

# How to Best Fight Poverty: The Uneven Ex-Post Effects of Conditional and Unconditional Cash Transfers on Labor Earnings

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## **Abstract**

Programs to fight poverty aim at allowing individuals to support themselves ex-post, when they are not part of the program anymore. We compare the ex-post effects of conditional and unconditional cash transfer programs on labor income. We use an experiment where low-income individuals are randomly assigned to three groups: no treatment, unconditional cash transfer, and cash transfer conditional on reemployment training. We exploit Social Security data, including all registered labor contracts in Italy. Results show that conditional cash transfers have positive and sizeable effects on labor income, both contemporaneous and ex-post effects. These effects last at least two years and are led by males. Unconditional cash transfers have no impact on labor income.

# 1 Introduction

Transfer programs for poor citizens reduce poverty and raise consumption levels (Fiszbein and Schady [2009]), improve educational outcomes (Paul Schultz et al. [2004]; Glewwe and Olinto [2004]; Maluccio and Flores [2005]), and access to health services (Gertler [2000], Gertler [2004]; Attanasio, Battistin, Fitzsimons, and Vera-Hernandez [2005]). Despite these proven gains, policy-makers and the public often express concerns about whether transfer programs discourage work. On the one hand, cash transfer programs may reduce work incentives: individuals may leave the labor force (or work only in the irregular sector) to stay eligible for the benefits or decide not to work simply through the income effect. On the other hand, these programs could positively affect employment if beneficiaries search for a job more efficiently or invest in small firms. Along these lines, conditioning cash transfers on re-employment training may teach beneficiaries to take advantage of the new job search opportunities provided by the transfer. Given that the theoretical predictions are ambiguous, we need empirical analysis to estimate the impact of conditional and unconditional cash transfer programs on labor market outcomes.

Exiting the poverty trap means that individuals achieve economic sustainability without relying on welfare benefits or charity. We understand economic sustainability as the capacity to earn income in the ex-post, once individuals leave the cash transfer program. Moreover, real economic sustainability is possible only if individuals participate in the regular economy, guaranteeing unemployment protection, pension contributions, insurance against job accidents, and many other benefits and amenities. This paper estimates the contemporaneous and ex-post impacts of conditional and unconditional cash transfers on labor income earned in the regular labor market.

We focus on the cash transfer program *Accoglienza Orientamento Sostegno* (Hospitality Advice Support), financed by *Compagnia di San Paolo*, one of Italy's most prominent bank foundations. The program presents a series of characteristics that make it attractive for our research:

1. *Wealthy context.* The cash transfer program is implemented in Turin, one of the wealthiest cities in Italy. The focus on a rich context significantly departs from most previous literature, which focuses on developing countries. Some of the most widely known examples of cash transfer evaluations are those of the GiveDirectly program in Kenya (Haushofer and Shapiro [2016]) and Ecuador's Bono de Desarrollo Humano (Carrillo and Jarrín [2009]).
2. *Needy population.* The cash transfer program targets impoverished households. Families must have an annual income below a certain threshold (around 6,000 - 7,000 euros depending on the year) which is lower than half the minimum wage. There must be at least a 0-6 years old child in the household.
3. *Fixed-term program.* The cash transfer has a duration of two years. This limited duration allows us to analyze the impact of the cash transfer at the time it is received, and the effects of the cash transfer after families have received it.
4. *Randomized control trial.* In the year 2016, eligible applicants were randomly divided into three groups: one group that did not receive any transfer, a second group that received unconditional cash transfers (UCT), and a third group that received cash transfers conditional on attending some job search courses (CCT).<sup>1</sup> There were 500 families in each group. By comparing the labor market outcomes of the three groups during participation in the program and after leaving the program, we estimate the contemporaneous and ex-post impacts of UCT and CCT on labor income.

For estimation, we regress annual labor income on dummies for belonging to the UCT and CCT groups in each of the treatment and post-treatment years. We control for basic

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<sup>1</sup>In some cases, those courses were combined with parenting and family income administration courses.

demographic characteristics: male, age, immigrant status, number of household members, number of children, and number of disabled individuals in the household.

We find that conditional cash transfers have a positive and sizeable effect on labor income, both contemporaneous and two years after the end of the transfer. The size of the effect grows over time. Unfortunately, we cannot address whether the impact lasts longer than two years because Covid hit the labor market at the beginning of the third year. Males lead the positive contemporaneous and ex-post effects. We also find contemporaneous negative effects of UCT and CCT on welfare benefits. Males also lead the negative impact of CCT on welfare benefits.

## **1.1 Related Literature**

The literature on the impact of transfer programs in developing countries is relatively large. Most of the papers find no effects on employment (see Baird, McKenzie, and Özler [2018], for a review). Banerjee, Hanna, Kreindler, and Olken [2017] re-analyze the results of seven randomized controlled trials of government-run conditional cash transfer programs from six countries to examine impacts on labor supply. The authors do not observe a significant effect on employment or hours of work. Parker and Todd [2017] provide a review of the impact of Mexico's PROGRESA on labor market outcomes for adult beneficiaries and find no effects on work or leisure. In the context of two unconditional cash transfer programs in Malawi and Zambia targeting labor-constrained households, De Hoop, Groppo, and Handa [2017] find that such households substitute away from working for others and start spending more time on own-agricultural work.

In contrast to the extensive literature for developing countries, the impact of transfer programs in developed countries has received little attention. One exception is the paper by Ashenfelter and Plant [1990] which finds small but statistically significant adverse effects on work for families enrolled in the Seattle/Denver Income Maintenance

Experiment. However, the authors are concerned that “responses to the data collection instrument (which depended on costly surveys) were not random, which opens up some ambiguity in the results.” A recent paper by Jones and Marinescu [2018] studies the effects of Alaska’s universal and permanent cash transfers on the labor market. They find that the program does not significantly decrease aggregate employment. Recent studies of lottery winners in Sweden (Cesarini, Lindqvist, Notowidigdo, and Östling [2017]) and the Netherlands (Picchio, Suetens, and van Ours [2018]) find that winning a prize reduces the number of hours worked and the amount of income earned. However, the impact of programs targeted at the poor is likely to be very different from universal programs or lottery winners because poor individuals may respond differently to unearned income. Moreover, the effect of limited duration programs is potentially very different because the advantages of keeping your labor income below a certain threshold disappear after some time. Individuals could use the limited exposure time to search for a better job match or invest in human capital.

Del Boca, Pronzato, and Sorrenti [2021] analyze the contemporaneous impacts of our program using survey data. They find that the year after admission to the program, men assigned to the conditional cash transfer group are 14 percent more likely to have a job than men assigned to the unconditional cash transfer or the control group. They find no effect on women. They also conclude that wages seem unaffected by the intervention. We shed additional light on the efficacy of UCT and CCT by measuring not only contemporaneous but also ex-post effects on regular labor income and employment. In line with Del Boca, Pronzato, and Sorrenti [2021], we find that males lead the impact of CCT. Differently from them, we find a sizeable and significant effect on labor income. Additionally, we find that there are sizeable, positive, and significant effects on labor income and employment up to two years after the end of the transfer. These ex-post effects increase over time and are led by males.

The remainder of this paper is organized as follows. We present the institutional background and data in Section 2. In Section 3 we describe our methodology and in Section 4

we present our results. Section 5 discusses several applications and robustness checks. We conclude in Section 6.

## 2 Data and Institutional Framework

The Accoglienza, Orientamento e Sostegno (AOS) program of the Ufficio Pio, Compagnia di San Paolo runs since 2008. Eligible families must reside in the metropolitan area of Turin, have at least one child 0-6 years old, and have an income below a certain threshold. From 2008 to 2015, AOS was an unconditional cash transfer program with a limited duration. In 2016, when the experiment took place, the duration was two years, and the income threshold was 7,000 euros.

The cash transfer amounts to 2,500–3,500 euros, with the exact figure depending on the number of children in the household. The transfer represents a significant proportion of total household income (in 2016, 75% of total family income). To receive these cash transfers, individuals assigned to the conditional cash transfer group had to attend job-seeking courses if they had low levels of labor force participation (93% of the group). They could also be required to participate in reconciliation between work and family tasks, use of money, and/or parenting courses if Ufficio Pio’s social workers considered them useful for the family.

We have data on the 1,500 families who participated in the randomized controlled experiment in 2016: 500 did not receive any treatment, 500 received the unconditional cash transfer, and the remaining 500 received the conditional cash transfer. We had access to the fiscal code identification number for each household member. We used this number to merge the information on treatment received with restricted-access social security data. The social security data contains information on the working history (employment, type of contract, and wages) of the assisted individuals, and welfare benefits. It also includes basic demographic information, including gender, age, immigrant status, number of household members, number of children, and number of disabled household members.

Our sample comprises working-age individuals (18 to 65 years old) who were part of the 2016 experiment. We extracted their 2011-2020 working records from the Social Security archives.<sup>2</sup> Table 1 summarizes labor market outcomes, welfare benefits, and demographic characteristics of individuals in our sample. The average income perceived in a given year is 2,387 euros, with a standard deviation of 5,372. Most of this income originates in labor (annual labor income is 2,220 euros on average). The average individual in our sample receives welfare benefits equal to 167 euros per year. Slightly more than one-fourth of our sample hold a regular contract at some point of the year. Around six percent are welfare recipients. Regarding demographic characteristics, around 43% of our sample are male, the average individual in our sample is 36 years old, and only 18% of individuals are Italian. The average number of household members is 4.5, the average number of children is slightly above two, and there are 0.13 disabled individuals per family on average.

Table 1: Descriptive Statistics

	Mean	Std. Dev.	Minimum	Maximum
Total income	2387	5372	0	59630
Labor income	2220	5246	0	59630
Welfare benefits	167	910	0	20955
Employed	0.266	0.442	0	1
Welfare recipient	0.063	0.243	0	1
Male	0.434	0.496	0	1
Age	36.356	9.328	13	67
Italian	0.175	0.380	0	1
Number of household members	4.461	1.508	1	15
Number of children	2.155	1.100	0	9
Number of disabled members	0.129	0.396	0	5
Year	2015	2.582	2011	2019

*Notes:* The total number of observations is 26,120. Data is from Social Security Registers. The sample is composed by all working age individuals included in the experiment.

We ran a balance test to ensure the comparability of the three randomized groups in

<sup>2</sup>While working records are available up to 2020, the information on welfare benefits is only available up to 2017.



our sample. We compare the distribution of pre-determined demographic characteristics across the three groups in the year before the treatment (2015). Table 2 shows that demographic characteristics are very similar among the control, conditional, and unconditional cash transfers groups. We perform formal tests of equality of averages across the three groups and find that those averages are statistically indistinguishable, and hence, we conclude that the three groups are comparable. Therefore, we can interpret differences in employment histories after the treatment as causal estimates.

Table 2: Balance Tests

	Control	UCT	CCT
Male	0.427 (0.495)	0.430 (0.495)	0.446 (0.497)
Age	36.410 (8.716)	36.345 (9.163)	36.314 (9.010)
Italian	0.175 (0.380)	0.189 (0.391)	0.160 (0.367)
Number of household members	4.429 (1.503)	4.458 (1.460)	4.501 (1.567)
Number of disabled members	0.121 (0.352)	0.123 (0.361)	0.145 (0.474)
Number of children	2.141 (1.096)	2.163 (1.098)	2.163 (1.108)
N. observations	927	965	919

*Notes:* The total number of observations is 2,811. Data is from Social Security Registers. The sample is composed by the 2015 records of all working age individuals included in the experiment.

### 3 Methodology

We estimate the impact of UCT and CCT on labor income using the control group as a reference category using the following specification:

$$I_{igt} = \beta_0 + \beta_1 UCT_g * Post_t + \beta_2 CCT_g * Post_t + \beta_3 C_{igt} + \varepsilon_{igt} \quad (1)$$

Where  $I$  stands for labor income earned by individual  $i$  who belongs to randomization group  $g$  in year  $t$ , the dummies  $UCT$  and  $CCT$  equal one if individual  $i$  belongs to

the unconditional and conditional cash transfers groups, respectively. Hence, the control group remains the reference category. *Post* is a vector of dummies for the years 2016, 2017, 2018, 2019, and 2020 where 2016 and 2017 are the years of the treatment, and 2018, 2019, and 2020 correspond to the period ex-post. The vector *C* contains the set of individual characteristics (gender, age, immigrant status, number of household members, number of children, and number of disabled household members). Finally,  $\varepsilon$  is the error term, which we cluster at the household level.

## 4 Results

In this section, we present the result of estimating the labor market impacts of UCT and CCT during the program and up to three years after, as in Equation 1. We present the results for labor income using the entire sample of working-age individuals in Column 1 of Table 3. Interestingly, only conditional cash transfers have a sizeable, positive, and significant effect on labor income in 2016, 2017, and 2019. The magnitude of the impact increases from 434 to 469 and 552 euros. The coefficients are also positive in 2018 and 2020, but we cannot estimate the effects precisely. Our results for 2019 indicate that the positive impact of conditional cash transfers persists over time once the transfer is over.

Del Boca, Pronzato, and Sorrenti [2021] find contemporaneous effects of the cash transfers on employment only for males. To understand whether there are gender differences in the ex-post effects of UCT and CCT on labor income, we perform separate regressions for males and females. Column 2 of Table 3 shows the results of estimating Equation 1 for the subsample of males. The positive effects of CCT on labor income are much higher for males. The magnitude of the effect increases over time and moves from 1,030 euros in 2016 to 1,254 in 2017, to 1,229 in 2018, and 1,436 euros in 2019. Again, coefficients are positive and insignificant for 2020 when Covid reduced dramatically both employment and labor income at the macroeconomic level.

The third column of Table 3 shows the results for the subsample of female working-

age individuals. We do not find any significant effects of UCT or CCT on labor income. We conclude that the positive impact of CCT on labor income found for the entire sample was led by males and that for the subsample of males, these positive effects amplify over time and last at least two years after the end of the program.

The estimated effects can be due to an increase in labor income of anyway employed individuals or to an increase in employment as a consequence of the conditional cash transfer program. We check whether the latter explanation is behind our results by performing additional regressions with employment as the dependent variable. We define our left-hand side variable as a dummy equal to one if the individual is regularly employed at some point during a given year. Results in columns 4-6 of Table 3 show positive impacts of CCT on employment only for males in 2016 and 2019. Hence, we conclude that increases in employment can partly explain our main results. Interestingly, we also find positive effects of UCT on female employment in 2018. In the next section, we check whether these gender differences in the effect of UCT and CCT on labor income and employment are in line with differences in the use of welfare benefits.

## 5 Extensions and Robustness Checks

Around 8% of the participants in the 2016 experiments applied to the cash transfer program after 2017. To ensure that differences between ex-post application probability or ex-post admission probability across treatment and control groups do not lead our estimates, we replicate our main estimations for the subsample of individuals who did not apply to the program after participating in the experiment. Results shown in Table 4 are very similar to those obtained when estimating the effect of cash transfers using the full sample.

Our estimated effects of CCT on labor income and employment are positive and increasing over time. One may be concerned that they reflect pre-existing trends. To rule out this possibility, we re-estimate Equation 1 pretending that the experiment took place

Table 3: The Impact of UCT and CCT on Labor Income

	Labor Income (1)	LI Males (2)	LI Females (3)	Employment (4)	E Males (5)	E Females (6)
UCT*Year2016	152.541 (191.055)	317.066 (413.096)	31.332 (139.006)	0.008 (0.019)	0.011 (0.033)	0.006 (0.02)
CCT*Year2016	433.550 (196.947)**	1029.888 (420.493)**	-25.867 (150.370)	0.033 (0.018)*	0.078 (0.032)**	-.001 (0.021)
UCT*Year2017	-36.415 (227.110)	17.770 (492.404)	-73.273 (162.241)	-.001 (0.02)	-.023 (0.035)	0.015 (0.023)
CCT*Year2017	469.473 (236.546)**	1253.955 (507.085)**	-140.882 (177.027)	0.007 (0.019)	0.036 (0.032)	-.015 (0.024)
UCT*Year2018	85.452 (244.572)	42.420 (516.419)	122.053 (190.853)	0.023 (0.022)	-.022 (0.037)	0.057 (0.026)**
CCT*Year2018	411.544 (256.616)	1228.629 (543.970)**	-227.391 (188.421)	0.007 (0.021)	0.032 (0.036)	-.013 (0.025)
UCT*Year2019	123.658 (267.054)	226.400 (574.843)	53.289 (212.675)	0.008 (0.022)	-.019 (0.038)	0.029 (0.026)
CCT*Year2019	551.859 (293.222)*	1436.337 (619.123)**	-142.011 (221.297)	0.023 (0.022)	0.063 (0.038)*	-.008 (0.027)
UCT*Year2020	41.554 (271.092)	-36.591 (576.681)	104.931 (213.354)	-.014 (0.022)	-.042 (0.039)	0.006 (0.025)
CCT*Year2020	182.444 (275.623)	508.481 (579.534)	-82.130 (211.065)	0.003 (0.023)	0.024 (0.038)	-.013 (0.027)
UCT	-89.202 (180.084)	134.841 (389.988)	-224.921 (139.626)	-.001 (0.015)	0.043 (0.028)	-.032 (0.018)*
CCT	-104.068 (179.073)	88.023 (383.820)	-238.895 (144.552)*	-.015 (0.015)	-.005 (0.028)	-.025 (0.018)
Year2016	-213.265 (168.208)	-208.333 (355.985)	-137.202 (126.645)	-.022 (0.015)	-.023 (0.026)	-.014 (0.017)
Year2017	341.283 (195.864)*	776.948 (414.356)*	110.604 (143.715)	0.02 (0.016)	0.049 (0.027)*	0.009 (0.019)
Year2018	593.615 (208.905)***	1282.631 (432.419)***	188.981 (156.993)	0.029 (0.017)*	0.068 (0.029)**	0.012 (0.02)
Year2019	1025.101 (226.815)***	1950.249 (476.706)***	459.402 (173.633)***	0.045 (0.017)**	0.069 (0.031)**	0.04 (0.021)*
Year2020	807.619 (227.065)***	1709.979 (481.253)***	274.677 (166.255)*	0.031 (0.018)*	0.061 (0.032)*	0.024 (0.021)
Obs.	26120	11210	14910	26120	11210	14910
R <sup>2</sup>	0.142	0.104	0.105	0.122	0.093	0.101

Notes: Data is from Social Security Registers and Ufficio Pio records. The sample is composed by all working age individuals included in the experiment. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 4: The Impact of UCT and CCT. Restricted Sample

	Labor Income	LI Males	LI Females	Employment	E Males	E Females
	(1)	(2)	(3)	(4)	(5)	(6)
UCT*Year2016	161.117 (204.546)	366.115 (437.539)	9.786 (150.836)	0.01 (0.02)	0.015 (0.035)	0.005 (0.022)
CCT*Year2016	421.783 (211.215)**	1029.109 (445.962)**	-47.473 (163.680)	0.034 (0.019)*	0.081 (0.034)**	-.002 (0.023)
UCT*Year2017	-37.506 (243.751)	-13.731 (526.006)	-48.394 (172.433)	0.003 (0.021)	-.015 (0.037)	0.016 (0.024)
CCT*Year2017	433.233 (254.299)*	1134.965 (542.162)**	-115.080 (189.231)	0.004 (0.02)	0.031 (0.034)	-.017 (0.025)
UCT*Year2018	72.452 (265.962)	56.063 (555.646)	93.249 (202.530)	0.032 (0.023)	-.005 (0.039)	0.06 (0.026)**
CCT*Year2018	340.133 (278.520)	1115.204 (583.551)*	-266.716 (202.356)	0.012 (0.022)	0.042 (0.038)	-.012 (0.026)
UCT*Year2019	197.958 (288.282)	320.695 (615.516)	117.646 (222.997)	0.02 (0.023)	-.005 (0.04)	0.039 (0.027)
CCT*Year2019	562.635 (314.301)*	1446.096 (663.288)**	-130.428 (231.755)	0.024 (0.023)	0.069 (0.04)*	-.011 (0.028)
UCT*Year2020	182.479 (287.600)	197.633 (612.331)	180.355 (220.663)	-.006 (0.023)	-.024 (0.041)	0.008 (0.026)
CCT*Year2020	231.701 (291.628)	630.960 (617.706)	-86.219 (217.704)	-.00004 (0.023)	0.034 (0.04)	-.026 (0.027)
UCT	-56.136 (194.678)	-75.200 (424.653)	-91.405 (147.725)	0.009 (0.016)	0.032 (0.03)	-.011 (0.019)
CCT	-38.583 (196.885)	-30.821 (423.457)	-75.597 (154.442)	-.001 (0.017)	-.012 (0.03)	0.002 (0.019)
Year2016	-189.618 (186.792)	-209.012 (390.406)	-107.081 (142.358)	-.021 (0.016)	-.024 (0.028)	-.011 (0.019)
Year2017	384.894 (218.431)*	871.954 (459.170)*	97.905 (157.262)	0.02 (0.018)	0.045 (0.03)	0.01 (0.02)
Year2018	659.396 (237.127)***	1346.789 (483.966)***	234.443 (173.782)	0.024 (0.019)	0.056 (0.032)*	0.009 (0.022)
Year2019	1014.118 (255.199)***	1949.779 (533.826)***	414.941 (186.239)**	0.037 (0.019)*	0.061 (0.033)*	0.03 (0.022)
Year2020	736.308 (249.465)***	1578.320 (531.625)***	221.548 (174.046)	0.029 (0.019)	0.05 (0.034)	0.025 (0.022)
Obs.	24010	10340	13670	24010	10340	13670
R <sup>2</sup>	0.15	0.11	0.114	0.133	0.099	0.111

Notes: Data is from Social Security Registers and Ufficio Pio records. The sample is composed by all working age individuals included in the experiment who did not apply to the program after 2017. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

in 2015 instead of 2016. We show the results of this exercise in Table 5. The coefficients associated with the interactions of UCT and CCT with the year 2015 produce smaller and statistically insignificant estimates. This indicates that pre-existing differential trends across treatment groups can not explain our main results.

Del Boca, Pronzato, and Sorrenti [2021] find that the CCT implied an increase in social contacts among individuals attending job-seeking training. Bertrand, Luttmer, and Mullainathan [2000] show that social networks have a significant positive impact on women's probability of receiving welfare benefits. On the other hand, being legally employed typically excludes individuals from welfare benefits. As men receiving the CCT are more likely to be employed, they may rely less on welfare benefits. We explore the impact of CCT and UCT on welfare benefits and the probability of receiving any benefits in the Appendix. Unfortunately, our Social Security data only allows us to estimate contemporaneous effects because there is no information on welfare benefits after 2017. We find negative effects of UCT and CCT on welfare benefits in 2016 for the entire sample. The magnitude of the effect is a decrease of 92-93 euros both for UCT and CCT. We also find negative effects of CCT on welfare benefits in 2016 and 2017 for men, with the impact around minus 168-180 euros. Results are consistent with the labor market effects of UCT and CCT, as regular employment and welfare benefits are often substitutes.

## 6 Discussion

We compare the contemporaneous and ex-post implications of unconditional and conditional cash transfers for labor income and employment. We use a randomized controlled trial where applicants to a cash transfer program are divided into three groups: 500 families belong to the control group, 500 families receive an unconditional cash transfer, and 500 families receive a cash transfer only if they participate in reemployment training programs.

We find that conditional cash transfers increase workers' labor income during the program and two years after. This effect is led by men and increases over time. In contrast,

Table 5: The Labor Income Impact of UCT and CCT. Placebo

	Labor Income (1)	LI Males (2)	LI Females (3)	Employment (4)	E Males (5)	E Females (6)
treat1pre15	243.123 (180.059)	519.896 (380.741)	36.373 (137.153)	0.014 (0.018)	0.03 (0.032)	0.002 (0.02)
treat2pre15	75.322 (173.467)	377.102 (362.572)	-152.222 (138.523)	0.015 (0.018)	0.038 (0.031)	-.002 (0.021)
UCT*Year2016	201.166 (216.075)	421.045 (466.055)	38.607 (158.329)	0.011 (0.02)	0.017 (0.037)	0.007 (0.022)
CCT*Year2016	448.615 (217.799)**	1105.309 (465.044)**	-56.311 (167.174)	0.036 (0.02)*	0.086 (0.035)**	-.002 (0.024)
UCT*Year2017	12.209 (244.492)	121.749 (530.325)	-65.998 (175.640)	0.002 (0.021)	-.017 (0.037)	0.016 (0.025)
CCT*Year2017	484.538 (249.506)*	1329.375 (534.913)**	-171.326 (189.944)	0.01 (0.021)	0.043 (0.035)	-.016 (0.025)
UCT*Year2018	134.077 (258.649)	146.399 (547.005)	129.327 (201.709)	0.026 (0.023)	-.016 (0.039)	0.057 (0.027)**
CCT*Year2018	426.608 (268.094)	1304.049 (567.986)**	-257.835 (199.692)	0.01 (0.022)	0.039 (0.038)	-.013 (0.027)
UCT*Year2019	172.283 (280.253)	330.379 (603.208)	60.564 (221.777)	0.011 (0.023)	-.013 (0.04)	0.029 (0.027)
CCT*Year2019	566.923 (303.169)*	1511.757 (640.721)**	-172.456 (230.140)	0.026 (0.023)	0.07 (0.04)*	-.009 (0.028)
UCT*Year2020	90.179 (283.120)	67.388 (604.219)	112.206 (221.442)	-.011 (0.023)	-.036 (0.041)	0.007 (0.027)
CCT*Year2020	197.509 (284.526)	583.902 (599.288)	-112.574 (220.766)	0.007 (0.023)	0.032 (0.04)	-.013 (0.028)
UCT	-137.827 (189.003)	30.862 (408.850)	-232.195 (145.198)	-.004 (0.016)	0.037 (0.03)	-.032 (0.019)*
CCT	-119.133 (188.891)	12.603 (403.103)	-208.450 (154.386)	-.018 (0.016)	-.013 (0.03)	-.024 (0.02)
pre15	-538.792 (155.629)***	-925.124 (322.948)***	-185.550 (121.935)	-.051 (0.015)***	-.074 (0.025)***	-.026 (0.017)
Year2016	-234.275 (178.377)	-266.639 (377.030)	-130.309 (135.168)	-.024 (0.016)	-.027 (0.027)	-.014 (0.018)
Year2017	320.272 (203.440)	718.643 (430.008)*	117.497 (150.584)	0.018 (0.017)	0.045 (0.028)	0.009 (0.02)
Year2018	572.604 (215.776)***	1224.326 (446.304)***	195.874 (162.738)	0.028 (0.018)	0.064 (0.03)**	0.012 (0.021)
Year2019	1004.090 (233.147)***	1891.943 (489.714)***	466.294 (178.532)***	0.043 (0.018)**	0.065 (0.032)**	0.04 (0.021)*
Year2020	786.608 (232.640)***	1651.674 (493.001)***	281.569 (170.941)*	0.029 (0.018)	0.056 (0.032)*	0.024 (0.021)
Obs.	26120	11210	14910	26120	11210	14910
R <sup>2</sup>	0.142	0.104	0.105	0.122	0.093	0.101

Notes: Data is from Social Security Registers and Ufficio Pio records. The sample is composed by all working age individuals included in the experiment. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

there seem to be neither contemporaneous nor ex-post effects of unconditional cash transfers. We also analyze the contemporaneous impact of cash transfers on welfare benefits. Our results indicate that UCT and CCT reduce welfare benefits in 2016, and CCT reduces welfare benefits in 2016 and 2017 for males. This pattern is consistent with cash transfers in general reducing welfare benefits, also as a mechanical side-effect of increasing labor income (reducing welfare benefits eligibility).

We conclude that limited-duration CCTs targeting impoverished households in rich countries effectively allow individuals to exit the poverty trap. Whether re-employment training by itself (not enforced through cash transfers conditionality) would also be effective is left for future research.



## References

- ASHENFELTER, O., AND M. W. PLANT (1990): “Nonparametric estimates of the labor-supply effects of negative income tax programs,” *Journal of Labor Economics*, 8(1, Part 2), S396–S415.
- ATTANASIO, O., E. BATTISTIN, E. FITZSIMONS, AND M. VERA-HERNANDEZ (2005): “How effective are conditional cash transfers? Evidence from Colombia,” .
- BAIRD, S., D. MCKENZIE, AND B. ÖZLER (2018): “The effects of cash transfers on adult labor market outcomes,” *IZA Journal of Development and Migration*, 8(1), 1–20.
- BANERJEE, A. V., R. HANNA, G. E. KREINDLER, AND B. A. OLKEN (2017): “Debunking the stereotype of the lazy welfare recipient: Evidence from cash transfer programs,” *The World Bank Research Observer*, 32(2), 155–184.
- BERTRAND, M., E. F. LUTTMER, AND S. MULLAINATHAN (2000): “Network effects and welfare cultures,” *The Quarterly Journal of Economics*, 115(3), 1019–1055.
- CARRILLO, P. E., AND J. P. JARRÍN (2009): “Efficient delivery of subsidies to the poor: Improving the design of a cash transfer program in Ecuador,” *Journal of Development Economics*, 90(2), 276–284.
- CESARINI, D., E. LINDQVIST, M. J. NOTOWIDIGDO, AND R. ÖSTLING (2017): “The effect of wealth on individual and household labor supply: evidence from Swedish lotteries,” *American Economic Review*, 107(12), 3917–46.
- DE HOOP, J., V. GROPPPO, AND S. HANDA (2017): “Household Micro-Entrepreneurial Activity and Child Work: Evidence from Two African Unconditional Cash Transfer Programs on Behalf of the Malawi SCTP and Zambia MCTG Study Teams,” .
- DEL BOCA, D., C. PRONZATO, AND G. SORRENTI (2021): “Conditional cash transfer programs and household labor supply,” *European Economic Review*, 136, 103755.
- FISZBEIN, A., AND N. R. SCHADY (2009): *Conditional cash transfers: reducing present and future poverty*. World Bank Publications.

- GERTLER, P. (2000): "The impact of Progresa on health; final report," Discussion paper.
- (2004): "Do conditional cash transfers improve child health? Evidence from PROGRESA's control randomized experiment," *American economic review*, 94(2), 336–341.
- GLEWWE, P., AND P. OLINTO (2004): "Evaluating the impact of conditional cash transfers on schooling: An experimental analysis of Honduras' PRAF program," *Unpublished manuscript, University of Minnesota*.
- HAUSHOFER, J., AND J. SHAPIRO (2016): "The short-term impact of unconditional cash transfers to the poor: experimental evidence from Kenya," *The Quarterly Journal of Economics*, 131(4), 1973–2042.
- JONES, D., AND I. MARINESCU (2018): "The labor market impacts of universal and permanent cash transfers: Evidence from the Alaska Permanent Fund," Discussion paper, National Bureau of Economic Research.
- MALUCCIO, J., AND R. FLORES (2005): *Impact evaluation of a conditional cash transfer program: The Nicaraguan Red de Protección Social*. Intl Food Policy Res Inst.
- PARKER, S. W., AND P. E. TODD (2017): "Conditional cash transfers: The case of Progresa/Oportunidades," *Journal of Economic Literature*, 55(3), 866–915.
- PAUL SCHULTZ, T., ET AL. (2004): "School subsidies for the poor: evaluating the Mexican Progresa poverty program," *Journal of development Economics*, 74(1), 199–250.
- PICCHIO, M., S. SUETENS, AND J. C. VAN OURS (2018): "Labour supply effects of winning a lottery," *The Economic Journal*, 128(611), 1700–1729.

## A Appendix

Table A: The Welfare Benefits Impact of UCT and CCT

	Welfare Benefits	WB Males	WB Females	Benefit Recipient	BR Males	BR Females
	(1)	(2)	(3)	(4)	(5)	(6)
UCT*Year2016	-92.248 (48.701)*	-135.467 (99.536)	-60.532 (38.154)	-.018 (0.014)	-.013 (0.023)	-.022 (0.016)
CCT*Year2016	-93.181 (45.333)**	-179.500 (87.922)**	-26.059 (39.505)	-.020 (0.014)	-.031 (0.022)	-.013 (0.017)
UCT*Year2017	-55.275 (45.215)	-129.041 (94.240)	-1.122 (33.772)	-.017 (0.014)	-.022 (0.023)	-.013 (0.016)
CCT*Year2017	-66.147 (41.517)	-168.289 (81.973)**	13.728 (33.828)	-.019 (0.013)	-.033 (0.022)	-.008 (0.016)
UCT	35.563 (37.907)	126.616 (86.697)	-34.431 (22.834)	0.002 (0.01)	0.002 (0.018)	-.003 (0.011)
CCT	20.555 (37.581)	52.891 (80.474)	-27.357 (21.406)	-.006 (0.01)	-.016 (0.017)	-.004 (0.01)
Year2016	55.195 (38.138)	39.233 (73.502)	79.540 (33.811)**	0.058 (0.012)***	0.064 (0.019)***	0.057 (0.014)***
Year2017	-51.557 (33.671)	-104.516 (65.795)	2.995 (28.193)	0.04 (0.011)***	0.046 (0.019)**	0.04 (0.013)***
Obs.	18284	7847	10437	18284	7847	10437
R <sup>2</sup>	0.058	0.068	0.064	0.062	0.079	0.077

Notes: Data is from Social Security Registers and Ufficio Pio records. The sample is composed by all working age individuals included in the experiment. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .