The Conditional Cash Transfer: A Model for the World?

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Introduction

Nations of the world have long searched for a poverty relief solution that can break the cycle of poverty and encourage education and health among low income citizens. Conditional cash transfer programs are means tested poverty relief efforts that give households money provided they comply with certain human capital development goals. Specifically, the Mexican *Progresa* program (now rebranded *Oportunidades or Prospera)* gives monetary transfers provided children attend school 85% of the time and visits health clinics a certain number of times a year. I compare CCT programs that have emerged in Mexico and Brazil and compare the program goals and impacts. My empirical analysis measures the effect of a specific policy, the conditional cash transfer (CCT), on school attendance in rural and urban environments. This analysis uses household data from a Mexican survey to measure the effect of a household receiving a conditional cash transfer on whether or not children are attending school in the next year.

Prior Literature

Do Conditional Cash Transfers of Schooling Generate Lasting Benefits – Behrman, Parker, and Todd (2010): The authors used matched pairing to estimate the effects of cash transfers on school attendance comparing like households that were part of the CCT program and those that were not. They used earlier year's data of the same survey. They found that cash transfers had significant effects on increasing education and future employment

Education Choice in Mexico: Using a Structural Model and a Randomized Experiment to Evaluate Progresa – Attanasio, Meghir, and Santiago (2011): The authors use an econometric model to analyze data from Progresa's major randomized social experiment. They find strong impacts on enrollment, particularly in secondary school.

Rawlings and Rubio – 2004 – This was one of the pioneering works on conditional cash transfer programs. They ran two early stage evaluations of the two programs and provide the analytical and economic framework I use in my comparison. Mainly, the efficiency vs. equity tradeoff. In this case, CCTs seek to resolve market failures (inefficiencies) like households undervaluing education, poor education access, and positive externalities of more education. Attacking these goals with human capital is efficiency. The redistributive transfer is an example of the equity goal – giving equal opportunities to different homes.

Comparative Methods

Compare Mexico and brazils programs using the following outline:

- History and background behind creation
- Political attitudes and economic background surrounding program creation
- How the program was founded (by whom, why, and what was the public reaction?)
- Specific program details and programs
- Reported program outcomes

What are the different program goals (efficiency and equity tradeoff)

- Mexico – efficiency focus
- Brazil – equity focus

VARIABLE	RURAL			URBAN		
ATTENDING SCHOOL NEXT YEAR?	Coef.	Std. Err.	obs	Coef.	Std. Err.	obs
RECEIVING A CCT?	-0.00209	(0.01134)	5,655	0.003973	(0.009594)	5,626
MID SIZED HOUSEHOLD	-2.76E-02*	(0.009307)	5,655	-7.50E-06	(1.78E-05)	5,626
LARGE HOUSEHOLD	-0.04809**	(0.014081)	5,655	0.006399	(0.010141)	5,626
CONSUMPTION PER CAPITA	-6.40E-07	(8.49E-06)	5,655	-0.006	(0.024784)	5,626
LITERATE?	0.02802	(0.069423)	5,655	0.117825**	(0.0209)	5,626
SECONDARY SCHOOL	0.0461**	(0.014054)	5,655	0.108387**	(0.0305)	5,626
HIGH SCHOOL	0.063269**	(0.015245)	5,655	0.034002	(0.031704)	5,626
GRADUATED	0.112988**	(0.018527)	5,655	-0.49895**	(0.030768)	5,626
WORKING	-0.00705**	(0.01122)	5,655	-0.07678**	(0.016934)	5,626
WORK MISSING	0.099487**	(0.008252)	5,655	-0.23908**	(0.013083)	5,626
_CONS	0.845207	(0.07166)	5,655	0.66499	(0.036999)	5,626

Progresa Evaluation

- The data comes from two externally administered 2009 household surveys evaluating *Progresa* program impacts. Specifically, these study the effects of *Progresa* on urban households.
- My dependent variable is binary – whether or not the child will be attending school in the following year. As a result I used a linear probability model, a probit, and a logit model to measure my effect of interest. I hypothesize that households that receive Oportunidades transfers (cct) will have a higher probability of attending school in the following year. I control for various factors that I think will have an effect on school attendance for the households in the survey. I ended up presenting the linear probability model results.

Model

$$attend_i = \beta_0 + \beta_1 cct_i + \beta_2 sizemid_i + \beta_3 sizebig_i + \beta_4 consumption_i + \beta_5 literacy_i + \beta_6 secondaryschool_i + \beta_7 highschool_i + \beta_8 graduated_i + \beta_9 work_i + \beta_{10} workmissing_i + \varepsilon_i$$

Results

Model Selection:

- In comparing my linear probability models with the probit and logit models, I find pretty similar marginal effects of the cash transfer on attendance rates, with the exception of slightly lower effects in the logit model.
- The probit and logit model, in both cases offer high sensitivity, specificity, and percent of observations correctly classified.
- Because of its low standard error and large magnitude, the probit model is the best.

Interpretation:

- Some other important coefficients to look at are significant negative effects of larger family size on school attendance and the effect of working on one's ability to enroll in school in the next year.
- Because of the limitations of my data analysis toolkit, weaker data, and a changing landscape of poverty relief in Mexico I cannot offer a robust conclusion to some of the questions I hoped to. Because of program expansion, it is difficult to tell if the program maintained its effectiveness over the long term and if it remains effective even when expanded. Further than that, it's hard to tell whether an increase in school attendance will actually create human capital growth.

Analysis

Claim - Different political climates, government structures, and political attitudes toward poverty relief affect the policy process model. In Mexico and Brazil, these factors created two similar poverty relief policies that were implemented in different ways, and hold different primary objectives.

- Brazil, larger by population and geographically, created a more decentralized program because of administrative challenges. It also created a program more focused on widespread relief as opposed to human capital development because of the popularity of the measure
- Mexico used a nationalized program because they valued the ability to evaluate the program over time and prioritized developing human capital among the needy as opposed to wide poverty relief

Conclusion

- In conclusion, it appears that the CCT program has mixed results in incentivizing school attendance. Households receiving CCT payments showed significant increases in attendance rates.
- The comparative approach lets me make claims about why different settings in Mexico and Brazil cause different priorities for policymakers. These different priorities create different program structures and different effects on the population of interest.
- Quantitative analyses are important, but flawed in understanding the effects of poverty relief programs on the poor. They are important to policymakers.
- Cultures, public opinion, and political goals are essential to understanding the development and success/failure of public policies.

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