The PROGRESA/Oportunidades program of Mexico and its Impact Evaluation (I)

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What is a CCT?

- A Conditional Cash Transfer (CCT) program is a targeted transfer program whereby cash is directly provided to beneficiary families (usually mothers) on the condition that children attend school regularly and family members visit health centers regularly.
Dual Objectives of CCT programs

- Long-run poverty alleviation through investment in human capital (i.e., education, health and nutrition)
  - Early Interventions have much higher returns over life-cycle
- Short-run effect on poverty through cash transfers
Why are CCT programs attractive?

- CCT can provide the foundation of a comprehensive Poverty Alleviation and Social Protection Policy
  - Induce investments by poor on human capital
  - Can mitigate short-run macroeconomic shocks
  - Can facilitate the phase-out of price subsidies and/or other less effective programs
  - Can serve as a basic social safety net system available to ALL households (complementary to the safety net system accessible through employment in formal sector)
Why are CCT programs attractive?

- CCT can achieve a significant redistribution of income in favor of the poor under tight fiscal conditions
  - PROGRESA was initiated in the context of a short-run economic crisis (1994-95) and was designed as medium-term response to the crisis
  - PROGRESA gradually replaced generalized food subsidies with direct monetary transfers
Why are CCT programs attractive? -3

- CCT exploit the complementarities among health, education, and nutrition.
  - **Coordination:** Promote coordination of poverty alleviation efforts among Gov’t ministries (education, health, nutrition)
  - **Synergy:** simultaneous provision of health, education and nutrition benefits to all the beneficiaries.
Why are CCT programs attractive?-4

• Co-responsibility: The beneficiaries need to take specific actions or else they do not receive benefit

• CCT have potential of leading to lasting improvements in the well being of the poor
  • Evidence from rigorous impact evaluation of Oportunidades in Mexico Familias en Accion in Colombias and other countries
How CCT try to achieve their objectives?

- Targeting (geographic/household-level)
  - Oportunidades combines geographic/village-level with household level targeting within villages
- Simultaneous intervention in 3 key sectors (synergy)
How CCT try to achieve their objectives?-2

- Conditioning cash transfers to regular school attendance and visits to health centers
- Cash transfers given to mothers
- Parallel support on Supply Side (schools & health centers)
Controversial aspects of Oportunidades-1

- Why grant direct monetary transfers instead of food in-kind, vouchers, or improving supply side of services.

  Distribution of large volumes of food free of charge can inhibit the development of private commercial channels and create unfair competition with marginal producers in the area.

- Why target on the extreme/structurally poor and not include all?

- Setting new selection criteria: Why not start from beneficiary lists of existing programs or obtaining the roster of beneficiaries from community proposals.
Controversial aspects of Oportunidades-2

- Creating a single national roster of beneficiaries
- Giving transfers directly to individuals rather than to communities
- Having unique, non-discretionary rules for the whole country rather than allowing flexibility for local initiatives and conditions in each state
Controversial aspects of Oportunidades-3

- Granting benefits to women, given potential family conflicts
- Having possible impact on fertility (since benefits are linked to family demographics)
- Size of cash transfer
- The definition of family co-responsibilities and their certification (might generate additional workload for teachers and medical personnel)
How the controversial aspects of Oportunidades were managed

- Piloting
- Expansion of the program in phases
- Independent and rigorous evaluation (targeting, impact of the program on health, education, nutrition, social relations, women’s status etc.)
- Monitoring
- Operational evaluation of the program
- Cost analysis
Why Evaluation?

- **Economic Reasons**
  - Improve design and effectiveness of the program
  - Comparing program impacts allows G to reallocate funds from less to more effective programs and thus to an increase in Social Welfare

- **Social Reasons** (increases transparency & accountability)

- **Political Reasons**
  - Credibility/break with “bad” practices of past
Key elements of a successful and rigorous evaluation

- Evaluation built-in as a component of the program early in the program design stages
- Evaluation has clear objectives
  - Impact?
  - Program Design? e.g. PROGRESA package
- Evaluation has political support
- Evaluation Design that yields credible estimates of Impact
Key elements of a successful and rigorous evaluation

- Log frame helps identify subject to the budget constraint available (agreed) upon
  - objectives
  - setting indicators of impact
  - data needs (quantitative and qualitative)
  - the threshold value of the CHANGE in impact indicator if a program HAS an effect
- Survey sizes needed
- Budget allocated to the evaluation
Key elements of a successful and rigorous evaluation

• Pre-existing household surveys & administrative data
  • Can be used for an “ex-ante” evaluation of the expected program impact and determining size of benefits (design)
  • Can be used to evaluate program impact (using before & after estimator)
CCT programs (like Oportunidades) Expanding

- Brazil: Bolsa Familia=Bolsa Escola, Bolsa Alimentacao & Programa de Erradicaçao do Trabalho Infantil (PETI)
- Colombia: Familias en Acción
- Honduras: Programa de Asignación Familiar (PRAF)
- Jamaica: Program of Advancement through Health and Education (PATH)
- Nicaragua: Red de Protección Social (RPS)
- Turkey
- Ecuador: Bono Solidario
- Argentina:
- Bangladesh: Food for Education
OPORTUNIDADES
(previously called PROGRESA)

Large program covering rural and marginal urban areas

- In 2004: 5 million families or 25 million individuals
- In 2004: budget of US$ 2.5 billion or 0.3% of GDP
Program Description & Benefits

- Education component
  - A system of educational grants (details below)
  - Monetary support or the acquisition of school materials/supplies

(The above benefits are tied to enrollment and regular (85%) school attendance)

- Improved schools and quality of educations (teacher salaries)
Program Description & Benefits

- Health and Nutrition Component
  - basic package of primary heath-care services
  - Food support (cash)
  - nutritional supplements: 6 packs/child/mo; 20% of caloric requirements and 100% of necessary micronutrients)
  
  (The above benefits are tied to regular visits to health-service centers).

- Information and training
- Improved supply and quality of health services
  (medicine availability etc.)
Program Description & Benefits

- Average benefit received by beneficiary households: or 20% of the value of consumption expenditure before program
- About $\frac{1}{2}$ of transfer is the cash transfer for food and the rest from the school-related cash transfer
### Monthly Amount of Educational Grant (Pesos)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd year</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>4th year</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>5th year</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>6th year</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st year</td>
<td>175</td>
<td>185</td>
</tr>
<tr>
<td>2nd year</td>
<td>185</td>
<td>205</td>
</tr>
<tr>
<td>3rd year</td>
<td>195</td>
<td>225</td>
</tr>
</tbody>
</table>

Note: The standard age for primary school entry (1st year) is 5-6 years, so that primary school children are usually in the age group 6-12 years and secondary-school children in the age group 13-18 years.
Components of the Basic Health Service Package

1. Basic sanitation at the family level
2. Family planning
3. Prenatal, childbirth and puerperal care
4. Supervision of nutrition and children's growth
5. Vaccinations
6. Prevention and treatment of outbreaks of diarrhea in the home
7. Anti-parasite treatment
8. Prevention and treatment of respiratory infections
9. Prevention and control of tuberculosis
10. Prevention and control of high blood pressure and diabetes mellitus
11. Accident prevention and first-aid for injuries
12. Community training for health care self-help

Note: Actions aimed at identifying and treating hearing and sight problems that inhibit the learning capacity of children and young people will also be incorporated.
<table>
<thead>
<tr>
<th>Age group</th>
<th>Annual frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td></td>
</tr>
<tr>
<td>Newborn to one year of age</td>
<td>7 check-ups: 7 and 28 days; 2, 4, 6, 9 &amp; 12 months</td>
</tr>
<tr>
<td>One to two years</td>
<td>4 check-ups: one every three months</td>
</tr>
<tr>
<td>Three to five years</td>
<td>3 check-ups: one every four months</td>
</tr>
<tr>
<td>Six to eleven years</td>
<td>2 check-ups: one every six months</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
</tr>
<tr>
<td>Of childbearing age</td>
<td>4 check-ups: one every three months</td>
</tr>
<tr>
<td>Pregnant</td>
<td>5 check-ups during prenatal period.</td>
</tr>
<tr>
<td>During puerperium and lactation</td>
<td>2 check-ups: in immediate puerperium and during lactation</td>
</tr>
<tr>
<td><strong>Adults and youths</strong></td>
<td></td>
</tr>
<tr>
<td>Young adults</td>
<td>One check-up per year</td>
</tr>
<tr>
<td>Senior citizens</td>
<td>One check-up per year</td>
</tr>
</tbody>
</table>
Targeting

- **Step 1: geographical targeting**
  - Identify localities of highest marginality; used census data

- **Step 2: Household-level targeting**
  - Within the localities identified in step 1, conduct a household census and use that census to collect socio-demographic data and information on housing characteristics that is consistent and standard nationwide.
  - Within Village household-level targeting (village household census)
  - Used hh income, assets, and demographic composition to estimate the probability of being poor (Inc per cap<Standard Food basket).
  - Discriminant analysis applied separately by region
  - Discriminant score (DS) of each household compared to a threshold value (high DS=Noneligible, low DS=Eligible)
Figure 1: Kernel Densities of Discriminant Scores and Threshold points by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Discriminant Score</th>
<th>Density</th>
<th>Threshold</th>
<th>Probability</th>
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<tbody>
<tr>
<td>3</td>
<td>759</td>
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<td>0.003412</td>
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<td>751</td>
<td>0</td>
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<td>0.002918</td>
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<td>4.5e-06</td>
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<tr>
<td>28</td>
<td>757</td>
<td>0.000015</td>
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<td>0.002937</td>
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