



Can Unconditional Cash Transfers Lead to Sustainable Poverty Reduction? Evidence from two government-led programmes in Zambia

Supplementary Material

This document provides supporting online material to Innocenti Working Paper 2016 No. 21. In particular, hereafter, we discuss the impact of two unconditional cash transfer programmes - the Child Grant Programme (CGP) and the Multiple Category Targeted Programme (MCP) - on each single outcome studied.

We provide, for each programme, impact estimates based on standardized (rather than actual) units for each single outcome and comment on the variable-by-variable results in detail. Each section refers to a domain.

A. CONSUMPTION

Tables I and II show that overall, both the Child Grant Programme (CGP) and the Multiple Category Targeted Programme (MCP) had large and positive impacts on total consumption per capita – our lead/summary indicator for the domain – in the range of 0.4-0.5 standard deviation units of the control.¹ Notwithstanding the strong economic growth recorded in Zambia in these years, programme participant households increased consumption significantly faster than non-beneficiary households. In the CGP, total consumption per capita increased from 40 Zambian Kwacha (ZMW) to 51 ZMW in three years in the control group (by 30%) compared to the increase from 41.5 ZMW to 64.4 ZMW in the treatment group (by 55%), translating into a 11 ZMW increase after three years thanks to the programme; in the MCP the impact was even larger and around 21 ZMW.

The impact on total consumption seems to be slightly decreasing over time in the CGP whereas it is slightly increasing in the MCP; these patterns are mainly driven by the impact on food consumption; these are again large and significant in both programmes and at each follow-up; however, whereas the impact is larger at 36-months in the MCP, it decreased in the CGP.

Results are consistent with those reported in Tables A5 and A6 in the Annex of Innocenti Working Paper 2016-21 which reports the intent-to-treat (ITT) estimates in actual units. According to these estimates, the impact on food consumption passed from 28 percentage points (pp) at 24 months to 19 pp at 36 months in the CGP and from 26 pp to 37 pp in the MCP. Finally, the CGP also had a significant impact on non-food consumption possibly indicating that the impact goes beyond mere subsistence needs; the impact however is not significant in the MCP.

Table I – Effects of CGP on consumption (mean standardized ITT)

	Food consumption pc	Non-food consumption pc	Total consumption pc ^a
Impact at 24 months	0.47 (0.10)***	0.37 (0.10)***	0.48 (0.10)***
Impact at 36 months	0.34 (0.07)***	0.35 (0.12)***	0.38 (0.07)***
R ²	0.20	0.17	0.23
N	6,813	6,813	6,813
Unadjusted p-value: 24m impact=0	0.00	0.00	
Adjusted p-value: 24m impact=0	0.00	0.00	
Unadjusted p-value: 36m impact=0	0.00	0.00	
Adjusted p-value: 36m impact=0	0.00	0.01	

Notes: Estimations use difference-in-difference modelling. Robust standard errors clustered at the community level are in parentheses.

* p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the consumption domain.

¹ Multiple inference testing is reported in the tables even if somehow superfluous given we only have two indicators in this family of outcomes; as expected, results are consistent when p-values are adjusted for multiple inference testing.

Table II – Effects of MCP on consumption (mean standardized ITT)

	Food consumption pc	Non-food consumption pc	Total consumption pc ^a
Impact at 24 months	0.42 (0.11)***	0.15 (0.10)	0.38 (0.10)***
Impact at 36 months	0.56 (0.15)***	0.21 (0.11)**	0.51 (0.14)***
R ²	0.24	0.18	0.27
N	8,810	8,810	8,810
Unadjusted p-value: 24m impact=0	0.00	0.15	
Adjusted p-value: 24m impact=0	0.00	0.27	
Unadjusted p-value: 36m impact=0	0.00	0.05	
Adjusted p-value: 36m impact=0	0.00	0.09	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.

* p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the consumption domain.

B. FOOD SECURITY

Consistent with the impacts on food consumption discussed above, we find positive and significant impacts on the food security index around 0.5 standard deviation units of the control group in both programmes (slightly lower, 0.4 std, at 24 months in the MCP; see Tables III and IV).

In order to analyze the impact on each single indicator, we rely on the results of multiple inference testing. In the CGP, there is a significant impact on five out of the eight indicators at both follow-ups, with slightly larger impacts at 24 compared to 36 months. In the MCP, at 24 months there is a positive and significant impact only on four out of the eight indicators, however by the third year there is a positive and significant impact on each single indicator even after adjusting for multiple inference testing.

In both programmes, after three years, the impact on “never or rarely worry about food” is around 0.3-0.4 standard deviation units of the control group. In actual units (see tables A7 and A8 in the Appendix of Innocenti Working Paper 2016-21) these impacts translate into a 16-18 pp impact after three years depending on the programme. For instance, in the MCP, in three years, the proportion of households that do not or rarely worry about food almost tripled (from 15% to 42%) whereas in the control group it increased only by 9 pp.

Table III – Effects of CGP on food security (mean standardized ITT)

	Does not worry about food	Able to eat preferred food	Does not eat unwanted food	Does not eat smaller meal	Does not eat fewer meals	Does not lack food due to scarce resources	Does not go to sleep hungry at night	Does not go whole day w/o eating	Food security scale (HFIAS) ^a
Impact at 24 months	0.37 (0.11)***	0.28 (0.13)**	0.35 (0.13)***	0.39 (0.12)***	0.40 (0.11)***	0.28 (0.11)**	0.18 (0.12)	0.12 (0.13)	0.53 (0.11)***
Impact at 36 months	0.38 (0.13)***	0.26 (0.13)*	0.26 (0.14)*	0.33 (0.13)**	0.44 (0.13)***	0.17 (0.12)	0.14 (0.11)	0.06 (0.12)	0.53 (0.13)***
R ²	0.04	0.03	0.03	0.05	0.06	0.04	0.03	0.02	0.10
N	6,815	6,802	6,813	6,812	6,810	6,804	6,813	6,808	6,776
Unadjusted p-value: 24m impact=0	0.00	0.03	0.01	0.00	0.00	0.01	0.13	0.32	
Adjusted p-value: 24m impact=0	0.01	0.22	0.07	0.02	0.00	0.10	0.67	0.96	
Unadjusted p-value: 36m impact=0	0.00	0.05	0.06	0.01	0.00	0.16	0.21	0.59	
Adjusted p-value: 36m impact=0	0.04	0.35	0.41	0.10	0.01	0.75	0.84	1.00	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the food security domain.

Table IV – Effects of MCP on food security (mean standardized ITT)

	Does not worry about food	Able to eat preferred food	Does not eat unwanted food	Does not eat smaller meal	Does not eat fewer meals	Does not lack food due to scarce resources	Does not go to sleep hungry at night	Does not go whole day w/o eating	Food security scale (HFAS) ^a
Impact at 24 months	0.28 (0.11)**	0.32 (0.12)***	0.34 (0.11)***	0.31 (0.10)***	0.28 (0.10)***	0.07 (0.11)	0.27 (0.11)**	0.17 (0.10)*	0.41 (0.10)***
Impact at 36 months	0.42 (0.12)***	0.41 (0.12)***	0.42 (0.10)***	0.39 (0.09)***	0.36 (0.10)***	0.34 (0.09)***	0.38 (0.09)***	0.30 (0.09)***	0.54 (0.10)***
R ²	0.03	0.03	0.03	0.03	0.03	0.04	0.06	0.04	0.08
N	8,800	8,778	8,801	8,799	8,792	8,794	8,802	8,801	8,733
Unadjusted p-value: 24m impact=0	0.01	0.01	0.00	0.00	0.01	0.48	0.02	0.10	
Adjusted p-value: 24m impact=0	0.11	0.05	0.02	0.02	0.05	1.00	0.15	0.55	
Unadjusted p-value: 36m impact=0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Adjusted p-value: 36m impact=0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the food security domain.

C. ASSETS AND LIVELIHOOD STRENGTHENING

To help present the results, we computed three asset indices rather than reporting on each individual asset owned by the household. We computed a domestic, a livestock and a productive asset index. The impact is strong and impressive in both programmes and at each follow-up, and is well summarized by the 0.4-0.7 standard deviation units impact on the overall asset index (see Tables V and VI). Multiple inference testing confirms the significance of these results. The impacts seem to be relatively stable over time in the CGP, and increasing in the MCP.

The largest impacts are recorded in both programmes for the livestock index; the treatment mean is around 0.5 standard deviation units above the control mean at 36 months and even 0.71 standard deviation units in the MCP. The second largest impacts are recorded on domestic assets at 0.3-0.6 standard deviation units depending on programme and wave.

These results point to the fact that the impacts of these two unconditional transfers are impressive not only in the protective sphere but also in the productive one; indeed, households now own more livestock (in particular goats, chickens and ducks) and agricultural implements.

Table V – Effects of CGP on assets (mean standardized ITT)

	Asset index	Livestock index	Productive asset index	Overall asset index ^a
Impact at 24 months	0.48 (0.07)***	0.49 (0.10)***	0.27 (0.08)***	0.56 (0.08)***
Impact at 36 months	0.47 (0.08)***	0.54 (0.09)***	0.25 (0.08)***	0.55 (0.09)***
R ²	0.20	0.11	0.10	0.20
N	6,801	6,808	6,794	6,815
Unadjusted p-value: 24m impact=0	0.00	0.00	0.00	
Adjusted p-value: 24m impact=0	0.00	0.00	0.00	
Unadjusted p-value: 36m impact=0	0.00	0.00	0.00	
Adjusted p-value: 36m impact=0	0.00	0.00	0.01	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.

* p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the assets domain.

Table VI – Effects of MCP on assets (mean standardized ITT)

	Asset index	Livestock index	Productive asset index	Overall asset index ^a
Impact at 24 months	0.31 (0.08)***	0.49 (0.07)***	0.22 (0.08)***	0.44 (0.08)***
Impact at 36 months	0.59 (0.09)***	0.71 (0.09)***	0.32 (0.08)***	0.72 (0.09)***
R ²	0.13	0.13	0.25	0.25
N	8,801	8,580	8,801	8,811
Unadjusted p-value: 24m impact=0	0.00	0.00	0.01	
Adjusted p-value: 24m impact=0	0.00	0.00	0.02	
Unadjusted p-value: 36m impact=0	0.00	0.00	0.00	
Adjusted p-value: 36m impact=0	0.00	0.00	0.00	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.
* p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.
^a Summary index for the assets domain.

D. RELATIVE POVERTY

The first two indicators in the relative poverty domain capture how the respondent perceives their household conditions with respect to others and the past, whereas the last indicator captures women's future expectations.

Overall, in both programmes, the impact on the summary index is extremely large (between 0.7 and 1.1 standard deviation units depending on programme and wave) and significant (see Tables VII and VIII). This result seems to be driven in both programmes by the impact on the first two indicators; indeed the impact on women's future expectations is not significant when we control for multiple inference testing. Also, the impact seems to be driven even more by how the household perceives its own conditions compared to the previous year. Indeed, the impact is around 1-1.4 standard deviation units depending on wave and programme. This translates into impacts of 20 pp and 30 pp impacts after three years in the CGP and MCP respectively; at 36 months 33 and 43 per cent of households in the treatment considered themselves better off compared to the previous year (see tables of means by wave: Table 7 for the CGP and Table 8 for the MCP in the main paper).

Table VII – Effects of CGP on relative poverty (mean standardized ITT)

	Does not consider household very poor	Better off than 12 months ago	Believes life will be better in future (women)	Relative poverty index ^a
Impact at 24 months	0.60 (0.10)***	1.41 (0.11)***	0.21 (0.10)**	1.11 (0.11)***
Impact at 36 months	0.40 (0.09)***	0.94 (0.11)***	0.12 (0.11)	0.74 (0.11)***
R ²	0.14	0.20	0.03	0.22
N	6,813	6,801	6,707	6,813
Unadjusted p-value: 24m impact=0	0.00	0.00	0.04	
Adjusted p-value: 24m impact=0	0.00	0.00	0.12	
Unadjusted p-value: 36m impact=0	0.00	0.00	0.28	
Adjusted p-value: 36m impact=0	0.00	0.00	0.63	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.
* p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.
^a Summary index for the relative poverty domain.

Table VIII – Effects of MCP on relative poverty (mean standardized ITT)

	Does not consider household very poor	Better off than 12 months ago	Believes life will be better in future (women)	Relative poverty index ^a
Impact at 24 months	0.53 (0.11)***	1.42 (0.13)***	0.12 (0.07)*	1.05 (0.11)***
Impact at 36 months	0.62 (0.12)***	1.20 (0.12)***	0.12 (0.09)	0.97 (0.13)***
R ²	0.09	0.19	0.04	0.17
N	8,811	8,811	7,879	8,811
Unadjusted p-value: 24m impact=0	0.00	0.00	0.10	
Adjusted p-value: 24m impact=0	0.00	0.00	0.27	
Unadjusted p-value: 36m impact=0	0.00	0.00	0.18	
Adjusted p-value: 36m impact=0	0.00	0.00	0.44	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.
* p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.
^a Summary index for the relative poverty domain.

E. INCOME AND REVENUES

The summary index for the Incomes and revenues domain brings together a number of indicators that captures mainly agricultural production and non-farm enterprises (NFEs). The impact on this index is statistically significant at both follow-ups and in both programmes, and is between 0.2 and 0.6 standard deviation units depending on follow-up and programme (see Tables IX and X).

In the CGP, these results seem to be driven mainly by investments in NFEs whereas in the MCP by investments in agricultural production. Indeed, the impact on the value of harvest is significant in the MCP but not in CGP and the impact on the amount spent on agricultural inputs is significant in both programmes at 24 months but only at 36 months in the MCP. However, only the CGP seemed to have had an impact on households operating a NFE and its revenues. Households are spending more for agricultural production in both programmes (though the impact is not significant at 36 months in the CGP).

Multiple inference testing in this case seems superfluous given there is complete consistency between significance levels using adjusted and unadjusted p-values.

Table IX – Effects of CGP on incomes and revenues (mean standardized ITT)

	Value of harvest	Amount spent on agricultural inputs	Operating a NFE	Revenues from NFEs	Operating a NFE	Revenues from NFEs	Income and revenues index ^a	Income and revenues index ^a
Impact at 24 months	0.15 (0.10)	0.52 (0.11)***	0.36 (0.09)***	0.47 (0.10)***			0.62 (0.08)***	
Impact at 36 months	0.13 (0.11)	0.04 (0.12)			0.30 (0.07)***	0.33 (0.07)***		0.35 (0.07)***
R ²	0.13	0.07	0.09	0.12	0.17	0.17	0.15	0.14
N	6,816	6,816	2,272	2,272	2,272	2,272	2,272	2,272
Unadjusted p-value: 24m impact=0	0.13	0.00	0.00	0.00				
Adjusted p-value: 24m impact=0	0.43	0.00	0.00	0.00				
Unadjusted p-value: 36m impact=0	0.25	0.73			0.00	0.00		
Adjusted p-value: 36m impact=0	0.68	0.99			0.00	0.00		

Notes: Estimations use difference in difference modelling (single-difference for NFE outcomes and Income and Revenue index). Robust standard errors clustered at the community level are in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the incomes and revenues domain.

Table X – Effects of MCP on incomes and revenues (mean standardized ITT)

	Value of harvest	Amount spent on agricultural inputs	Operating a NFE	Revenues from NFEs	Operating a NFE	Revenues from NFEs	Income and revenues index ^a	Income and revenues index ^a
Impact at 24 months	0.28 (0.09)***	0.48 (0.10)***	-0.04 (0.09)	-0.01 (0.09)			0.19 (0.09)**	
Impact at 36 months	0.44 (0.09)***	0.63 (0.09)***			0.06 (0.07)	0.08 (0.08)		0.36 (0.07)***
R ²	0.13	0.10	0.02	0.02	0.02	0.02	0.07	0.08
N	8,811	8,811	2,937	2,937	2,934	2,934	2,937	2,937
Unadjusted p-value: 24m impact=0	0.00	0.00	0.64	0.91				
Adjusted p-value: 24m impact=0	0.01	0.00	0.98	1.00				
Unadjusted p-value: 36m impact=0	0.00	0.00			0.42	0.29		
Adjusted p-value: 36m impact=0	0.00	0.00			0.89	0.74		

Notes: Estimations use difference in difference modelling (single difference for NFE outcomes and domain index). Robust standard errors clustered at the community level are in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the incomes and revenues domain.

F FINANCE AND DEBT

In this section, we investigate whether an unconditional cash transfer can lead to an increase in (women's) cash savings, a reduction in long-standing debts as well as a reduction in the proportion of households that take on a new loan. It could be debatable whether being able to take out a new loan is positive or negative; our reasoning would be that a new loan for subsistence and/or consumption only would be a 'bad' loan whereas a loan to open up a new activity or for some other form of investment would be a 'good' loan. In the MCP and CGP samples, the vast majority of new loans is taken up for subsistence reasons and, in this light, we consider a reduction, rather than an increase, in new loans as a positive impact.²

Overall, there is a positive impact on our summary index in both programmes and waves (see Tables XI and XII), around 0.3 standard deviation units of the respective control group. At 24 months, in the CGP, the impact is larger and around 0.6 standard deviation units, however it is not directly comparable with the summary index at 36 months as the latter does not include information on debts and loans that, in the CGP, was only collected during the 36-month follow-up. Impacts are very large on the proportion of women holding cash savings, slightly decreasing over time in the CGP³ and increasing in the MCP (22 pp and 10 pp at 24 and 36 months in the CGP; 14 pp both at 24 and 36 months in the MCP). Impacts are found not only on the extensive but also on the intensive margins, namely on the amount saved. At the same time, as women increase their savings the financial situation of households is further improved by a reduction in debts and in new loans in the MCP (though only at 24 months; these impacts are not significant anymore at 36 months); in the CGP, there is a significant impact on reduction in long-outstanding debts but not on new loans.

Table XI – Effects of CGP on finance and debt (mean standardized ITT)

	Holding any savings (women)	Amount saved (women)	No outstanding debt	Reduction in amount owed	No new borrowing	Reduction in amount borrowed	Finance and debt index ^a	Finance and debt index ^a
Impact at 24 months	0.53 (0.12)***	0.61 (0.11)***					0.58 (0.12)***	
Impact at 36 months	0.23 (0.12)*	0.30 (0.10)***	0.19 (0.05)***	0.19 (0.05)***	0.04 (0.07)	0.03 (0.07)	(0.08)***	0.29
R ²	0.06	0.08	0.02	0.02	0.01	0.02	0.07	0.04
N	6,667	6,658	2,272	2,270	2,271	2,271	6,667	2,272
Unadjusted p-value: 24m impact=0	0.00	0.00						
Adjusted p-value: 24m impact=0	0.00	0.00						
Unadjusted p-value: 36m impact=0	0.05	0.01	0.00	0.00	0.56	0.67		
Adjusted p-value: 36m impact=0	0.27	0.04	0.00	0.00	0.99	1.00		

Notes: Estimations use difference in difference modelling (single-difference for outstanding debt and credit outcomes and the Finance & Debt index at 36m). Robust standard errors clustered at the community level are in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the finance and debt domain.

²When discussing borrowing we refer to informal borrowing.

³ However, data show that impacts increase in magnitude again at 48 months (14.7 pp).

Table XII – Effects of MCP on finance and debt (mean standardized ITT)

	Holding any savings (women)	Amount saved (women)	No outstanding debt	Reduction amount owed	No new borrowing	Reduction in amount borrowed	No outstanding debt	Reduction in amount owed	No new borrowing	Reduction in amount borrowed	Finance and debt index ^a (SD)	Finance and debt index ^a (SD)
Impact at 24 months	0.34 (0.11)***	0.38 (0.11)***	0.11 (0.05)**	0.11 (0.05)**	0.14 (0.06)**	0.14 (0.05)**					0.34 (0.08)***	
Impact at 36 months	0.47 (0.10)***	0.50 (0.11)***					0.04 (0.04)	0.03 (0.04)	0.06 (0.05)	0.06 (0.05)		0.33 (0.06)***
R ²	0.04	0.04	0.02	0.02	0.03	0.03	0.01	0.02	0.02	0.02	0.06	0.03
N	7,860	7,854	2,936	2,930	2,933	2,926	2,936	2,932	2,934	2,933	2,937	2,936
Unadjusted p-value: 24m impact=0	0.00	0.00	0.03	0.03	0.02	0.01						
Adjusted p-value: 24m impact=0	0.02	0.00	0.14	0.15	0.12	0.09						
Unadjusted p-value: 36m impact=0	0.00	0.00					0.31	0.53	0.24	0.21		
Adjusted p-value: 36m impact=0	0.00	0.00					0.89	0.99	0.81	0.75		

Notes: Estimations use difference in difference modelling (single difference for debt and credit outcomes and domain index). Robust standard errors clustered at the community level are in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the finance and debt domain.

G SCHOOLING

In this section we focus on the schooling of older children (11-17) and in particular we look at whether the child is currently attending school and the number of days attended in the prior week.

Why do we focus on secondary school-aged children? This is a critical age; children in this age group are transitioning from primary to secondary schools, the shadow price of schooling increases and children are at a higher risk of dropping out at an age in which schooling and work often become substitutes rather than complementary. In the CGP, however, given demographic targeting criteria, there are fewer households with older children; even if not necessarily representative, we are still using this age group for the comparison of schooling outcomes with MCP.

As already highlighted in Handa et al. (2016), there is no overall impact on schooling (enrolment) in the CGP⁴ (see Table XIII). On the other hand, there are strong impacts on schooling in the MCP⁵ of between 10 and 11 percentage points as regards children currently attending and 0.5 more days in attendance (see Table A18 in the Annex). Overall, the impact on the schooling index is around 0.2 standard deviation units of the control group (see Table XIV).

Looking at the table of means over time by treatment status (Table 7 for the CGP and Table 8 for the MCP in the main paper), it is possible to see that in the MCP the positive impact on these schooling indicators means that, in actual units, these indicators worsen over time but they worsened less than if they had not received the intervention; indeed, in the control group around 80 per cent of children were attending at baseline compared to only 66 per cent at endline (-14 pp) whereas in the control group 75 per cent on children were attending at baseline compared to 71 per cent at endline (-4 pp).

Table XIII – Effects of CGP on schooling 11-17 (mean standardized ITT)

	Currently enrolled	Days attended in prior week	Schooling index ^a
Impact at 24 months	-0.03 (0.07)	0.01 (0.08)	-0.02 (0.07)
Impact at 36 months	0.05 (0.07)	0.07 (0.08)	0.07 (0.07)
R^2	0.07	0.07	0.07
N	6,033	5,905	6,033
Unadjusted p-value: DD24=0	0.60	0.94	
Adjusted p-value: DD24=0	0.84	1.00	
Unadjusted p-value: DD36=0	0.41	0.35	
Adjusted p-value: DD36=0	0.66	0.57	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the schooling domain.

⁴ Even though there are some heterogeneous impacts by age group, in particular on children 11-14.

⁵ Note that even though at baseline, in the MCP, the probability of attending school was not balanced between treatment arms (higher in the control group than in the treatment group), we are controlling for a number of baseline demographic variables that should increase the credibility of our impact estimates.

Table XIV – Effects of MCP on schooling 11-17 (mean standardized ITT)

	Currently enrolled	Days attended in prior week	Schooling index ^a
Impact at 24 months	0.26 (0.06)***	0.19 (0.08)**	0.23 (0.06)***
Impact at 36 months	0.21 (0.06)***	0.23 (0.07)***	0.23 (0.06)***
R ²	0.04	0.03	0.04
N	10,442	9,854	10,442
Unadjusted p-value: DD24=0	0.00	0.02	
Adjusted p-value: DD24=0	0.00	0.04	
Unadjusted p-value: DD36=0	0.00	0.00	
Adjusted p-value: DD36=0	0.00	0.00	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses. * p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the schooling domain.

H. MATERIAL NEEDS

Both surveys asked for every child between the age of 5 and 17 whether they owned a pair of shoes, two sets of clothes and a blanket. Tables XV and XVI report the results for the CGP and MCP respectively. Overall, the impact on the summary index is strong and significant in both programmes and follow-ups and somewhat larger in the CGP.

In the CGP, the larger impacts are recorded on shoes (34 pp and 27 pp at 24 and 36 months respectively, see Table in Annex) and then blanket (20 pp and 12 pp in the two follow-ups), while two sets of clothes is hardly significant once we adjust p-values for multiple inference testing. Impacts in the MCP are very similar to those found in the CGP, although impacts are found also on two sets of clothes at 36 months (11 pp, see Table A20 in the Appendix of Innocenti Working Paper 2016-21).

Table XV – Effects of CGP on material needs 5-17 (mean standardized ITT)

	Shoes	Two sets of clothes	Blanket	Material needs index ^a
Impact at 24 months	0.74 (0.12)***	0.25 (0.11)**	0.48 (0.11)***	0.81 (0.13)***
Impact at 36 months	0.54 (0.10)***	0.10 (0.11)	0.35 (0.11)***	0.57 (0.10)***
R ²	0.16	0.06	0.10	0.16
N	14,828	14,821	14,827	14,813
Unadjusted p-value: DD24=0	0.00	0.03	0.00	
Adjusted p-value: DD24=0	0.00	0.07	0.00	
Unadjusted p-value: DD36=0	0.00	0.36	0.00	
Adjusted p-value: DD36=0	0.00	0.73	0.01	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses. * p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the material needs domain.

Table XVI – Effects of MCP on material needs 5-17 (mean standardized ITT)

Shoes	Two sets of clothes	Blanket	Material needs index ^a	
Impact at 24 months	0.46 (0.10)***	0.18 (0.09)**	0.36 (0.09)***	0.47 (0.10)***
Impact at 36 months	0.52 (0.09)***	0.33 (0.09)***	0.43 (0.09)***	0.55 (0.08)***
R ²	0.07	0.03	0.06	0.07
N	18,179	18,159	18,184	18,133
Unadjusted p-value: DD24=0	0.00	0.04	0.00	
Adjusted p-value: DD24=0	0.00	0.07	0.00	
Unadjusted p-value: DD36=0	0.00	0.00	0.00	
Adjusted p-value: DD36=0	0.00	0.00	0.00	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.

* p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the material needs domain.

I. ANTHROPOMETRIC INDICATORS

Anthropometric indicators of the nutritional status of children were collected only in the CGP. No impact on anthropometric outcomes was detected (Table XVII); as already reported in previous official evaluation reports (AIR 2011, 2013, 2014a), the determinants of nutrition are complex and complementary inputs important. An article from the Institute of Development Studies (Seidenfeld et al. 2014) found some heterogeneous impacts at 24 months, namely there was a reduction in stunting when the mother has higher education and if there is a protected water source at home.

Table XVII – Effects of CGP on anthropometric indicators 0-59 months (mean standardized ITT)

	Not stunted	Not wasted	Not underweight	Anthropometric index ^a
Impact at 24 months	0.05 (0.05)	0.00 (0.05)	0.07 (0.05)	0.06 (0.05)
Impact at 36 months	-0.10 (0.05)*	-0.02 (0.06)	0.00 (0.05)	-0.06 (0.05)
R ²	0.04	0.01	0.01	0.02
N	9,073	9,043	9,979	10,077
Unadjusted p-value: DD24=0	0.36	0.93	0.13	
Adjusted p-value: DD24=0	0.74	1.00	0.35	
Unadjusted p-value: DD36=0	0.06	0.72	0.97	
Adjusted p-value: DD36=0	0.18	0.98	1.00	

Notes: Estimations use difference in difference modelling. Robust standard errors clustered at the community level are in parentheses.

* p<0.1; ** p<0.05; *** p<0.01. Adjusted p-values are Sidak-Bonferroni corrected p-values. Estimations are adjusted and include recipient's age, education and marital status, household size and household demographic composition, and districts.

^a Summary index for the anthropometric domain.

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