Economics
Research Programme Public Economics and Inequality

Freie Universität Berlin

Do CCTs raise educational attainment?

A case study of Juntos in Peru

Background

Conditional Cash Transfers (CCTs): transfers to poor households conditional upon pre-specified responsibilities tied to the use of health and education services

Target group	Conditionality	Benefit
Children under age 6	Attendance of regular health checks (CRED), vaccinations	100 Soles per month (≈ US$ 37)
Children aged 6-14	School attendance of at least 85% of the school year	
Pregnant / lactating women	pre- and post-natal health checks	

Motivation

- CCTs as a demand-side intervention to break a **poverty trap**
- „Theoretical default“ (rational agents, functioning markets)

  → should favour *unconditional transfers*
- But: Education as a **merit good** (Musgrave 1959)
- Conditionality (substitution effect) augments income effect

Research question

What is the effect of JUNTOS on educational outcomes of beneficiary children?

- Enrolment and progression through grade
- Years of schooling
- Likelihood of passing transition points (primary, secondary school)
- Test scores (PPVT, Math test)

Contribution: Evaluate intermediate and final education outcomes rather than compliance with conditionalities, case study Peru

Identification strategy

Combined matching and DiD (MDiD) (Heckman et al, 1997)**:**

$$\hat{A}TT^{MDiD} = \Sigma \{ [y_{it_1} - y_{it_0}] - \Sigma \hat{w}_{ij}[y_{jt_1} - y_{jt_0}] \} w_i$$

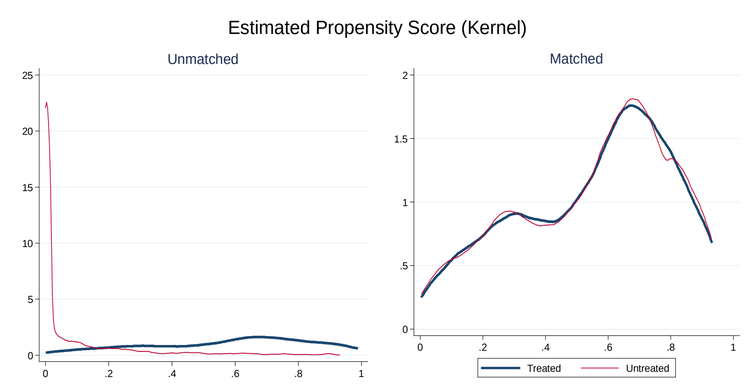
Key identifying assumptions:

→ Conditional on observables X,

→ evolution of unobservables indep. of T; $\mathbf{u_{it_1} - u_{it_0} \perp T_{it_1} \mid X_i}$

→ common support assumption $\mathbf{Pr\ (T_{it_1} = 1 \mid X_{i,t}) < 1}$

Kernel Matching



Discussion

- Demand side focus
- Results mixed: success in raising schooling, no effect on test scores
- Heterogenous effects further study: age of child, number of targeted children, ethnicity
- chool vs household factors
- Longer time span needed to observe final impacts

Results:Schooling

Panel C: Age group secondary school (12-18 years)

Outcomes	Enrolled	Highest grade	Age-for-grade	Primary complete	In secondary
Baseline					
Diff (T-C)	-0.006	-0.539**	0.496***	-0.079**	-0.089***
	(0.011)	(0.205)	(0.126)	(0.027)	(0.024)
Follow-up					
Diff (T-C)	0.067**	-0.217	0.107	-0.009	0.004
	(0.032)	(0.227)	(0.151)	(0.047)	(0.068)
DiD	**0.073****	**0.322*****	**-0.389*****	**0.070****	**0.093***
	(0.034)	(0.065)	(0.094)	(0.031)	(0.053)
N	1956	1956	1956	1956	1956
R-squared	0.04	0.38	0.02	0.34	0.22

Robust standard errors in parentheses; clustered at the district level.

*** p<0.01, ** p<0.05, * p<0.1, Kernel bandwidth: 0.07

Results: Learning outcomes

Pooled sample (excluding siblings)

Outcomes	Younger cohort		Older cohort	
	PPVT	**Math**	**PPVT**	**Math**
Baseline				
Diff (T-C)	0.003	0.256	-0.111	-0.181
	(0.123)	(0.218)	(0.100)	(0.214)
Follow-up				
Diff (T-C)	-0.229*	-0.355***	-0.338**	-0.283
	(0.118)	(0.035)	(0.153)	(0.195)
DiD	**-0.232**	**-0.611****	**-0.227**	**-0.101**
	(0.178)	(0.231)	(0.148)	(0.227)
Observations	1491	1571	496	438
R-squared	0.01	0.02	0.06	0.02

Robust standard errors in parentheses; clustered at the district level.

*** p<0.01, ** p<0.05, * p<0.1, Kernel bandwidth: 0.05 (YC), 0.04 (OC)

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