investigate how women and men in the evaluation sample understood the concept of empowerment and well-being. Responses to these questions revealed an almost unanimous perspective that money is synonymous to being empowered or doing well in life. While many explicitly stated that having money conveys the power to do what one wants, others implied that having a more successful business or being able to cultivate more crops would provide them money to care for their family, making them empowered. Many women also discussed running a profitable business, with some seeing empowerment in terms of access to financing by qualifying for and receiving a loan to develop their business. The ability to make purchases independently of a husband or other household head was also described as empowering. The discussions clearly reveal that respondents believe the level of poverty their
households face is such that making a better living financially is necessary to achieve any kind of empowerment and perception of independent control over one’s life.

(b) Program impacts

Table 3 reports the adjusted and unadjusted ANCOVA estimates for sole decision making, by domain and as a combined indicator. Results indicate the CGP had an impact on the probability of women making sole decisions related to their own health by 3–4 percentage points (pps), on average, during the four years of implementation. Although we were not able to detect impacts for the majority of disaggregated decision-making domains, results from the adjusted regression show that the CGP increased the number of sole decisions domains a woman is involved in, on average by 0.19 decision domains; however, these results are only weakly significant ($p < 0.10$ level).

Turning to indicators of sole or joint decisions (Table 4), we found positive and significant program impacts in five out of nine domains: (1) children’s schooling, (2) own income, (3) partner’s income, (4) children’s clothes or shoes, and (5) family visits. The point estimate of the significant average impacts range from a low of 2 pps for decisions related to children’s clothes or shoes to a high of 5.8 pps for decisions regarding partner’s income. As expected, the composite measure also shows a positive average impact of CGP on the number of decisions domains a woman is involved in, on average by 0.34, representing a 6% increase over baseline mean values. As in Table 3, coefficients and significance levels in general increase when covariates are added to regressions.

We also investigated the differential effect of the CGP by follow-up wave as an alternative to the pooled model (adjusted models only) and report results in Appendix Tables 14 and 15. Coefficients for the program impact at 36 and 48 months can be interpreted as the additional program impact at each wave (accounting for previous impacts). We report tests of significant differences on coefficients in the bottom panel to show if there are measurably larger (or smaller) impacts over time. Similar to pooled models, we find few impacts on sole decision making (Table 14), and in only three cases are coefficients significantly different over waves, with coefficients at 48 months significantly larger in comparison to those at 36 months (own income, daily purchases and count of decision making). In terms of sole or joint decision making (Table 15), we see that for several domains, impacts at 48 months are statistically smaller in comparison to those at 36 months (own income, partner’s income, major purchases, family visits), while the overall count indicator is larger at 24 months in comparison to 36 months. These results largely confirm our hypothesis that measuring averaged impacts combining all three waves allow for more power to detect impacts over time, possibly due to the low correlation and potential for noise in these indicators.

Qualitatively, women and men reported limited impact of the CGP on decision making, likely due to entrenched traditional beliefs regarding gender roles. The notion of a woman being the primary decision maker in a married household is not recognized in study communities. Despite this, there were some marginal, positive changes in decision making reported by married women. For example, six out of twelve married women responded to a question indicating they were in charge of decisions made with transfer funds, with the other
six stating that they consulted their husbands or made shared decisions. Additionally, approximately six out of twenty-two women said that while the decision-making process may be the same, they are now making purchases without having to wait for their husband to earn or give them money. The most frequently mentioned spending categories by beneficiaries were clothing (including school uniforms), food, school fees, and business and farming investments. Additionally, the majority of women reported that they managed to save money from the transfer, despite the fact that the transfer size is small relative to the needs of most households. In contrast, all but one man stated that there had been no change in decision making since the CGP started, highlighting that the subtlety in women’s perceived changes. Unmarried women who received the transfer reported no change in decision making; as the heads of household they were already making most, if not all, decisions prior to receipt of the CGP.

“I used to tell him and the children that the money had come and would just inform them what I wanted to use it for.” ~ Female, married, age 44 (beneficiary)

“I am very happy because I don’t have to wait for him to make enough money as he puts it. I am able to suggest anything for the children now. He is in charge, but at least the money is in my hands.” ~ Female, married, age 24 (beneficiary)

Despite the limited impacts on decision making, respondents perceived the transfer as improving their overall wellbeing and happiness, particularly because they had more resources and they were experiencing financial gains. Although most respondents indicated that the transfer did not impact relationships between beneficiary couples or with other household members, a few respondents said that household relationships improved while receiving the transfer. When asked if they themselves had ever felt empowered, several women stated that they have never felt empowered, while the majority explained that the CGP transfer directly made them feel empowered.

“We just got along fine, but our relating even got better as we were seeing progress. We were eating better and dressing much better.” ~Female household member, age 20 (beneficiary)

“I have also been empowered because of the child grant. I never used to have my own money, but now even as I suggest something to my husband I don’t feel worthless because I have money in my hands. It is my first time to experience such: I am really empowered.” ~Female, married, age 24 (beneficiary) “I built this house with the help of CWAC. What happened is that, after [we] divorced I moved from where I was staying with my husband to my mother’s house. When I was selected on the CWAC program and was able to grow enough maize, I decided to start life alone” ~Female, divorced, age 30 (beneficiary)

We also investigated the possibility of adverse effects of the transfer due to disputes over use, jealousy, or other financial-related issues. Most respondents stated that the transfer did not cause tensions or arguments in their home; however, they were more forthcoming with discussing problems observed in neighboring households receiving the transfer. Women often referenced that they heard others complaining
of their husbands trying to take some of the money to use on beer and to go out drinking.

In addition, two women reported violent arguments due to the transfer, although several men and women recalled disagreements that were unrelated to the transfer, saying that these are part of normal life and living together.

“There are times we do argue. Ifimutu ifilipamo tafibula uku shekana. ‘Trees which are near each other will not avoid brushing each other. So of course we do argue; living with people you will argue every so often.’ “ ~Male, age 42 (nonbeneficiary).

“He just wants to drink his money; he doesn’t want to use it at home. Maybe that is how God made him. He uses his money for beer, but I use it at home to solve various problems.” ~Female, married, age 44 (beneficiary)

(c) Heterogeneous impacts and robustness checks

We examined heterogeneous impacts as extensions to our main quantitative analysis, by level of education (primary or more versus 0–6 years of education), marital status (married or cohabiting versus widowed, never married, separated, or divorced), and the logarithm of the household’s monthly expenditures per capita. We analyzed ANCOVA models identical to those in the main analysis and interacted our treatment indicator with each potential baseline modifier. These explorations were conducted based on past literature as well as qualitative findings from our sample, which indicate that women with different characteristics (education, marital status, overall household economic standing) may be more or less able to leverage transfer funds to negotiate change in their households (Anderson, Reynolds, & Gugerty, 2016; Kishor & Subaiya, 2008; Peterman et al, 2015). Tables 5 and 6 show the results of the regressions exploring heterogeneous impacts. There is scarce evidence pointing to differential impacts by level of education, marital status, or per capita (logged) monthly expenditures across all indicators for both the sole and sole and joint outcomes.

To check for robustness of results to attrition bias, Tables 16 and 17 in the Appendix report Lee (2009) bounds estimates for the average effect over time of the program on the sole and sole or joint decision-making indicators considered. The Lee (2009) bounds are estimated without covariates because the estimation procedure requires the explanatory variables to be discrete, which prevent us from using the value of the dependent variable at baseline as a regressor in order to gain precision in program estimates. Thus, for comparability, we reproduce the unadjusted program impacts for each indicator of interest from Tables 3 and 4. The estimated lower- and upper-bound impacts essentially mirror those for the full sample, with similar patterns of statistical significance and point estimates, especially for the impact of CGP on the composite measure of women’s sole or joint decision making presented in Table 17 (lower bound 0.311—upper bound 0.312, both statistically significant at the p < 0.01 level). This is not surprising given that the attrition rates between the treatment and control groups are just within a 2-pp difference and the estimation of the Lee bounds relies on this differential attrition rate.
7. DISCUSSION AND CONCLUSION

We conducted a mixed-methods study to understand the impact and pathways through which the Government of Zambia’s CGP has affected women’s decision making and empowerment over a four-year period. Quantitatively, we found that the women in beneficiary households were making more sole or joint decisions (across five domains, including decisions related to spending of partner’s income), though increases were only found among sole decisions related to the woman’s own health. However, these quantitative impacts translated into relatively modest increases of on average, an increase in the number of decision-making domains in which the woman is involved by an additional 0.34 domains (a 6% increase on average over baseline values). An alternative interpretation for this magnitude of impact could be that 34% of the sample increased joint participation in one decision-making domain. Qualitatively, we found that only modest perceived changes in decision making were realized among beneficiaries due to entrenched gender norms, which indicate men as the head of household and primary decision maker. However, the transfer was perceived to increase overall household well-being, particularly for women, who indicated they were more empowered and retained control over the transfer funds to use for household investment and savings for emergencies. These findings are in line with those by Natali, Handa, Peterman, Seidenfeld, and Tembo (2016), who found that the CGP led to a 23-pp increase in women’s probability of saving in cash after 24 months and a 10-pp increase after 36 months. Findings also indicated that the program increased diversification into primarily female-run household non-farm enterprises. This supports qualitative findings that women are more diligent savers than men in study communities and that the transfer has allowed women to become more financially independent, which is nearly universally equated with empowerment for both men and women within our sample.

The combined methods show that there is significant room for improvement of measurement of empowerment, including of women’s decision-making indicators. In particular, findings show that although women often state they make decisions (either solely or jointly), they also acknowledge that if there is a disagreement or difference of opinion women’s preferences are often second to men’s, calling into question the validity of empirical measures to accurately capture the concept of “the ultimate decision maker.” In addition, research suggests that men and women differ in their perceptions of decision making, indicating a divergence of opinion or other sources of bias with creates conflicting reports (Allendorf, 2007; Anderson et al., 2016). The usefulness and responsiveness of decision making measures have been critiqued elsewhere (Bishop & Bowman, 2014; Carter et al., 2014; Heckert & Fabric, 2013; Peterman et al., 2015); however, they are still widely used in development research and program evaluation to evidence impacts on “women’s empowerment.” Moreover, women and men alike equate empowerment to having control over money rather than other social or relational dynamics (including decision making), which are more dictated by social norms around gender. Therefore, it is likely that we may not expect programs such as the CGP to drastically change decision making, even over the medium term, with relatively small amounts of money. As an alternative, one could rely on direct measures of women’s financial standing, such as savings or labor force participation and earnings, or rely on multidimensional measures, as it is likely interventions will affect

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different realms of a woman’s life in different ways. Recently, researchers have also tested methods of soliciting measures of willingness to pay to maintain gender-targeting of a CCT in Macedonia as alternative measures of perceived empowerment (Almas, Armand, & Attanasio, 2015). We should encourage these types of experimentations around measurement of direct indicators of empowerment, including those seeking to measure subjective empowerment.

There are a number of limitations to this study. For the qualitative work, we did not have the luxury of multiple visits to construct a “before and after” panel of respondents. Thus, we relied on retrospective information from beneficiaries about how the CGP affected their households and relationships with other members. We also attempted to mitigate social desirability bias through the design of the questions and the explanation of the research within the informed consent. However, we acknowledge that respondents may have still considered the impact of the study on their involvement in the CGP, which may be reflected in their responses. In addition, decision-making indicators tend to be noisy; thus, larger sample sizes may be required to detect program impacts compared to the sample sizes required with more precisely measured outcomes. Indeed, we have evidence suggesting that the pooled sample allowed us to detect impacts that were smaller or only marginally significant at each wave individually. Finally, our sample is a unique population of women with young children, living in three poor rural districts in Zambia, and thus findings around empowerment dynamics are likely to vary significantly from populations in other geographic regions, particularly those with markedly different gender norms (Mumtaz & Salway, 2009; Rocca, Rathod, Falle, Pande, & Krishnan, 2009).

This study is important for governments, policy makers, and program implementers who are engaged in SCTs for poverty reduction. On one hand, we contribute to quantitative evidence that suggests the CGP positively affected women’s decision making, however due to existing gender norms, impacts on sole and joint decision making translated into qualitatively relatively minor actual shifts. Thus, we conclude that programs such as the CGP realize beneficial gendered impacts but fail to shift gender norms in a transformational way. In addition, traditional decision-making indicators did not comprehensively or accurately capture women’s empowerment in our sample. Despite this, in the absence of a true counterfactual, evidence here and from other programs suggests that targeting women, as opposed to men, does result in increased overall benefits to the household (Yoong, Rabinovich, & Diepeveen, 2012). It is important to recall that these impacts are realized under a program with no additional conditions, such as attendance to health or nutrition sessions, which in past programs have suggested as one pathway through which programs have potential to empower women. Alternatively, lack of co-responsibilities ensures that women are not subject to a myriad of time-intensive obligations, which may reinforce gender norms and burden women with activities related to household welfare that could be shared equally between partners (Chant, 2008; Molyneux, 2006). Results suggest that if policymakers wish to meet dual objectives of poverty alleviation and reducing gendered inequalities, it is likely programs will need to consider explicit design components which encourage more transformational change, rather than relying solely on targeting women for receipt of cash benefits.
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APPENDIX A

Table 7.
Balanced panel of women across waves vs. cross-sectional sample of women at each wave

| Column A Cross-sectional | Column B Panel only |
|--------------------------|---------------------|
| Baseline                 | 2,492               |
| 24-month follow-up       | 2,284               |
| 36-month follow-up       | 2,421               |
| 48-month follow-up       | 2,387               |
| Total (N)                | 9,584               |

Table 8.
Differential attrition analysis by baseline background characteristics

|                         | Controls | Treatment | Difference Among Those Lost to Attrition |
|-------------------------|----------|-----------|------------------------------------------|
|                         | Lost to Attrition | p-value | Panel only | Lost to Attrition | p-value | Panel only | Col(1) - Col(4) | p-value |
| Recipient’s age         | Lost to | 32.099 | 0.002 | 31.064 | 0.046 | 1.035 | 0.425 |
|                         | Attrition | Panel | (2) | Attrition | (2) | p-value | (3) | (4) | (5) | p-value |
| 7 + years of education  | 0.330 | 0.266 | 0.054 | 0.371 | 0.181 | -0.041 | 0.488 |
| Married/cohabiting      | 0.717 | 0.716 | 0.984 | 0.669 | 0.752 | 0.027 | 0.047 | 0.403 |
| Divorced/widow/separated/never married | 0.283 | 0.284 | 0.984 | 0.331 | 0.248 | 0.027 | -0.047 | 0.403 |
| Per capita monthly expenditures (ZMW) | 39.246 | 39.651 | 0.886 | 43.752 | 0.262 | -4.507 | 0.241 |
| Number of children ages 0-5 | 1.973 | 1.909 | 0.294 | 1.833 | 0.365 | 0.140 | 0.118 |
| Number of children ages 6-18 | 1.670 | 1.776 | 0.474 | 1.888 | 0.561 | -0.218 | 0.252 |
| Number of females ages 19+ | 1.163 | 1.076 | 0.016 | 1.117 | 0.139 | -0.008 | 0.898 |
| Number of males ages 19+ | 0.760 | 0.792 | 0.500 | 0.783 | 0.105 | -0.023 | 0.740 |
| Kalabo District          | 0.285 | 0.345 | 0.283 | 0.263 | 0.045 | 0.023 | 0.831 |
| Kaputa District          | 0.525 | 0.290 | 0.000 | 0.504 | 0.000 | 0.021 | 0.870 |
| Shangombo District       | 0.190 | 0.365 | 0.000 | 0.233 | 0.006 | -0.043 | 0.619 |

Notes: p-values are reported from Wald tests on the equality of means of the attrition group and panel for columns (3) and (5) and treatment and control for column (8). Standard errors are clustered at the CWAC level. Of the 2,492 female transfer...
recipients at baseline 2,031 are in the panel sample and 444 lost to attrition at any wave and 17 lost to missing covariate data at baseline. We show unlogged values of per capital monthly expenditures for mean comparisons, however control for logged values in regression analyses.

**Table 9.**
Differential attrition analysis by baseline value of decision-making indicator

| Sole decision-making indicators | Controls | Treatment | Difference Among Those Lost to Attrition |
|---------------------------------|----------|-----------|-----------------------------------------|
|                                 | Lost to Attrition | Panel (2) | p-value (3) | Lost to Attrition | Panel (5) | p-value (6) | Col(1) - Col(4) | p-value (8) |
| Sole children’s health          | 0.534    | 0.557     | 0.621       | 0.596         | 0.554     | 0.328       | −0.062        | 0.339      |
| Sole children’s schooling       | 0.432    | 0.433     | 0.984       | 0.481         | 0.415     | 0.166       | −0.049        | 0.429      |
| Sole own income                 | 0.448    | 0.400     | 0.276       | 0.493         | 0.386     | 0.020       | −0.046        | 0.466      |
| Sole partner’s income           | 0.416    | 0.366     | 0.237       | 0.398         | 0.317     | 0.082       | 0.018         | 0.781      |
| Sole major purchases            | 0.439    | 0.408     | 0.460       | 0.439         | 0.390     | 0.261       | 0.000         | 0.995      |
| Sole daily purchases            | 0.480    | 0.481     | 0.974       | 0.519         | 0.472     | 0.268       | −0.039        | 0.540      |
| Sole children’s clothes/shoes   | 0.436    | 0.443     | 0.882       | 0.502         | 0.423     | 0.042       | −0.066        | 0.319      |
| Sole family visits              | 0.389    | 0.405     | 0.678       | 0.460         | 0.379     | 0.047       | −0.071        | 0.199      |
| Sole own health                 | 0.523    | 0.530     | 0.854       | 0.582         | 0.521     | 0.132       | −0.059        | 0.298      |
| Count of sole decision making (0–9) | 3.958    | 3.785     | 0.576       | 4.184         | 3.592     | 0.101       | −0.226        | 0.648      |
| Sole or joint decision-making indicators | Controls | Treatment | Difference Among Those Lost to Attrition |
|                                 | Lost to Attrition | Panel (2) | p-value (3) | Lost to Attrition | Panel (5) | p-value (6) | Col(1) - Col(4) | p-value (8) |
| Sole/joint children’s health    | 0.738    | 0.709     | 0.438       | 0.758         | 0.699     | 0.102       | −0.021        | 0.693      |
| Sole/joint children’s schooling | 0.627    | 0.604     | 0.563       | 0.665         | 0.586     | 0.082       | −0.038        | 0.543      |
| Sole/joint own income           | 0.686    | 0.589     | 0.025       | 0.686         | 0.566     | 0.005       | 0.000         | 0.995      |
| Sole/joint partner’s income     | 0.668    | 0.557     | 0.014       | 0.631         | 0.518     | 0.010       | 0.037         | 0.560      |
| Sole/joint major purchases      | 0.674    | 0.602     | 0.085       | 0.661         | 0.576     | 0.044       | 0.013         | 0.832      |
| Sole/joint daily purchases      | 0.697    | 0.650     | 0.192       | 0.703         | 0.641     | 0.133       | −0.006        | 0.916      |
| Sole/joint children’s clothes   | 0.668    | 0.628     | 0.288       | 0.699         | 0.615     | 0.032       | −0.031        | 0.593      |
| Sole/joint family visits        | 0.629    | 0.581     | 0.215       | 0.640         | 0.559     | 0.041       | −0.011        | 0.839      |
| Sole/joint health               | 0.665    | 0.642     | 0.495       | 0.703         | 0.627     | 0.055       | −0.038        | 0.438      |
| Count of sole/joint decision making (0–9) | 6.125    | 5.415     | 0.023       | 6.020         | 5.231     | 0.023       | 0.105         | 0.827      |

*Notes:* p-values are reported from Wald tests on the equality of means of the attrition group and panel for columns (3) and (6) and treatment and control for column (8). Standard errors are clustered at the CW AC level. Of the 2,492 female transfer recipients at baseline 2,031 are in the panel sample and 444 lost to attrition at any wave and 17 lost to missing covariate data at baseline. We show unlogged values of per capital monthly expenditures for mean comparisons, however control for logged values in regression analyses.
| Interview | Age (years) | Current Marital Status | Changes in sole or joint decision making over quantitative evaluation | CGP Treatment Status | Male Partner Interviewed |
|-----------|------------|------------------------|-----------------------------------------------------------|---------------------|-------------------------|
| 1         | 40         | Married                | Negative                                                   | Control             | Yes                     |
| 2         | 28         | Married                | Negative                                                   | Control             | Yes                     |
| 3         | 23         | Married                | Negative                                                   | Treatment           | No                      |
| 4         | 43         | Married                | Negative                                                   | Treatment           | No                      |
| 5         | 42         | Married                | Negative                                                   | Treatment           | Yes                     |
| 6         | 24         | Married                | Negative                                                   | Treatment           | No                      |
| 7         | 31         | Married                | Positive                                                   | Control             | Yes                     |
| 8         | 40         | Married                | Positive                                                   | Treatment           | Yes                     |
| 9         | 34         | Married                | Positive                                                   | Treatment           | No                      |
| 10        | 64         | Married                | Positive                                                   | Treatment           | No                      |
| 11        | 42         | Married                | Positive                                                   | Treatment           | No                      |
| 12        | 44         | Married                | Positive                                                   | Treatment           | No                      |
| 13        | 38         | Married                | Positive                                                   | Treatment           | Yes                     |
| 14        | 34         | Married                | Positive                                                   | Treatment           | No                      |
| 15        | 25         | Married                | Positive                                                   | Treatment           | No                      |
| 16        | 52         | Married                | Positive                                                   | Treatment           | Yes                     |
| 17        | 34         | Married                | Positive                                                   | Treatment           | Yes                     |
| 18        | 40         | Not Married            | Negative                                                   | Control             | No                      |
| 19        | 26         | Not Married            | Negative                                                   | Control             | No                      |
| 20        | 52         | Not Married            | Negative                                                   | Treatment           | No                      |
| 21        | 43         | Not Married            | Negative                                                   | Treatment           | Yes                     |
| 22        | 29         | Not Married            | Negative                                                   | Treatment           | No                      |
| 23        | 28         | Not Married            | Negative                                                   | Treatment           | No                      |
| 24        | 22         | Not Married            | No Change                                                  | Control             | No                      |
| 25        | 70         | Not Married            | No Change                                                  | Treatment           | No                      |
| 26        | 48         | Not Married            | No Change                                                  | Treatment           | No                      |
| 27        | 34         | Not Married            | No Change                                                  | Treatment           | Yes                     |
| 28        | 38         | Not Married            | No Change                                                  | Treatment           | No                      |
| 29        | 23         | Not Married            | No Change                                                  | Treatment           | No                      |
| 30        | 48         | Not Married            | Positive                                                   | Treatment           | No                      |

Notes: Currently not married includes women who have never been married, are widowed, divorced or separated at the time of the qualitative survey.

1 As no male partner was available at the time of the survey, a female household member was interviewed to gain an alternative perspective on decision making.
| Indicator                        | Baseline-24 months | Baseline-36 months | Baseline-48 months |
|---------------------------------|--------------------|--------------------|--------------------|
| **Sole decision-making indicators** |                    |                    |                    |
| Sole children’s health          | 0.242              | 0.286              | 0.218              |
| Sole children’s schooling       | 0.378              | 0.407              | 0.282              |
| Sole own income                 | 0.367              | 0.419              | 0.308              |
| Sole partner’s income           | 0.260              | 0.077              | 0.210              |
| Sole major purchases            | 0.420              | 0.467              | 0.398              |
| Sole daily purchases            | 0.209              | 0.184              | 0.167              |
| Sole children’s clothes/shoes   | 0.266              | 0.286              | 0.276              |
| Sole family visits              | 0.372              | 0.377              | 0.328              |
| Sole own health                 | 0.197              | 0.185              | 0.160              |
| Count of sole decision making (0–9) | 0.302              | 0.120              | 0.160              |
| **Sole or Joint decision-making indicators** |                    |                    |                    |
| Sole/joint children’s health    | 0.080              | 0.119              | 0.060              |
| Sole/joint children’s schooling | 0.133              | 0.178              | 0.069              |
| Sole/joint own income           | 0.121              | 0.118              | 0.042              |
| Sole/joint partner’s income     | 0.068              | 0.025              | 0.016              |
| Sole/joint major purchases      | 0.107              | 0.120              | 0.100              |
| Sole/joint daily purchases      | 0.079              | 0.088              | 0.045              |
| Sole/joint children’s clothes   | 0.055              | 0.115              | 0.014              |
| Sole/joint family visits        | 0.133              | 0.120              | 0.099              |
| Sole/joint own health           | 0.121              | 0.145              | 0.037              |
| Count of sole/joint decision making (0–9) | 0.072              | 0.111              | 0.006              |

Notes: Each sample wave contains 2,031 female transfer recipients.
Table 12.

OLS and probit ANCOVA estimates on the average impact of the CGP on women’s sole decision making

|                          | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health |
|--------------------------|-------------------|----------------------|------------|------------------|-----------------|-----------------|----------------------------|---------------|------------|
| **Unadjusted Models**    |                   |                      |            |                  |                 |                 |                            |               |            |
| Program Impact (OLS)     | −0.004            | 0.001                | −0.015     | 0.013            | −0.011          | −0.015          | 0.008                      | 0.016         | 0.031      |
|                          | (0.019)           | (0.019)              | (0.021)    | (0.012)          | (0.021)         | (0.017)         | (0.020)                    | (0.023)       | (0.017)*   |
| Program Impact (Probit)  | −0.004            | 0.001                | −0.017     | 0.015            | −0.010          | −0.017          | 0.008                      | 0.018         | 0.031      |
|                          | (0.020)           | (0.022)              | (0.023)    | (0.012)          | (0.024)         | (0.017)         | (0.022)                    | (0.025)       | (0.017)*   |
| **Adjusted Models**      |                   |                      |            |                  |                 |                 |                            |               |            |
| Program Impact (OLS)     | 0.010             | 0.016                | −0.006     | 0.016            | 0.005           | −0.004          | 0.021                      | 0.027         | 0.042      |
|                          | (0.016)           | (0.015)              | (0.019)    | (0.011)          | (0.015)         | (0.015)         | (0.018)                    | (0.018)       | (0.015)*** |
| Program Impact (Probit)  | 0.011             | 0.018                | −0.010     | 0.015            | 0.006           | −0.005          | 0.023                      | 0.033         | 0.043      |
|                          | (0.019)           | (0.019)              | (0.024)    | (0.010)          | (0.020)         | (0.016)         | (0.021)                    | (0.023)       | (0.016)*** |
| **N**                    | 6,084             | 6,087                | 5,339      | 4,239            | 6,080           | 6,087           | 6,087                      | 6,079         | 6,086      |

Notes: Estimations use OLS or Probit ANCOVA models. Probit coefficients are reported as marginal effects. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* $p < 0.1$,

** $p < 0.05$,

*** $p < 0.01$.

Adjusted models include baseline values of the decision-making indicator as well as the following controls: woman’s age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
Table 13.
OLS and probit ANCOVA estimates on the average impact of the CGP on women’s sole or joint decision making

|                                    | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health |
|------------------------------------|-------------------|----------------------|------------|------------------|-----------------|-----------------|-----------------------------|---------------|------------|
| **Unadjusted Models**              |                   |                      |            |                  |                 |                 |                             |               |            |
| Program Impact (OLS)              | 0.012             | 0.033                | 0.033      | 0.056            | 0.003           | 0.006           | 0.016                       | 0.029         | 0.009      |
|                                   | (0.015)           | (0.019)***           | (0.013)*** | (0.021)***       | (0.020)         | (0.012)         | (0.011)                     | (0.021)       | (0.016)    |
| Program Impact (Probit)           | 0.012             | 0.033                | 0.033      | 0.056            | 0.002           | 0.005           | 0.015                       | 0.030         | 0.009      |
|                                   | (0.015)           | (0.020)***           | (0.013)*** | (0.022)***       | (0.020)         | (0.012)         | (0.011)                     | (0.021)       | (0.016)    |
| **Adjusted Models**               |                   |                      |            |                  |                 |                 |                             |               |            |
| Program Impact (OLS)              | 0.016             | 0.039                | 0.036      | 0.058            | 0.010           | 0.009           | 0.020                       | 0.035         | 0.014      |
|                                   | (0.015)           | (0.018)***           | (0.013)*** | (0.021)***       | (0.017)         | (0.011)         | (0.011)                     | (0.020)       | (0.015)    |
| Program Impact (Probit)           | 0.016             | 0.040                | 0.036      | 0.060            | 0.011           | 0.008           | 0.019                       | 0.038         | 0.014      |
|                                   | (0.014)           | (0.018)***           | (0.012)*** | (0.021)***       | (0.018)         | (0.011)         | (0.011)                     | (0.021)       | (0.014)    |
| N                                 | 6,084             | 6,087                | 5,339      | 4,239            | 6,080           | 6,087           | 6,079                       | 6,079         | 6,086      |

Notes: Estimations use OLS or Probit ANCOVA models. Probit coefficients are reported as marginal effects. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:
* $p < 0.1$,
** $p < 0.05$,
*** $p < 0.01$.

Adjusted models include baseline values of the decision-making indicator as well as the following controls: woman’s age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
Table 14.

ANCOVA estimates across waves of the CGP on women’s sole decision making (adjusted models)

|                    | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|--------------------|-------------------|----------------------|------------|------------------|-----------------|----------------|---------------------------|---------------|------------|-------------|
| Program Impact 24 M| 0.023             | 0.019                | −0.014     | 0.027            | 0.005           | 0.003          | 0.026                     | 0.018         | 0.051      | 0.260       |
|                    | (0.030)           | (0.028)              | (0.029)    | (0.029)          | (0.028)         | (0.033)        | (0.037)                   | (0.028)       | (0.025)***| (0.240)     |
| Additional Impact 36 M| −0.028           | −0.021               | −0.021     | −0.010           | −0.007          | −0.051         | −0.028                    | 0.035         | −0.027     | −0.365      |
|                    | (0.038)           | (0.033)              | (0.031)    | (0.035)          | (0.030)         | (0.046)        | (0.051)                   | (0.033)       | (0.042)***| (0.307)     |
| Additional Impact 48 M| −0.012           | 0.010                | 0.047      | −0.022           | 0.008           | 0.029          | 0.012                     | −0.009        | 0.001      | 0.158       |
|                    | (0.043)           | (0.047)              | (0.043)    | (0.036)          | (0.031)         | (0.054)        | (0.044)                   | (0.033)       | (0.043)    | (0.319)     |
| Wave 36 M          | −0.105            | −0.132               | −0.060     | −0.164           | −0.133          | −0.006         | −0.111                    | −0.073        | −0.000     | −0.949      |
|                    | (0.026)***        | (0.021)***           | (0.021)*** | (0.021)***       | (0.19)***       | (0.030)***     | (0.035)***                | (0.019)***    | (0.27)***  | (0.180)***  |
| Wave 48 M          | −0.050            | −0.056               | 0.004      | −0.095           | −0.104          | −0.047         | −0.101                    | −0.030        | 0.021      | −0.496      |
|                    | (0.029)**         | (0.027)**            | (0.029)    | (0.024)***       | (0.020)***      | (0.034)        | (0.028)***                | (0.026)       | (0.027)*** | (0.171)***  |

Testing impacts differences across waves: P-values

|                   | 24 M = 36 M | 24 M = 48 M | 36 M = 48 M | R² | N     |
|-------------------|------------|------------|------------|----|-------|
|                   | 0.44       | 0.49       | 0.61       | 0.18 | 6,084 |
|                   | 0.89       | 0.56       | 0.36       | 0.26 | 6,087 |
|                   | 0.83       | 0.83       | 0.43       | 0.25 | 5,339 |
|                   | 0.81       | 0.76       | 0.05***    | 0.16 | 4,239 |
|                   | 0.47       | 0.76       | 0.37       | 0.37 | 6,080 |
|                   | 0.53       | 0.86       | 0.06*      | 0.10 | 6,087 |
|                   | 0.77       | 0.62       | 0.33       | 0.18 | 6,079 |
|                   | 0.18       | 0.42       | 0.66       | 0.09 | 6,086 |
|                   | 0.25       | 0.42       | 0.66       | 0.09 | 6,086 |
|                   | 0.12       | 0.03***    | 0.66       | 0.03*** | 3,949 |

Notes: Estimations use OLS ANCOVA models. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* p < 0.1,
** p < 0.05,
*** p < 0.01.
Adjusted models include baseline values of the following controls: woman’s age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
### Table 15.

**ANCOVA estimates across waves of the CGP on women’s sole or joint decision making (adjusted models).**

|                          | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|--------------------------|-------------------|----------------------|------------|------------------|-----------------|----------------|-----------------------------|---------------|------------|-------------|
| **Program Impact 24 M**  |                   |                      |            |                  |                 |                |                             |               |            |             |
|                          | 0.014             | 0.032                | 0.013      | 0.059            | -0.002          | 0.004          | 0.014                       | 0.029         | 0.031      | 0.416       |
|                          | (0.023)           | (0.030)              | (0.030)    | (0.039)          | (0.028)         | (0.020)        | (0.022)                     | (0.033)       | (0.023)    | (0.219)     |
| **Additional Impact 36 M**|                   |                      |            |                  |                 |                |                             |               |            |             |
|                          | 0.021             | 0.001                | 0.060      | 0.062            | 0.073           | -0.002         | 0.016                       | 0.054         | -0.036     | 0.145       |
|                          | (0.039)           | (0.054)              | (0.041)    | (0.049)          | (0.037)**       | (0.030)        | (0.034)                     | (0.040)       | (0.038)    | (0.350)     |
| **Additional Impact 48 M**|                   |                      |            |                  |                 |                |                             |               |            |             |
|                          | -0.015            | 0.019                | 0.005      | -0.063           | -0.035          | 0.017          | 0.001                       | -0.035        | -0.017     | -0.375      |
|                          | (0.033)           | (0.039)              | (0.037)    | (0.048)          | (0.038)         | (0.026)        | (0.026)                     | (0.041)       | (0.032)    | (0.256)     |
| **Wave = 36 M**          |                   |                      |            |                  |                 |                |                             |               |            |             |
|                          | -0.034            | -0.053               | 0.051      | 0.014            | 0.008           | 0.026          | -0.003                      | -0.053        | 0.024      | 0.055       |
|                          | (0.028)           | (0.041)              | (0.032)    | (0.041)          | (0.027)         | (0.024)        | (0.027)                     | (0.031)***     | (0.027)    | (0.281)     |
| **Wave = 48 M**          |                   |                      |            |                  |                 |                |                             |               |            |             |
|                          | 0.049             | 0.037                | 0.091      | 0.004            | -0.019          | 0.027          | 0.021                       | 0.055         | 0.104      | 0.665       |
|                          | (0.023)**         | (0.029)              | (0.027)*** | (0.037)          | (0.026)         | (0.021)        | (0.018)                     | (0.028)**      | (0.023)*** | (0.183)***  |

**Testing impacts differences across waves: P-values of tests**

|                          | 24 M = 36 M | 24 M = 48 M | 36 M = 48 M | R² | N |
|--------------------------|------------|------------|------------|----|---|
|                          | 0.89       | 0.60       | 0.40       | 0.06 | 6084 |
|                          | 0.68       | 0.84       | 0.75       | 0.08 | 6087 |
|                          | 0.49       | 0.90       | 0.09*      | 0.04 | 5339 |
|                          | 0.97       | 0.14       | 0.00***    | 0.06 | 4239 |
|                          | 0.20       | 0.58       | 0.00***    | 0.07 | 6080 |
|                          | 0.89       | 0.78       | 0.46       | 0.02 | 6087 |
|                          | 0.97       | 0.76       | 0.64       | 0.02 | 6079 |
|                          | 0.69       | 0.36       | 0.07*      | 0.08 | 6086 |
|                          | 0.21       | 0.35       | 0.67       | 0.05 | 3949 |
|                          | 0.11       | 0.35       | 0.11       | 0.04 |     |

**Notes:** Estimations use OLS ANCOVA models. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

- *p < 0.1,
- **p < 0.05,
- ***p < 0.01.
Adjusted models include baseline values of the following controls: woman’s age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
Table 16. Lee bounds ANCOVA estimates on the average impact of the CGP on women’s sole decision making (unadjusted models)

|                   | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|-------------------|-------------------|----------------------|------------|------------------|-----------------|----------------|-----------------------------|---------------|------------|-------------|
| **Full Impact**   | −0.004            | 0.001                | −0.015     | 0.013            | −0.011          | −0.015         | 0.008                       | 0.016         | 0.031      | 0.162       |
|                   | (0.019)           | (0.019)              | (0.021)    | (0.012)          | (0.021)         | (0.017)        | (0.020)                     | (0.023)       | (0.017)*   | (0.098)*    |
| **Lower**         | −0.015            | −0.012               | −0.041     | 0.006            | −0.023          | −0.029         | −0.007                      | 0.000         | 0.016      | 0.170       |
|                   | (0.014)           | (0.014)              | (0.015)**  | (0.019)          | (0.013)*        | (0.014)**      | (0.014)                     | (0.013)       | (0.014)    | (0.143)     |
| **Upper**         | 0.005             | 0.008                | −0.006     | 0.012            | −0.004          | −0.010         | 0.013                       | 0.018         | 0.036      | 0.172       |
|                   | (0.014)           | (0.014)              | (0.016)    | (0.010)          | (0.014)        | (0.013)        | (0.014)                     | (0.014)       | (0.013)**  | (0.098)*    |
| N                 | 7,555             | 7,555                | 7,555      | 7,555            | 7,555           | 7,555          | 7,555                       | 7,555         | 7,555      | 7,555       |

Notes: Estimations use OLS ANCOVA models and the stata ‘leebound’ command to replicate unadjusted models from Table 3. The Lee (2009) bounds are estimated without covariates because the estimation procedure requires the explanatory variables to be discrete, which prevent the use of value of the dependent variable at baseline as a regressor in order to gain precision in program estimates. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* $p < 0.1$,  ** $p < 0.05$,  *** $p < 0.01$.  


Table 17.

Lee bounds ANCOVA estimates on the average impact of the CGP on women’s sole or joint decision making (unadjusted models)

|                      | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|----------------------|-------------------|----------------------|------------|------------------|-----------------|-----------------|-----------------------------|---------------|------------|-------------|
| Full Impact          | 0.012             | 0.033                | 0.033      | 0.056            | 0.003           | 0.006           | 0.016                       | 0.029         | 0.009      | 0.338       |
|                      | (0.015)           | (0.019)**            | (0.013)**  | (0.021)**        | (0.020)         | (0.012)         | (0.011)                     | (0.021)       | (0.016)    | (0.115)**   |
| lower                | −0.005            | 0.018                | −0.002     | 0.052            | −0.012          | −0.012          | −0.001                      | 0.015         | −0.009     | 0.311       |
|                      | (0.014)           | (0.014)              | (0.015)*** | (0.015)**        | (0.014)         | (0.013)         | (0.013)                     | (0.014)       | (0.014)    | (0.086)**   |
| upper                | 0.016             | 0.038                | 0.034      | 0.059            | 0.007           | 0.007           | 0.018                       | 0.033         | 0.011      | 0.312       |
|                      | (0.010)           | (0.012)**            | (0.010)**  | (0.019)**        | (0.012)         | (0.008)         | (0.009)**                    | (0.012)**     | (0.010)    | (0.156)**   |
| N                    | 7,555             | 7,555                | 7,555      | 7,555            | 7,555           | 7,555           | 7,555                       | 7,555         | 7,555      | 7,555       |

Notes: Estimations use OLS ANCOVA models and the `leebound` command to replicate unadjusted models from Table 4. The Lee (2009) bounds are estimated without covariates because the estimation procedure requires the explanatory variables to be discrete, which prevent the use of value of the dependent variable at baseline as a regressor in order to gain precision in program estimates. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* p < 0.1,
** p < 0.05,
*** p < 0.01.
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## Table 1.

Household- and individual-level characteristics of the panel sample at baseline

| Variables                              | All Panel Sample | Control (C) | Treatment (T) | T-C Diff | p-value | Effect Size |
|----------------------------------------|------------------|-------------|---------------|----------|---------|-------------|
|                                        | Mean             | N           | Mean          | N1       | Mean    | N2          | Diff       | SE       |         |         |
| Recipient’s age                        | 29.414           | 2,031       | 29.246        | 1,025    | 29.585  | 1,006       | 0.340      | 0.615    | 0.582   | 0.038   |
| 7 + years of education                 | 0.290            | 2,031       | 0.266         | 1,025    | 0.315   | 1,006       | 0.049      | 0.037    | 0.185   | 0.107   |
| Married/cohabiting                     | 0.734            | 2,031       | 0.716         | 1,025    | 0.752   | 1,006       | 0.036      | 0.042    | 0.387   | 0.082   |
| Divorced/widow/separated/never married | 0.266            | 2,031       | 0.284         | 1,025    | 0.248   | 1,006       | −0.036     | 0.042    | 0.387   | −0.082  |
| Per capita monthly expenditures (ZMW)  | 40.263           | 2,031       | 39.651        | 1,025    | 40.888  | 1,006       | 0.043      | 0.070    | 0.534   | 0.063   |
| Number of children ages 0–5            | 1.903            | 2,031       | 1.909         | 1,025    | 1.897   | 1,006       | −0.013     | 0.058    | 0.829   | −0.016  |
| Number of children ages 6–18           | 1.799            | 2,031       | 1.776         | 1,025    | 1.823   | 1,006       | 0.047      | 0.107    | 0.657   | 0.030   |
| Number of females ages 19+             | 1.089            | 2,031       | 1.076         | 1,025    | 1.101   | 1,006       | 0.025      | 0.027    | 0.353   | 0.054   |
| Number of males ages 19+               | 0.828            | 2,031       | 0.792         | 1,025    | 0.864   | 1,006       | 0.072      | 0.045    | 0.116   | 0.122   |
| Kalabo District                         | 0.349            | 2,031       | 0.345         | 1,025    | 0.353   | 1,006       | 0.008      | 0.103    | 0.942   | 0.016   |
| Kaputa District                         | 0.289            | 2,031       | 0.290         | 1,025    | 0.287   | 1,006       | −0.002     | 0.094    | 0.979   | −0.005  |
| Shangombo District                      | 0.362            | 2,031       | 0.365         | 1,025    | 0.360   | 1,006       | −0.005     | 0.105    | 0.962   | −0.010  |

Notes: Diff is the average difference between Treatment and Control, and SE is the standard error of this difference clustered at the CWAC level. We show unlogged values of per capital monthly expenditures for mean comparisons, however control for logged values in regression analyses. 40 ZMW (rebased) = approximately US$ 8 in 2010.
Table 2.

Descriptive statistics of decision-making indicators at baseline, by treatment status

| Variables                          | All Panel Sample | Control (C) | Treatment (T) | T-C Diff | p-value | Effect Size |
|-----------------------------------|------------------|-------------|---------------|----------|---------|-------------|
|                                   | Mean N | Mean N1 | Mean N2 | Diff | SE |                      |
| **Sole decision-making indicators** |        |          |          |      |     |                      |
| Sole children’s health            | 0.555  | 2,029   | 0.557  | 1,025 | −0.003 | 0.047 | 0.945 | −0.007 |
| Sole children’s schooling         | 0.424  | 2,030   | 0.433  | 1,024 | −0.018 | 0.047 | 0.702 | −0.037 |
| Sole own income                   | 0.393  | 1,934   | 0.386  | 980  | −0.014 | 0.042 | 0.737 | −0.029 |
| Sole partner’s income             | 0.342  | 1,848   | 0.317  | 903  | −0.049 | 0.041 | 0.234 | −0.104 |
| Sole major purchases              | 0.399  | 2,029   | 0.408  | 1,024 | −0.018 | 0.041 | 0.656 | −0.037 |
| Sole daily purchases              | 0.477  | 2,081   | 0.481  | 1,025 | −0.009 | 0.043 | 0.837 | −0.018 |
| Sole children’s clothes/shoes     | 0.433  | 2,030   | 0.423  | 1,024 | −0.02  | 0.041 | 0.63  | −0.04  |
| Sole family visits                | 0.392  | 2,027   | 0.379  | 1,024 | −0.027 | 0.041 | 0.515 | −0.055 |
| Sole own health                   | 0.526  | 2,029   | 0.521  | 1,024 | −0.009 | 0.04  | 0.825 | −0.018 |
| Count of sole decision making (0–9) | 3.691 | 1,795   | 3.785  | 923  | −0.194 | 0.327 | 0.555 | −0.054 |
| **Sole or joint decision-making indicators** |        |          |          |      |     |                      |
| Sole/joint children’s health      | 0.704  | 2,029   | 0.699  | 1,025 | −0.01  | 0.035 | 0.775 | −0.022 |
| Sole/joint children’s schooling   | 0.595  | 2,030   | 0.586  | 1,024 | −0.017 | 0.041 | 0.68  | −0.035 |
| Sole/joint own income             | 0.578  | 1,934   | 0.566  | 980  | −0.023 | 0.039 | 0.563 | −0.046 |
| Sole/joint partner’s income       | 0.538  | 1,848   | 0.518  | 903  | −0.038 | 0.04  | 0.344 | −0.077 |
| Sole/joint major purchases        | 0.589  | 2,029   | 0.576  | 1,024 | −0.025 | 0.037 | 0.489 | −0.052 |
| Sole/joint daily purchases        | 0.645  | 2,081   | 0.641  | 1,025 | −0.009 | 0.038 | 0.823 | −0.018 |
| Sole/joint children’s clothes     | 0.622  | 2,030   | 0.615  | 1,024 | −0.013 | 0.037 | 0.72  | −0.028 |
| Sole/joint family visits          | 0.572  | 2,027   | 0.559  | 1,024 | −0.022 | 0.034 | 0.511 | −0.045 |
| Sole/joint own health             | 0.634  | 2,029   | 0.627  | 1,024 | −0.015 | 0.033 | 0.658 | −0.031 |
| Count of sole/joint decision making (0–9) | 5.325 | 1,795   | 5.415  | 923  | −0.184 | 0.306 | 0.548 | −0.051 |

Notes: Diff is the average difference between Treatment and Control, and SE is the standard error of this difference clustered at the CWAC level.
Table 3.

ANCOVA estimates of the average impact of CGP on women’s sole decision making.

|                          | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|--------------------------|-------------------|----------------------|------------|------------------|-----------------|----------------|-----------------------------|---------------|------------|-------------|
| Program impact (unadjusted) | -0.004            | 0.001                | -0.015     | 0.013            | -0.011          | -0.015         | 0.008                       | 0.016         | 0.031      | 0.162       |
|                          | (0.019)           | (0.019)              | (0.021)    | (0.012)          | (0.021)         | (0.017)        | (0.020)                     | (0.023)       |            | (0.098)     |
| Program impact (adjusted) | 0.010             | 0.016                | -0.006     | 0.016            | 0.005           | -0.004         | 0.021                       | 0.027         | 0.042      | 0.189       |
|                          | (0.016)           | (0.015)              | (0.019)    | (0.011)          | (0.015)         | (0.015)        | (0.018)                     | (0.018)       |            | (0.096)     |
|                          |                   |                      |            |                  |                 |                 | (0.015)***                  | (0.096)       |            |             |
| N                       | 6,084             | 6,087                | 5,339      | 4,239            | 6,080           | 6,087          | 6,087                       | 6,079         | 6,086      | 3,949       |

Notes: Estimations use OLS ANCOVA models. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* \( p < 0.1, \)
** \( p < 0.05, \)
*** \( p < 0.01. \)

Adjusted models include baseline values of the decision-making indicator as well as the following controls: woman’s age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
Table 4.

ANCOVA estimates of the average impact of CGP on women’s sole or joint decision making

|                          | Children’s health | Children’s schooling | Own income | Partner’s income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|--------------------------|-------------------|----------------------|------------|------------------|-----------------|-----------------|------------------------------|---------------|------------|-------------|
| Program impact (unadjusted) | 0.012 (0.015)     | 0.033 (0.019)*       | 0.033      | 0.056 (0.021)**  | 0.003 (0.020)   | 0.006 (0.012)   | 0.016 (0.011)               | 0.029 (0.021) | 0.009      | 0.338       |
| Program impact (adjusted)  | 0.016 (0.015)     | 0.039 (0.018)**      | 0.036      | 0.058 (0.021)*** | 0.010 (0.017)   | 0.009 (0.011)   | 0.020 (0.011)               | 0.035 (0.015) | 0.014      | 0.343       |
| N                        | 6,084             | 6,087                | 5,339      | 4,239            | 6,080           | 6,087           | 6,087                       | 6,079         | 6,086      | 3,949       |

Notes: Estimations use OLS ANCOVA models. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* \( p < 0.1 \),
** \( p < 0.05 \),
*** \( p < 0.01 \).

Adjusted models include baseline values of the decision-making indicator as well as the following controls: woman’s age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
Table 5.

ANCOVA heterogeneous average impact estimates of the CGP on women’s sole decision making by level of education, marital status, and per capita (logged) household expenditures (Adjusted Models)

| Model 1 | Treatment indicator (T) | 7 + years of education | Married/cohabiting | Per capita (logged) monthly expenditures (ZMW) |
|---------|-------------------------|------------------------|--------------------|-----------------------------------------------|
| Children's health | 0.070 | −0.033 | −0.332 | 0.015 |
| (0.066) | (0.060) | (0.075) | (0.026) | (0.029) |
| Children's schooling | −0.019 | −0.036 | −0.463 | −0.001 |
| (0.066) | (0.063) | (0.075) | (0.027) | (0.029) |
| Own income | −0.118 | −0.013 | −0.466 | −0.012 |
| (0.075) | (0.075) | (0.075) | (0.027) | (0.027) |
| Partner's income | −0.021 | −0.008 | −0.260 | −0.018 |
| (0.066) | (0.066) | (0.075) | (0.016) | (0.016) |
| Major purchases | −0.069 | −0.024 | −0.514 | −0.020 |
| (0.068) | (0.068) | (0.071) | (0.029) | (0.029) |
| Daily purchases | −0.000 | −0.035 | −0.231 | 0.004 |
| (0.075) | (0.075) | (0.075) | (0.021) | (0.021) |
| Children's clothes or shoes | 0.005 | −0.011 | −0.392 | −0.013 |
| (0.068) | (0.068) | (0.068) | (0.025) | (0.025) |
| Family visits | −0.041 | −0.015 | −0.475 | −0.009 |
| (0.577) | (0.577) | (0.577) | (0.029) | (0.029) |
| Own health | −0.002 | −0.026 | −0.285 | −0.002 |
| (0.125) | (0.125) | (0.125) | (0.031) | (0.031) |
| Count of DM | 0.627 | −1.440 | −0.304 | −0.008 |
| (0.577) | (0.577) | (0.577) | (0.033) | (0.033) |

Notes: Estimations use OLS ANCOVA models. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* $p < 0.1$,  
** $p < 0.05$,  
*** $p < 0.01$.

Models include baseline values of the decision-making indicator as well as the following controls: woman's age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.
### Table 6.

**ANCOVA heterogeneous average impact estimates of the CGP on women’s sole or joint decision-making by level of education, marital status, and per capita (logged) household expenditures (Adjusted Models)**

|                          | Children’s health | Children’s schooling | Own income | Partner's income | Major purchases | Daily purchases | Children’s clothes or shoes | Family visits | Own health | Count of DM |
|--------------------------|-------------------|----------------------|------------|------------------|-----------------|----------------|-----------------------------|---------------|------------|-------------|
| Treatment indicator (T)  | −0.005            | −0.052               | −0.002     | 0.152            | −0.010          | 0.033          | 0.019                       | −0.081        | −0.030     | 0.630       |
| (0.057)                  | (0.062)           | (0.056)              | (0.080)*   | (0.075)          | (0.043)         | (0.051)        | (0.077)                     | (0.055)       | (0.518)    |             |
| 7 + years of education   | −0.024            | −0.017               | −0.024     | −0.041           | −0.020          | −0.019         | −0.015                      | −0.003        | −0.028     | −0.167      |
| (0.016)                  | (0.019)           | (0.016)              | (0.021)*   | (0.022)          | (0.014)         | (0.015)        | (0.022)                     | (0.018)       | (0.133)    |             |
| Married/cohabiting       | −0.100            | −0.222               | −0.140     | −0.099           | −0.219          | −0.034         | −0.088                      | −0.216        | −0.127     | −0.577      |
| (0.020)**                | (0.025)**         | (0.020)**            | (0.038)**  | (0.021)**        | (0.016)**       | (0.018)**      | (0.024)**                   | (0.017)**     | (0.238)**   |             |
| Per capita (logged)      | 0.012             | 0.006                | 0.005      | 0.008            | −0.010          | 0.011          | 0.004                       | 0.002         | 0.003      | 0.084       |
| monthly expenditures     | (ZMW)             | (ZMW)                | (ZMW)      | (ZMW)            | (ZMW)           | (ZMW)          | (ZMW)                       | (ZMW)         | (ZMW)      |             |
| (0.014)                  | (0.013)           | (0.014)              | (0.015)    | (0.018)          | (0.010)         | (0.013)        | (0.016)                     | (0.014)       | (0.109)    |             |
| T* 7 + years of education| 0.018             | −0.013               | 0.014      | 0.023            | 0.005           | 0.000          | 0.008                       | −0.014        | 0.042      | 0.037       |
| (0.022)                  | (0.025)           | (0.022)              | (0.030)    | (0.029)          | (0.020)         | (0.022)        | (0.028)                     | (0.024)*      | (0.183)    |             |
| T* Married/cohabiting   | −0.011            | 0.044                | 0.039      | −0.043           | 0.023           | −0.008         | 0.006                       | 0.027         | 0.002      | −0.388      |
| (0.019)                  | (0.028)           | (0.020)*             | (0.045)    | (0.024)          | (0.016)         | (0.018)        | (0.027)                     | (0.021)       | (0.290)    |             |
| T* Per capita (logged)   | 0.007             | 0.018                | 0.001      | −0.018           | 0.001           | −0.005         | −0.002                      | 0.029         | 0.009      | 0.016       |
| monthly expenditures     | (ZMW)             | (ZMW)                | (ZMW)      | (ZMW)            | (ZMW)           | (ZMW)          | (ZMW)                       | (ZMW)         | (ZMW)      |             |
| (0.016)                  | (0.016)           | (0.016)              | (0.021)    | (0.022)          | (0.012)         | (0.015)        | (0.020)                     | (0.016)       | (0.135)    |             |
| N                        | 6,084             | 6,087                | 5,339      | 4,239            | 6,080           | 6,087          | 6,079                       | 6,086         | 3,949      |             |

**Notes:** Estimations use OLS ANCOVA models. Robust standard errors at the CWAC level are in parentheses. Asterisks indicate significance level:

* $p < 0.1$,

** $p < 0.05$,

*** $p < 0.01$. 

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Adjusted models include baseline values of the following controls: woman's age, indicator for whether woman has completed primary education or more, indicator for whether woman is married or cohabiting, household demographic composition (number of children 0–5 years, number of children 6–18 years, number of females 19 and older, number of males 19 and older in the household), per capita (logged) household monthly expenditures, survey wave indicators, and indicators for district of residence.