

---

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

---

Juan Bonilla, Rosa Castro Zarzur, Sudhanshu Handa, Claire Nowlin,  
Amber Peterman, Hannah Ring and David Seidenfeld  
for the Zambia Child Grant Programme Evaluation Team

Office of Research - Innocenti Working Paper

WP-2016-01 | January 2016

## INNOCENTI WORKING PAPERS

UNICEF Office of Research Working Papers are intended to disseminate initial research contributions within the programme of work, addressing social, economic and institutional aspects of the realization of the human rights of children.

The findings, interpretations and conclusions expressed in this paper are those of the authors and do not necessarily reflect the policies or views of UNICEF.

This paper has been peer reviewed both externally and within UNICEF.

The text has not been edited to official publications standards and UNICEF accepts no responsibility for errors.

Extracts from this publication may be freely reproduced with due acknowledgement. Requests to utilize larger portions or the full publication should be addressed to the Communication Unit at [florence@unicef.org](mailto:florence@unicef.org).

For readers wishing to cite this document we suggest the following form:

Bonilla, J., Castro Zarzur, R., Handa, S., Nowlin, C., Peterman, A., Ring, H. and Seidenfeld, D. (2016). Cash for Women's Empowerment? A Mixed-Methods Evaluation of the Government of Zambia's Child Grant Programme, *Innocenti Working Paper* No.2016-01, UNICEF Office of Research, Florence.

## THE UNICEF INNOCENTI OFFICE OF RESEARCH

In 1988 the United Nations Children's Fund (UNICEF) established a research centre to support its advocacy for children worldwide and to identify and research current and future areas of UNICEF's work. The prime objectives of the Office of Research are to improve international understanding of issues relating to children's rights and to help facilitate full implementation of the Convention on the Rights of the Child in developing, middle-income and industrialized countries.

The Office aims to set out a comprehensive framework for research and knowledge within the organization, in support of its global programmes and policies. Through strengthening research partnerships with leading academic institutions and development networks in both the North and South, the Office seeks to leverage additional resources and influence in support of efforts towards policy reform in favour of children.

Publications produced by the Office are contributions to a global debate on children and child rights issues and include a wide range of opinions. For that reason, some publications may not necessarily reflect UNICEF policies or approaches on some topics. The views expressed are those of the authors and/or editors and are published in order to stimulate further dialogue on child rights.

The Office collaborates with its host institution in Florence, the Istituto degli Innocenti, in selected areas of work. Core funding is provided by the Government of Italy, while financial support for specific projects is also provided by other governments, international institutions and private sources, including UNICEF National Committees.

Extracts from this publication may be freely reproduced with due acknowledgement. Requests to translate the publication in its entirety should be addressed to: Communications Unit, [florence@unicef.org](mailto:florence@unicef.org).

For further information and to download or order this and other publications, please visit the website at [www.unicef-irc.org](http://www.unicef-irc.org).

### **Correspondence should be addressed to:**

UNICEF Office of Research - Innocenti  
Piazza SS. Annunziata, 12  
50122 Florence, Italy  
Tel: (+39) 055 20 330  
Fax: (+39) 055 2033 220  
[florence@unicef.org](mailto:florence@unicef.org)  
[www.unicef-irc.org](http://www.unicef-irc.org)  
[@UNICEFInnocenti](https://www.facebook.com/UnicefOfficeofResearchInnocenti)  
[facebook.com/UnicefOfficeofResearchInnocenti](https://www.facebook.com/UnicefOfficeofResearchInnocenti)

## CASH FOR WOMEN'S EMPOWERMENT? A MIXED-METHODS EVALUATION OF THE GOVERNMENT OF ZAMBIA'S CHILD GRANT PROGRAMME

Juan Bonilla,<sup>1</sup> Rosa Castro Zarzur,<sup>1</sup> Sudhanshu Handa,<sup>2,3</sup> Claire Nowlin,<sup>1</sup> Amber Peterman,<sup>3</sup> Hannah Ring<sup>1</sup> and David Seidenfeld<sup>1</sup> on behalf of the Zambia Child Grant Programme Evaluation Team

<sup>1</sup> American Institutes for Research (AIR), Washington, DC, USA

<sup>2</sup> University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

<sup>3</sup> UNICEF Office of Research – Innocenti, Florence, Italy

Authors are listed in alphabetical order to denote equal contributions.

Corresponding authors: Amber Peterman (apeterman@unicef.org) and Hannah Ring (hreeves@air.org).

**Abstract:** The empowerment of women, broadly defined, is an often-cited objective and benefit of social cash transfer programmes 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 programmes that have gone to scale in sub-Saharan Africa. This paper reports findings from a mixed-methods evaluation of the Government of Zambia's Child Grant Programme, a poverty-targeted, unconditional transfer given to mothers or primary caregivers of young children aged 0 to 5. 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 programme participation. Our study found that women in beneficiary households were making more sole and joint decisions (across five domains); however, impacts translated into relatively modest increases of an additional 0.34 of a decision made across nine domains on average. 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 did increase overall household well-being because they felt increased financial empowerment and were able to retain control over transfers for household investment and savings for emergencies. The paper highlights methodological challenges in using intrahousehold decision-making as the primary indicator to measure empowerment. Despite this, the results show potential for national, poverty-targeted, unconditional, government-run programmes in Africa, to improve the well-being of female beneficiaries.

**Keywords:** Cash transfers; women's empowerment; Zambia; Africa

**JEL Classification:** I25, O15, I38

**Acknowledgements:** The Child Grant Programme impact evaluation was commissioned by the Government of Zambia (GRZ) through the Ministry of Community Development, Mother and Child Health to the American Institutes for Research (AIR) and the University of North Carolina at Chapel Hill (UNC) and was funded by a consortium of donors, including the United Kingdom Department for International Development (DFID), Irish Aid, and the Government of Finland. The results that appear in this paper are the culmination of over four years of intellectual, technical, financial, and operational efforts on the part of a large and dedicated team, all of whom made important contributions that led to the success of the evaluation. The members of the evaluation team, listed by affiliation and then alphabetically within affiliation, are AIR (Juan Bonilla, Rosa Castro Zarzur, Claire Nowlin, Hannah Ring, David Seidenfeld, Dan Sherman); UNICEF-Zambia (Charlotte Harland Scott, Paul Quarles van Ufford); GRZ (Vandras Luywa, Stanfield Michelo, Manzunzu Zulu); DFID-Zambia (Kelley Toole); Palm Associates (Alefa Banda, Chiluba Goma, Liseteli Ndiyoi, Gelson Tembo, Nathan Tembo); UNC (Sudhanshu Handa); and UNICEF Office of Research – Innocenti (Sudhanshu Handa, Tia Palermo, Amber Peterman, Leah Prencipe). Sudhanshu Handa and Amber Peterman received additional funding from the Swedish International Development Cooperation to the UNICEF Office of Research – Innocenti for analysis of the data and drafting of the manuscript.

## List of Acronyms

<u>AIR</u>	<u>American Institutes for Research</u>
<u>ANCOVA</u>	<u>Analysis of covariance</u>
<u>ATM</u>	<u>Automated Teller Machine</u>
<u>CCT</u>	<u>Conditional Cash Transfer</u>
<u>CGP</u>	<u>Child Grant Programme</u>
<u>cRCT</u>	<u>cluster Randomized Controlled Trial</u>
<u>CSG</u>	<u>Child Support Grant</u>
<u>CWAC</u>	<u>Community Welfare Assistance Committee</u>
<u>DHS</u>	<u>Demographic and Health Survey</u>
<u>DID</u>	<u>Difference-in-differences</u>
<u>IDI</u>	<u>In-depth Interview</u>
<u>ITT</u>	<u>Intent-to-treat</u>
<u>LAC</u>	<u>Latin America and the Caribbean</u>
<u>SCT</u>	<u>Social Cash Transfer</u>
<u>UCT</u>	<u>Unconditional Cash Transfer</u>
<u>ZMW</u>	<u>Zambian Kwacha</u>

## TABLE OF CONTENTS

1. Introduction .....	7
2. Theoretical Framing and Review of Literature .....	8
3. Programme and Setting.....	9
4. Data and Evaluation Design.....	10
4a. Quantitative.....	10
4b. Qualitative .....	11
5. Methodology and Key Indicators .....	12
5a. Quantitative .....	12
5b. Qualitative.....	13
6. Results .....	14
6a. Sample Descriptives and Context .....	14
6b. Programme Impacts.....	17
6c. Extensions and Heterogeneous Impacts .....	20
7. Discussion and Conclusion .....	22
8. References.....	25
9. Appendix .....	27

## 1. INTRODUCTION

The 'empowerment of women', broadly defined, is an often-cited objective and benefit of social cash transfer (SCT) programmes in developing countries. Many programmes 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 programmes gender sensitive but is also often a key component necessary to achieve overall programme 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 sub-Saharan 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 institutionalized as long-term government programming. Furthermore, when SCTs are poverty-targeted, women in qualifying households are likely to represent some of the most comparatively disempowered members of their communities – meeting the dual development objectives of poverty reduction and women's empowerment.

Despite the promise and potential of SCTs to empower women, the evidence supporting this outcome is mixed. In a review of women's empowerment and nutrition impacts, van den Bold and colleagues (2013) summarize quantitative and qualitative evidence on SCTs and other interventions with the potential to empower women. 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 programming 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 programme 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. pre-programmed 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 that make it difficult to draw conclusions across studies, 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 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 and 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 (Peterman et al., 2015; Bishop and Bowman, 2014; Carter et al., 2014). 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 programme results to political actors and funders.

We conducted a mixed-methods evaluation of the Government of Zambia's Child Grant Programme (CGP), a poverty-targeted UCT given to mothers or primary caregivers of young children aged 0 to 3 at enrolment. 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 one-time 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, programme 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 programme affected overall intrahousehold dynamics. This paper contributes to the literature by adding to the scarce mixed-methods evidence around women's empowerment and UCTs in Africa. In addition, we are able to make conclusions based on a relatively long period of programme receipt (four years), therefore overcoming limitations of other studies, which may examine only short-term impacts.

## 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 to inform the determinants of household decision-making processes (Doss, 2013). There are several channels through which an SCT could affect a woman's bargaining power (in relation to her spouse or other household members), including the 'income effect' of increasing cash in her hands, or increased social networks, mobility or knowledge, should the SCT be paired with additional training, information or contact with other services (health or financial). In the case of a UCT without co-responsibilities or other programme components, we expect her position to be affected purely by the 'income effect' of the extra cash.

Impacts of cash transfers on women's empowerment outcomes have been reviewed elsewhere (van den Bold, Quisumbing and Gillespie, 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 grey literature from these regional and typology-specific programmes, with a particular focus on decision-making outcomes. A mixed-methods evaluation of the Kenya Hunger Safety Net Programme, where approximately 75 per cent of named beneficiaries are women, found mixed results on women's social and economic empowerment after two years (OPM and IDS, 2012). Although the programme increased the proportion of women named as the primary household budget decision-maker (driven by female-headed households) and played a larger role in household income generation (specifically petty trading and small businesses), there were also qualitative reports of increased tension between spouses. Similar promising but mixed results were found in an assessment of the Government Child Support Grant (CSG) in Soweto, South Africa (Patel and Hochfeld, 2011). Findings suggest 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 the CSG did little overall to transform gender relations. Finally, over 12 months Peterman et al. (2015) measured the impact of a cash and food transfer programme, given to mothers and primary caregivers of young children aged 3–5 attending community-run preschools in Northern Uganda. Results indicated weakly significant impacts on decision-making totals across six 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. Therefore, although UCTs have had impacts on some quantitative measures, results are mixed, and qualitative methods highlight the limitations of cash-only interventions, which may not be enough to affect substantial change.

### 3. PROGRAMME 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 5. The overall goal of the programme was to reduce extreme poverty and curb the intergenerational transfer of poverty (AIR, 2013).<sup>1</sup> The CGP is geographically targeted, meaning that in eligible areas any household with a child from the age of 0 to 5 years can qualify to be a beneficiary. Distributed through a local pay-point manager, bimonthly transfers of 120 Zambian kwacha (ZMW) rebased (approximately US\$24) is 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 per cent of baseline household expenditure.

<sup>1</sup> According to the CGP operations manual, the specific objectives of the programme 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 5; (4) reduce stunting and wasting among children under age 5; (5) increase the number of households having a second meal per day; and (6) increase the number of households owning assets such as livestock.

As previously mentioned, there were no co-responsibilities to receiving the cash, and no additional programme 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 enrolment of children, investment in productive activities, and reduced poverty, among others (AIR, 2015).

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 (UNDP, 2013). This rank remains unchanged when examining the Gender Inequality Index, which measures a set of gender-specific indicators such as the male-to-female population ratio with any secondary education or participation in the labour force. Therefore, women in Zambia face not only overall poverty and human development challenges but also significant gender discrimination. According to the 2013-14 Demographic and Health Survey (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 per cent of young women aged 15-19 already mothers or pregnant with their first child (CSO, MOH and ICF International, 2014). These statistics vary greatly between rural and urban areas; for example, rural women have on average three more births than urban women. Moreover, 47 per cent of ever-married women aged 15-49 reported having experienced intimate partner physical, sexual, or emotional violence, indicating entrenchment of norms that marginalize women.

## 4. DATA AND EVALUATION DESIGN

### 4a. Quantitative

The CGP impact evaluation was designed as a cRCT since the Zambian government was not able to immediately scale up the programme 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 community welfare assistance committees (CWACs) per district (out of roughly 100 CWACs in each of the three districts) were selected randomly by lottery to appear in the study. All eligible households 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 baseline survey was conducted in collaboration with Zambian survey firm Palm Associates during October–November 2010, before the random selection of the CWACs. 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 programme on consumption smoothing during the arvest 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 fields, 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.<sup>2</sup> 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 A1, of the 2,492 female respondents at baseline, 443 were excluded, either because the household could not be contacted at one or more follow-up waves (household attrition), or because the individual answering the women's empowerment module was not the same person in all the follow-up interviews (individual attrition). We restricted the sample to allow the measurement of impacts over time among the same women, thus accounting for their baseline level of decision-making power. Further, of the 2,049 full panel women, 18 additional respondents were excluded because they have missing information for the set of control variables we use in the regression analysis.<sup>3</sup> 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 attriting 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 programme impact; however, our results show that 20.16 per cent and 18.59 per cent of individual women attrited in the treatment and control group, respectively, with a p-value difference of 0.3182. Further, we investigated the potential of differential attrition by comparing attrition levels by background characteristic (Table A2) and by decision-making outcomes (Table A3). 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.

#### **4b. Qualitative**

The qualitative component consisted of 30 IDIs with women and 10 IDIs with male partners or other decision-makers in the household, 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),<sup>4</sup> (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 accessible at the time of fieldwork that ranged from 0.5 kilometers to 60 kilometers from Kaputa's centre.

---

<sup>2</sup> Full survey instruments and technical reports are publicly available on the Transfer Project website: <http://www.cpc.unc.edu/projects/transfer>.

<sup>3</sup> For the sake of robustness, we maintain the same number of observations between adjusted and unadjusted models.

<sup>4</sup> 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).

The protocols for qualitative work were developed based on existing literature and examples of field protocols from similar studies that examined gendered impacts of cash transfers (Peterman et al., 2015; Buller et al., 2015). The 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 themes 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 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 were conducted in local languages, voice recorded, and transcribed into English. 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

### 5a. Quantitative

We used the successful randomization at baseline, combined with 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 Table A3). 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:

$$(1) Y_{ijt} = \alpha + \beta_T Treat_j + \rho Y_{ij0} + r$$

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.  $Treat_j$  is an indicator that equals 1 if cluster  $j$  is in a CGP community, and  $T$  represents the ITT estimator, or the effect of being assigned to a CGP community. In all models, we control for  $\gamma$ , 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 are robust to use of probit models.

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 0 to 9. 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.

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 (Equation 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 (seven 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.

## **5b. Qualitative**

Qualitative data were coded using the analysis software package NVivo 10 by two qualitative specialists. An interrater reliability test was performed to ensure that data were captured and coded in NVivo consistently. Data were coded under four key topics: (1) household structure, (2) decision-making, (3) experience with the transfer, and (4) empowerment and well-being. Key quotes were selected from IDIs meant to represent majority opinion or, alternatively, cases of outliers according to themes. 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.

## 6. RESULTS

### 6a. 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 per cent of women were either married or cohabiting, and the remaining 30 per cent were either divorced, separated, widowed, or had never been married. Women in the sample had very low levels of education – less than 30 per cent had seven 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 programme, households had on average two children under the age of 5. As expected, households in the sample were very poor; at baseline they had a mean monthly per capita expenditure of 40 ZMW, which is below the 2010 extreme poverty line for the country (90.5 ZMW).

**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 capita monthly expenditures for mean comparisons, however we control for logged values in regression analyses

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 range from a low of 34 per cent for decisions on partner's income to a high of 55 per cent for decisions on children's health. The means of the sole or joint decision-making indicators range from a low of 54 per cent, again corresponding to decisions on partner's income, to a high of 70 per cent 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 are all balanced at baseline between the treatment and the control respondents, suggesting that the panel sample is internally valid and randomization was successful.

**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		
<b>Sole decision-making indicators</b>										
Sole children's health	0.555	2,029	0.557	1,025	0.554	1,004	-0.003	0.047	0.945	-0.007
Sole children's schooling	0.424	2,030	0.433	1,024	0.415	1,006	-0.018	0.047	0.702	-0.037
Sole own income	0.393	1,934	0.4	980	0.386	954	-0.014	0.042	0.737	-0.029
Sole partner's income	0.342	1,848	0.366	945	0.317	903	-0.049	0.041	0.234	-0.104
Sole major purchases	0.399	2,029	0.408	1,024	0.39	1,005	-0.018	0.041	0.656	-0.037
Sole daily purchases	0.477	2,031	0.481	1,025	0.472	1,006	-0.009	0.043	0.837	-0.018
Sole children's clothes/shoes	0.433	2,030	0.443	1,025	0.423	1,005	-0.02	0.041	0.63	-0.04
Sole family visits	0.392	2,027	0.405	1,021	0.379	1,006	-0.027	0.041	0.515	-0.055
Sole own health	0.526	2,029	0.53	1,024	0.521	1,005	-0.009	0.04	0.825	-0.018
Count of sole decision-making (0-9)	3.691	1,795	3.785	923	3.592	872	-0.194	0.327	0.555	-0.054
<b>Sole or Joint decision-making indicators</b>										
Sole/joint children's health	0.704	2,029	0.709	1,025	0.699	1,004	-0.01	0.035	0.775	-0.022
Sole/joint children's schooling	0.595	2,030	0.604	1,024	0.586	1,006	-0.017	0.041	0.68	-0.035
Sole/joint own income	0.578	1,934	0.589	980	0.566	954	-0.023	0.039	0.563	-0.046
Sole/joint partner's income	0.538	1,848	0.557	945	0.518	903	-0.038	0.04	0.344	-0.077
Sole/joint major purchases	0.589	2,029	0.602	1,024	0.576	1,005	-0.025	0.037	0.489	-0.052
Sole/joint daily purchases	0.645	2,031	0.65	1,025	0.641	1,006	-0.009	0.038	0.823	-0.018
Sole/joint children's clothes	0.622	2,030	0.628	1,025	0.615	1,005	-0.013	0.037	0.72	-0.028
Sole/joint family visits	0.57	2,027	0.581	1,021	0.559	1,006	-0.022	0.034	0.511	-0.045
Sole/joint health	0.634	2,029	0.642	1,024	0.627	1,005	-0.015	0.033	0.658	-0.031
Count of sole/joint decision-making (0-9)	5.325	1,795	5.415	923	5.231	872	-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.

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 believe 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 report that men are 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 are also almost exclusively in charge of household chores, including cooking, cleaning, washing clothes, fetching water, and looking after younger children. Cooking occupies the majority of women's time in the house, taking between two and four hours a day; washing clothes is also similarly time intensive, though it is not a daily chore. There is 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 being 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 (non-beneficiary)



Almost no disagreements over decision-making were reported by unmarried women and men, who were, for the most part, the 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 surface-level 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 (non-beneficiary)

*"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 (non-beneficiary)

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 with 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.

## 6b. Programme 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 made by 0.19 decisions, on average; 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 programme 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 made solely or jointly by the women in the panel, with women making 0.34 additional decisions on average. As in Table 3, coefficients and significance levels generally increase when controls are added to regressions.

**Table 3 - ANCOVA Impact Estimates on 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 domains
Programme impact (unadjusted)	-0.004 (0.21)	0.001 (0.07)	-0.015 (0.71)	0.013 (1.10)	-0.011 (0.51)	-0.015 (0.92)	0.008 (0.41)	0.016 (0.72)	0.031 (1.84)*	0.162 (1.65)
Programme impact (adjusted)	0.010 (0.62)	0.016 (1.03)	-0.006 (0.32)	0.016 (1.40)	0.005 (0.36)	-0.004 (0.26)	0.021 (1.15)	0.027 (1.46)	0.042 (2.79)***	0.189 (1.98)*
<i>N</i>	6,084	6,087	5,339	4,239	6,080	6,087	6,087	6,079	6,086	3,949

**Table 4 - ANCOVA Impact Estimates on the Average Impact 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 domains
Programme impact (unadjusted)	0.012 (0.77)	0.033 (1.68)*	0.033 (2.55)**	0.056 (2.62)**	0.003 (0.15)	0.006 (0.48)	0.016 (1.37)	0.029 (1.42)	0.009 (0.53)	0.338 (2.93)***
Programme impact (adjusted)	0.016 (1.10)	0.039 (2.16)**	0.036 (2.80)***	0.058 (2.78)***	0.010 (0.60)	0.009 (0.78)	0.020 (1.79)*	0.035 (1.78)*	0.014 (0.93)	0.343 (2.99)***
<i>N</i>	6,084	6,087	5,339	4,239	6,080	6,087	6,087	6,079	6,086	3,949

Estimations use OLS ANCOVA models. Robust *t*-statistics 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, and indicators for district of residence.

We also investigated adjusted CGP impacts on decision-making at each follow-up wave separately as an alternative to the pooled model. The CGP had a positive and significant impact on one of the ten sole decision-making indicators in each of the three follow-up waves, with the domain varying by wave (see Tables A5–A7). At 24 months, the CGP increased women's probability of making sole decisions regarding their own health by 5.3 pps; at 36 months, the programme had an impact of 5.3 pps on sole decisions regarding visits to friends and family; and at 48 months, the transfers increased the number of sole decisions made by women by 0.37 decisions. Tables A8–A10 replicate the disaggregated analysis using sole and joint measures. Results show the CGP had positive impacts on

four out of the nine domains at 36 months: (1) own income, (2) partner's income, (3) major purchases, and (4) family visits. The point estimates of these impacts range from 7 pps, corresponding to decisions associated with major purchases, to 11.9 pps, related to partner's income. At 24 and 48 months we found positive impacts on the composite measure and children's schooling, respectively.

Qualitatively, women and men reported limited impact of the CGP on decision-making, probably 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 the study communities. Despite this, there were some marginal, positive changes in decision-making reported by married women. For example, half of married women indicated they were in charge of decisions made with transfer funds, with the other half stating that they consulted their husbands or made shared decisions. Additionally, approximately 25 per cent of 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 beneficiary households. All but one man stated that there had been no change in decision-making since the CGP started, highlighting 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 indicated that the transfer improved their overall well-being 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 made them feel directly 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 programme 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 neighbouring households receiving the transfer. Women often referred 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. 'Ifimuti 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 (non-beneficiary)*

*"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)*

### **6c. Extensions and Heterogeneous Impacts**

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 analysed 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 results, which indicate that women with different characteristics may be more or less able to leverage transfer funds to negotiate change in their households. Tables 5 and 6 show the results of the regressions exploring heterogeneous impacts. There is little 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.

Qualitatively, there was particular interest in exploring the 'counterfactual,' or the degree to which women believed men would spend the transfer differently if it was in their hands. This was investigated by posing questions regarding how men's and women's incomes were spent, how they would respond to different scenarios regarding spending decisions, and what their financial goals were for the upcoming year. Although incomes were spent on an almost identical list of items (clothes, food, school fees, and various household needs), almost all men had larger incomes and thus

could buy more and make major purchases. In addition, several women raised the issue that their husbands often spent money on beer or on other women (on another wife or on girlfriends). Previous discussions of saving patterns also made it clear that the women were diligent in maintaining or growing an emergency fund or saving up for major purchases, regardless of support from their husbands. One man acknowledged this, calling his wife the 'treasurer' of the house.

*"The only difference is that he also uses his money on beer, which I don't.  
The other thing is that my money buys less food than his; my money is very little." ~  
Female, married (non-beneficiary)*

**Table 5 - ANCOVA Heterogeneous Average Impact Estimates on Women's Sole 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 domains
Treatment indicator (T)	0.070 (1.07)	-0.019 (0.32)	-0.118 (1.56)	-0.021 (0.31)	-0.069 (1.02)	-0.000 (0.00)	0.005 (0.07)	-0.041 (0.55)	-0.002 (0.04)	0.206 (0.57)
7+ years of education	-0.033 (1.55)	-0.036 (1.37)	-0.013 (0.49)	-0.008 (0.48)	-0.024 (0.83)	-0.035 (1.64)	-0.011 (0.42)	-0.015 (0.50)	-0.026 (1.05)	-0.144 (1.13)
Married/cohabiting	-0.332 (13.43)***	-0.463 (16.19)***	-0.466 (15.25)***	-0.260 (7.41)***	-0.514 (18.87)***	-0.231 (10.30)***	-0.392 (12.84)***	-0.475 (14.55)***	-0.285 (12.29)***	-1.646 (9.08)***
Per capita (logged) monthly expenditures (ZMW)	0.015 (1.04)	-0.001 (0.11)	-0.012 (0.75)	-0.018 (1.96)*	-0.020 (1.44)	0.004 (0.33)	-0.013 (0.94)	-0.009 (0.61)	-0.002 (0.12)	0.022 (0.30)
T* 7+ years of education	0.057 (1.89)*	0.025 (0.76)	0.034 (1.07)	0.010 (0.43)	0.032 (0.97)	0.028 (1.10)	0.011 (0.32)	0.043 (1.22)	0.063 (2.01)**	0.181 (1.08)
T* Married/cohabiting	-0.011 (0.44)	0.035 (1.28)	0.002 (0.08)	-0.016 (0.34)	0.016 (0.56)	-0.016 (0.67)	-0.005 (0.16)	0.027 (0.85)	0.049 (2.17)**	-0.066 (0.44)
T* Per capita (logged) monthly expenditures (ZMW)	-0.020 (1.00)	0.000 (0.03)	0.029 (1.44)	0.014 (1.07)	0.015 (0.84)	-0.000 (0.00)	0.005 (0.23)	0.010 (0.53)	-0.003 (0.15)	-0.030 (0.30)
N	6,084	6,087	5,339	4,239	6,080	6,087	6,087	6,079	6,086	6,093

Estimations use OLS ANCOVA models. Robust *t*-statistics 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, and indicators for district of residence.

**Table 6 - ANCOVA Heterogeneous Average Impact Estimates 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 domains
Treatment indicator (T)	-0.005 (0.09)	-0.052 (0.85)	-0.002 (0.03)	0.152 (1.89)*	-0.010 (0.14)	0.033 (0.77)	0.019 (0.38)	-0.081 (1.05)	-0.030 (0.53)	0.033 (0.09)
7+ years of education	-0.024 (1.51)	-0.017 (0.88)	-0.024 (1.48)	-0.041 (1.94)*	-0.020 (0.88)	-0.019 (1.41)	-0.015 (1.04)	-0.003 (0.14)	-0.028 (1.51)	-0.161 (1.54)
Married/cohabiting	-0.100 (5.08)***	-0.222 (8.84)***	-0.140 (7.07)***	-0.099 (2.61)**	-0.219 (10.52)***	-0.034 (2.19)**	-0.088 (4.97)***	-0.216 (9.08)***	-0.127 (7.45)***	-0.695 (5.15)***
Per capita (logged) monthly expenditures (ZMW)	0.012 (0.87)	0.006 (0.48)	0.005 (0.37)	0.008 (0.58)	-0.010 (0.55)	0.011 (1.08)	0.004 (0.32)	0.002 (0.12)	0.003 (0.23)	0.059 (0.69)
T* 7+ years of education	0.018 (0.82)	-0.013 (0.51)	0.014 (0.65)	0.023 (0.78)	0.005 (0.18)	0.000 (0.01)	0.008 (0.38)	-0.014 (0.51)	0.042 (1.75)*	0.029 (0.21)
T* Married/cohabiting	-0.011 (0.59)	0.044 (1.59)	0.039 (1.92)*	-0.043 (0.95)	0.023 (0.97)	-0.008 (0.46)	0.006 (0.33)	0.027 (1.03)	0.002 (0.12)	0.096 (0.71)
T* Per capita (logged) monthly expenditures (ZMW)	0.007 (0.44)	0.018 (1.12)	0.001 (0.07)	-0.018 (0.85)	0.001 (0.03)	-0.005 (0.43)	-0.002 (0.12)	0.029 (1.43)	0.009 (0.52)	0.028 (0.27)
N	6,084	6,087	5,339	4,239	6,080	6,087	6,087	6,079	6,086	6,093

Estimations use OLS ANCOVA models. Robust *t*-statistics 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, and indicators for district of residence.

## 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 and 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 an additional 0.34 of a decision made across nine domains on average.

Qualitatively, we found that only modest changes in decision-making and intrahousehold relationships were realized among beneficiaries, due to entrenched gender norms, which indicate men as the head of household and primary decision-maker. However, the transfer did 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 et al. (2015), who found that the CGP led to a 23-pps increase in women's probability of saving in cash after 24 months and a 10-pps increase after 36 months. Findings also indicated that the programme increased diversification into household non-farm enterprises, driven in part by the increased women's savings generated by the CGP. This supports qualitative findings that women are more diligent savers than men in the 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.

The combined methods show that there is significant room for improvement of the measurement of direct measures of empowerment, particularly 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.' The usefulness and responsiveness of decision-making measures have been critiqued elsewhere (Bishop and Bowman, 2014; Carter et al., 2014; Heckert and Fabric, 2013; Peterman et al., 2015); however, they are still widely used in development research and programme 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 programmes such as the CGP to drastically change decision-making, even over the medium term, with relatively small amounts of money. Alternatively, more promising indicators might directly measure financial realms, such as savings or labour force participation and earnings, or rely on multidimensional measures, rather than focusing on decision-making alone. 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 and Attanasio, 2015). We should encourage these types of experimentations around measurement of direct indicators of 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. In addition, although we explored qualitatively how women and men believed the transfer would be spent differently if men (instead of women) were given the transfer, we were not able to confirm these results using quantitative data, because the CGP was given exclusively to women. Finally, our quantitative results rely on the decision to pool the post-treatment surveys for the averaged ANCOVA model. Using a pooled sample is useful because it allows us to average out noise, thus increasing our power to detect effects. The disadvantage of this method is that we are not able to test if impacts vary over time. In addition, decision-making indicators tend to be noisy; thus, larger sample sizes may be required to detect programme 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.

This study is important for governments, policy makers, and programme implementers who are engaged in SCTs for poverty reduction. On one hand, we contribute to evidence that suggests the CGP positively affected women's empowerment, particularly through increases in savings and the ability to start non-farm enterprises, as well as decisions to spend transfer funds on a set of household investment categories. However, due to existing gender norms, impacts on sole and joint decision-making translated into relatively minor actual shifts in intrahousehold dynamics. Thus, we conclude that programmes 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 programmes suggests that targeting women, as opposed to men, does result in increased overall benefits to the household (Yoong, Rabinovich and Diepeveen, 2012). It is important to recall that these impacts are realized under a programme with no additional conditions, such as attendance at health or nutrition sessions, which in past programmes have been suggested as one pathway through which programmes 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). As the CGP shares programme design components with other national poverty-targeted UCTs in Africa, we can expect a degree of generalizability in these results.



## 8. REFERENCES

- Almås, I., Armand, A., Attanasio, O. and Carniero, P. (2015). Measuring and Changing Control: Women's empowerment and targeted transfers, NBER Working Paper 21717, Cambridge MA, National Bureau of Economic Research.
- American Institutes for Research (AIR) (2015). *Zambia's Child Grant Program: 48-month impact report*. Washington, DC, American Institutes for Research.
- American Institutes for Research (AIR) (2013). *Zambia's Child Grant Program: 24-month impact report*. Washington, DC, American Institutes for Research.
- Bishop, D. and Bowman, K. (2014). Still Learning: A critical reflection on three years of measuring women's empowerment in Oxfam. *Gender & Development*, 22(2), 253–269.
- Buller, A.M., Hidrobo, M., Peterman, A., and Heise, L. (2015). *The Way to a Man's Heart Is through His Stomach?: A mixed methods study on causal mechanisms through which cash and in-kind food transfers decreased intimate partner violence*. Washington, DC: International Food Policy Research Institute.
- Carter, J., Byrne, S., Schrader, K., Kabir, H., Uruguchi, Z. B., Pandit, B., et al. (2014). Learning about Women's Empowerment in the Context of Development Projects: Do the figures tell us enough? *Gender & Development*, 22(2), 327–349.
- Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. (2014). *Zambia Demographic and Health Survey. 2013-14*. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health and ICF International.
- Chant, S. (2008). The "Feminisation of Poverty" and the "Feminisation" of Anti-poverty Programmes: Room for revision? *The Journal of Development Studies*, 44(2), 165–197.
- Doss, C. (2013). Intrahousehold Bargaining and Resource Allocation in Developing Countries, *World Bank Research Observer*, 28(1).
- Heckert, J., and Fabric, M.S. (2013). Improving Data Concerning Women's Empowerment in Sub-Saharan Africa, *Studies in Family Planning*, 44(3), 319–344.
- Kabeer, N. (2001). Reflections on the Measurement of Women's Empowerment. In A. Sisask (Series Ed.), *Sida studies no. 3: Discussing Women's Empowerment: Theory and practice* (pp. 17–57). Stockholm, Sweden, Novum Grafiska AB.
- Malhotra, A., Schuler, S.R., and Boender, C. (2002). *Measuring Women's Empowerment as a Variable in International Development*. Background paper prepared for the World Bank Workshop on Poverty and Gender: New Perspectives.
- McKenzie, D. (2012). Beyond Baseline and Follow-up: The case for more T in experiments, *Journal of Development Economics*, 99(2), 210–221.

- Molyneux, M. (2006). Mothers at the Service of the New Poverty Agenda: Progreso/Oportunidades, Mexico's conditional transfer programme, *Social Policy & Administration*, 40(4), 425–449.
- Natali, L., Handa, S., Peterman, A. and Seidenfeld, D., with the Zambia Cash Transfer Evaluation Team (2015). *Saving for a Rainy Day: How unconditional cash transfers allow women to save and re-invest in rural Zambia*. Unpublished manuscript.
- Oxford Policy Management (OPM) and Institute of Development Studies (IDS) (2012). *Kenya Hunger Safety Net Programme: Monitoring and evaluation component – impact analysis synthesis report*. Oxford, UK: Oxford Policy Management; Brighton, UK: IDS.
- Patel, L., and Hochfeld, T. (2011). It Buys Food But Does it Change Gender Relations? Child Support Grants in Soweto, South Africa, *Gender & Development*, 19(2), 229–240.
- Peterman, A., Schwab, B., Roy, S., Hidrobo, M. and Gilligan, D. (2015). *Measuring Women's Decision-making: Indicator choice and survey design experiments from cash and food transfer evaluations in Ecuador, Uganda and Yemen*, Discussion Paper #01453, Washington, DC, International Food Policy Research Institute.
- United Nations (UN) (2013). *The Rise of the South: Human progress in a diverse world* (Human Development Report 2013), Geneva, Switzerland, UN. Retrieved from <http://hdr.undp.org/en/2013-report>
- van den Bold, M., Quisumbing, A.R., Gillespie, S. (2013). *Women's Empowerment and Nutrition: An evidence review*, IFPRI Discussion Paper 01294, Washington DC, International Food Policy Research Institute.
- World Bank (2015). *The State of Social Safety Nets 2015*, Washington, DC, World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/2015/07/24741765/state-social-safety-nets-2015>
- Yoong, J., Rabinovich, L. and Diepeveen, S. (2012). *The Impact of Economic Resource Transfers to Women versus Men: A systematic review* (Technical report), London, UK: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

## 9. APPENDIX

**Table A1 - 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	2,031
24-month follow-up	2,284	2,031
36-month follow-up	2,421	2,031
48-month follow-up	2,387	2,031
<b>Total</b>	<b>9,584</b>	<b>8,124</b>

**Table A2 - Differential Attrition Analysis by Baseline Background Characteristics**

	Controls			Treatment			Difference Among Attrited	
	Attrited (1)	Panel (2)	p-value (3)	Attrited (4)	Panel (5)	p-value (6)	Col(1) - Col(4) (7)	p-value (8)
Recipient's age	32.099	29.246	0.002	31.064	29.585	0.046	1.035	0.425
7+ years of education	0.330	0.266	0.054	0.371	0.315	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	40.888	0.262	-4.507	0.241
Number of children ages 0–5	1.973	1.909	0.294	1.833	1.897	0.365	0.140	0.118
Number of children ages 6–18	1.670	1.776	0.474	1.888	1.823	0.561	-0.218	0.252
Number of females ages 19+	1.163	1.076	0.016	1.171	1.101	0.139	-0.008	0.898
Number of males ages 19+	0.760	0.792	0.500	0.783	0.864	0.105	-0.023	0.740
Kalabo District	0.285	0.345	0.283	0.263	0.353	0.045	0.023	0.831
Kaputa District	0.525	0.290	0.000	0.504	0.287	0.000	0.021	0.870
Shangombo District	0.190	0.365	0.000	0.233	0.360	0.006	-0.043	0.619

p-values are reported from Wald tests on the equality of means of attrited and panel for columns (3) and (6) 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 461 attrited at some of wave. We show unlogged values of per capita monthly expenditures for mean comparisons, however control for logged values in regression analyses.

**Table A3 - Differential Attrition Analysis by Baseline Value of Decision-making Indicator**

	Controls			Treatment			Difference Among Attrited	
	Attrited (1)	Panel (2)	p-value (3)	Attrited (4)	Panel (5)	p-value (6)	Col(1) - Col(4) (7)	p-value (8)
<b>Sole decision-making indicators</b>								
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
<b>Sole or joint decision-making indicators</b>								
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

p-values are reported from Wald tests on the equality of means of attrited and panel for columns (3) and (6) 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 461 attrited at some of wave. We show unlogged values of per capita monthly expenditures for mean comparisons, however we control for logged values in regression analyses.

**Table A4 - Decision-making Indicator Autocorrelations across Waves**

Indicator	Baseline– 24 months	Baseline– 36 months	Baseline– 48 months
<b><i>Sole decision-making indicators</i></b>			
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
<b><i>Sole or joint decision-making indicators</i></b>			
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 health	0.121	0.145	0.037
Count of sole/joint decision-making (0–9)	0.072	0.111	0.006

Each sample wave contains 2,031 female transfer recipients.

**Table A5 - ANCOVA Impact Estimates of the Impact on Women's Sole Decision-making at 24-Month Follow-Up (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 domains
Programme impact	0.025 (0.87)	0.020 (0.74)	-0.015 (0.54)	0.029 (1.09)	0.003 (0.11)	0.003 (0.09)	0.026 (0.69)	0.020 (0.75)	0.053 (2.17)**	0.268 (1.20)
<i>N</i>	2,027	2,028	1,786	1,434	2,022	2,026	2,027	2,025	2,028	1,349

Estimations use OLS ANCOVA models. Robust *t*-statistics 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, and indicators for district of residence.

**Table A6 - ANCOVA Impact Estimates of the Impact on Women's Sole Decision-making at 36-Month Follow-Up (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 domains
Programme impact	-0.005 (0.22)	-0.001 (0.04)	-0.035 (1.58)	0.011 (1.14)	-0.001 (0.05)	-0.049 (1.79)*	-0.001 (0.02)	0.053 (2.33)**	0.022 (0.58)	-0.138 (1.03)
<i>N</i>	2,028	2,030	1,841	1,402	2,029	2,030	2,030	2,027	2,029	1,322

**Table A7 - ANCOVA Impact Estimates of the Impact on Women's Sole Decision-making at 48-Month Follow-Up (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 domains
Programme impact	0.009 (0.37)	0.027 (0.94)	0.033 (1.11)	0.001 (0.07)	0.014 (0.83)	0.034 (1.03)	0.037 (1.18)	0.007 (0.25)	0.051 (1.57)	0.3688 (2.26)**
<i>N</i>	2,029	2,029	1,712	1,403	2,029	2,031	2,030	2,027	2,029	1,278

**Table A8 - ANCOVA Impact Estimates of the Impact on Women's Sole or Joint Decision-making at 24-Month Follow-Up (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 domains
Programme impact	0.015 (0.67)	0.033 (1.14)	0.013 (0.46)	0.059 (1.55)	-0.001 (0.05)	0.005 (0.28)	0.015 (0.70)	0.030 (0.92)	0.034 (1.51)	0.425 (2.00)**
<i>N</i>	2,027	2,028	1,786	1,434	2,022	2,026	2,027	2,025	2,028	1,349

Estimations use OLS ANCOVA models. Robust *t*-statistics 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, and indicators for district of residence.

**Table A9 - ANCOVA Impact Estimates of the Impact on Women's Sole or Joint Decision-making at 36-Month Follow-Up (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 domains
Programme impact	0.037 (1.15)	0.036 (0.85)	0.077 (3.42)***	0.119 (3.82)***	0.070 (2.75)***	0.002 (0.09)	0.031 (1.49)	0.084 (2.39)**	-0.005 (0.14)	0.546 (2.41)**
<i>N</i>	2,028	2,030	1,841	1,402	2,029	2,030	2,030	2,027	2,029	1,322

**Table A10 - ANCOVA Impact Estimates of the Impact on Women's Sole or Joint Decision-making at 48-Month Follow-Up (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 domains
Programme impact	-0.004 (0.24)	0.047 (1.94)*	0.017 (0.89)	-0.001 (0.04)	-0.038 (1.48)	0.019 (1.14)	0.013 (0.70)	-0.009 (0.37)	0.012 (0.60)	0.041 (0.29)
<i>N</i>	2,029	2,029	1,712	1,403	2,029	2,031	2,030	2,027	2,029	1,278