Cash or Condition? Evidence From a Cash Transfer Experiment

Sarah Baird, Craig McIntosh, and Berk Özler (2011)

Parijat Lal

November 1, 2019

Motivation

- Debate around conditional vs. unconditional cash transfers
- CCTs proponents
  - Address underinvestment in education/health due to market failure
  - Make transfers politically palatable to middle- and upper-class voters
- CCT critics
  - Marginal contribution of conditions to cash transfers largely unknown
  - Implementation of CCT programs may strain administrative capacity
- Ideal experiment: RCT with no transfers vs. UCTs vs. CCTs

Context and Study Design

- Country setting: Malawi
  - 81% of 15.3m population rural in 2009, mostly subsistence farming
  - GNI per capita less than 40% of Sub-Saharan African average
  - 24% net secondary school enrollment
- Sample: 2,907 schoolgirls across 176 EAs in Zomba district
  - Each EA contains average of 250 HHs spanning several villages
  - Selected from three strata: Zomba city, near rural, and far rural
  - Target population: never-married females, 13-22, in school at baseline
- Treatments administered over 2 years
  - **CCT:** monthly transfers of $4-10 to parents and $1-5 to girls (varied randomly across EAs) conditional on regular attendance
  - **UCT:** identical, but no condition, and school fees part of transfer
    - Evidence that UCT girls understood rules and were very aware of CCT (general sense program aimed to support girls' education)

Data

- Sources: household surveys (all rounds), school surveys (R2-3), school ledgers, independent achievement tests, and qualitative interviews (R3)

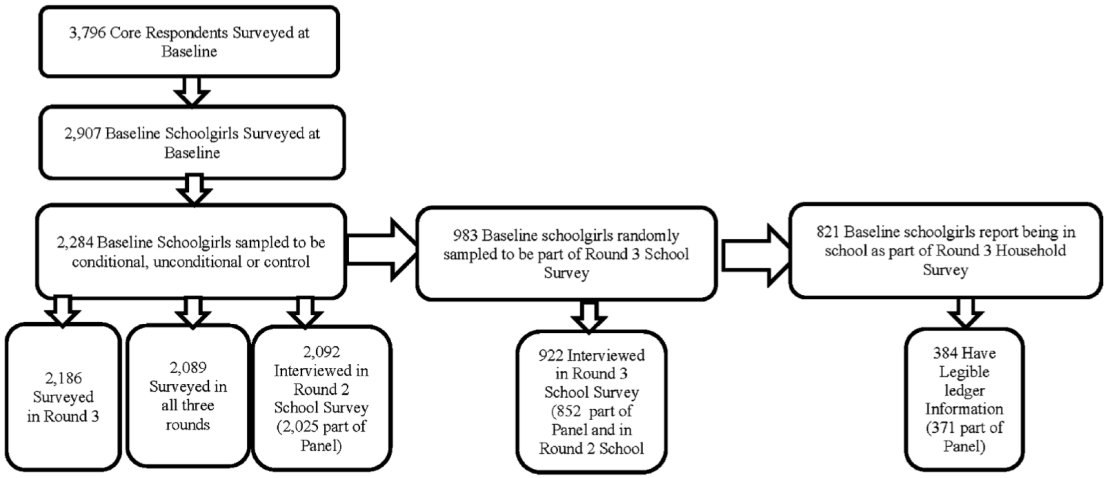

FIGURE I

Study Sample and Attrition

- Outcomes
  - **Schooling:** self-reported data, teacher reports, and attendance ledgers
  - **Learning:** tailored tests of math and English + cognitive ability test
  - **Marriage and fertility:** self-reported data

Attrition and Estimation Strategy

- No significant differential attrition or imbalance between groups

TABLE I
ANALYSIS OF ATTRITION

	Dependent variable					
	(1)	(2)	(3)	(4)	(5)	(6)
	=1 if surveyed in Round 3	=1 if surveyed in all three Rounds	=1 if took educational tests	=1 if information found in Round 2 survey	=1 if information found in Round 3 school survey	=1 if legible ledger found
Conditional treatment	0.020	0.021	0.029*	0.033	−0.000	0.116*
	(0.015)	(0.030)	(0.016)	(0.024)	(0.027)	(0.064)
Unconditional treatment	0.021	0.030	0.035*	−0.029	0.014	0.061
	(0.019)	(0.024)	(0.020)	(0.053)	(0.028)	(0.077)
Mean in the control group	0.946	0.893	0.929	0.890	0.935	0.378
Number of observations	2,284	2,284	2,284	2,284	983	821
Prob > F(Conditional = Unconditional)	0.965	0.797	0.801	0.246	0.627	0.513

- LPM for intention-to-treat effects of program in each treatment arm

$$Y_i = T_i^C \gamma^C + T_i^U \gamma^U + X_i \beta + \varepsilon_i$$

where T_i^C and T_i^U are indicators for offers to be in the CCT and UCT arms and standard errors ε_i are clustered at EA level

  - Age- and stratum-specific sampling weights used to make results representative of target population in study area

Results

- **School enrollment**
  - Self-reports: dropout rates lower in treatments; UCT outperforms
    - Evidence of significant over-reporting by control and UCT
  - Teacher reports: higher dropout rates overall but still lower in both treatments; impact of CCT significantly larger than UCT
- **School attendance:** rate for 2009 is 8 pp ($\sim$10 days/year) higher in CCT arm vs. control; UCT estimates positive but not significant
- **Test scores:** across-the-board improvements in CCT, but not in UCT
- **Marriage:** 7.9 pp reduction in UCT (relative to 18% in control); 1.2 pp reduction in CCT, but not significant
- **Pregnancy:** 6.7 pp reduction in likelihood in UCT by R3
  - Possible channels: schooling, income effect, sugar daddies
  - Framework: many noncompliers, strong income effect among them, and small incentive effects for those in school $\Longrightarrow$ UCTs more effective

Additional Findings and Conclusion

- Heterogeneity in program impacts
  - **Age:** trade-off between CCT and UCT among early adolescents
  - **Transfer size and identity**
    - CCT: increasing transfer amounts or varying recipient has no effect
    - UCT: impact on enrollment and marriage increases as parents are offered more money, but test scores suffer
- Significant implications of type of cash transfer program on affected outcomes and cost-effectiveness
  - Necessary condition for UCTs to delay marriage and pregnancy more effectively is presence of large group of noncompliers (relative to CCT compliers), and this is confirmed in many contexts
    - However, cultural context is also important (e.g. dowry)
- Important questions for policymakers
  - Which is the more vulnerable group?
  - Is there an evident market failure behind paternalistic motivation?