CASH TRANSFERS, IMPACT EVALUATION & SOCIAL POLICY:
THE CASE OF EL SALVADOR

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Vanderbilt University
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El Salvador is the smallest country in Central America with an estimated population of 6.2 million people.

Source: El Salvador Household surveys & WB methodology. Collaboration Margarita Sanfeliu
Years of schooling, per quintile of per capita income (prime age adults: 25 -65)

Source: El Salvador Household surveys & WB methodology. Collaboration Margarita Sanfeliu
1. Overview of Social Protection System
2. Solidarity Communities (Comunidades Solidarias) CCT Program
   - Theoretical framework
   - Policy instruments
3. Impact Evaluation of CCT
   - Methodology
   - Main Results
4. Policy Challenges
## 1. Overview of Social Protection System

### Social Protection System*

- Solidarity Communities (urban & rural)
- Universal Basic Pension
- School Supplies & Uniform-in kind subsidy
- School Feeding Program & Milk Program
- Family Farming Program & Seed Program

### Sector Policies

- Health
- Education
- Labor Market (active policies)
- Housing
- Social Basic Infrastructure

2. Solidarity Communities

- **Comunidades Solidarias program (2009)**, included an urban component, additionally to the rural component.
- Multiagency interventions
Solidarity Communities

• Strategy that will lay the basis for a Social Protection System.
• Considers a holistic approach to social assistance and promotion
• Considers the following interventions: human capital (Conditional & unconditional Cash Transfers -CCT & UCT), basic skills and promote equal opportunities for people living in extreme poverty and social exclusion in rural communities and urban settlements more precarious
• Is based on a framework of coordinated efforts and shared responsibility between Central Governments, Local Governments and Community Organizations.
CCT: Solidarity Communities

Rural

1. Cash Transfer:
   - Educational CCT: Primary education 1-6 grades
   - Health & nutrition CCT: health check-ups 0-5 yrs & pregnant women
   - Pension UCT: 70 yrs. & older

2. Basic Social Infrastructure
   - water, electricity & rural roads
   - Health units & schools

3. Productive insertion and employability
   - Financial inclusion

4. Local participation – Local Gov’t & community level

Urban

1. Cash Transfer:
   - Educational CCT: middle & secondary school (differentiated by grades, gender & inclusion)
   - Pension UCT: 70 yrs. & older

2. Social Infrastructure:
   - Integrated improvement of settlements: water, sanitation & electricity
   - Public spaces

3. Productive insertion and employability:
   - Temporary Income Support Program

4. Local participation – Local Gov’t & community level
### CCTs instruments

- **Management Information Systems (MIS):** Management tool for program administration, operation, monitoring and evaluation.

<table>
<thead>
<tr>
<th>Identification</th>
<th>• Targeting, Enrolment, Exit</th>
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</thead>
<tbody>
<tr>
<td>Registration</td>
<td>• Database Development, Validation, Updating</td>
</tr>
<tr>
<td>Certification</td>
<td>• Data collection, Verification, Penalization</td>
</tr>
<tr>
<td>Payment</td>
<td>• Eligibility, Payment, Reconciliation</td>
</tr>
<tr>
<td>Control</td>
<td>• Complaints, Processes, Impact</td>
</tr>
</tbody>
</table>
Geographical Targeting: Rural Extreme Poverty
Map 2005: Municipal level

**Poverty clusters:**
- Stunt rate
- Poverty rate

**Integrated Municipal Marginality Index:**
- poverty gap,
- educational needs index
- housing needs index

*Intervention in 100 poorest municipalities*

Source: http://www.fisdl.gob.sv/temas-543/mapa-de-pobreza
Urban Poverty Map 2009: Settlement level

- Classification of Precarious Urban Settlement (AUP)
  - Residential Marginality Index
  - Social Exclusion Index
- Order of AUP
  - Index of Socioeconomic Stratification
- Intervention in 25 municipalities with higher concentration of most precarious urban settlements

http://www.sv.undp.org/content/el_salvador/es/home/library/poverty/---mapa-de-pobreza-urbana-y-exclusion-social-el-salvador---volumen.html
Household targeting

Proxy mean test (PMT)

• A methodology that relies on household assets and other indicators (demographic, human capital & housing characteristics, durable goods, productive asset) to estimate household welfare.
• Inclusion and exclusion errors

Community based

• Potential participants list is validated at the municipal committee.
• Exclusion errors are presented to the committee.
3. Impact Evaluation

**Objective:** To assess the progress made in the first two axes of intervention Solidarity Network (Red Solidaria Family and Net Services) to verify compliance with the goals and feedback program actions.

**Main Questions:**
1. What is the coverage of the various interventions?
2. How effective is the targeting algorithm to be used from 2007?
3. What are the impacts of Red Solidaria short, medium and long term?
4. The combination of conditional cash transfer (CCT) with water supply and sanitation (SB) generates the greatest impact?
5. The effect of the basic package of health services and nutrition is maintained without CCT?
6. What is the satisfaction of users of Red Solidaria on the functioning of health services, education, water and sanitation?
7. What is the effect of the quality of service offerings impacts Red Solidaria?
8. What is the effect of Red Solidaria on citizen and social participation?
9. What is the sustainability of family welfare when Red Solidaria out of communities?
10. What are the results of the key indicators of the extent of health services?
Impact Evaluation reports

- Initial report 2007: Strategy and methodology for the Quantitative and Qualitative evaluations
- Second report 2008: Baseline results
- Fourth report: Impact evaluation after the 1st year of implementation.
- Fifth report mid 2009: Participants satisfaction with the program
- Sixth report beginning of 2010: Impact evaluation after the 2nd year of implementation.
- Last report end of 2010: Program’s Sustainability
Methodology

Quantitative
- Regression discontinuity design
- Main database: collected by evaluators and Census 2007
- Sample: 50 municipalities, 100 canton, and 2775 effective households (30 households per canton)
- Some households w/ children 6 to 12 years, children under 3 years or pregnant women

Qualitative
- Several stages- initiated end of 2008 until mid-2010.
- Main topic: participant´s satisfaction with the program and services provided, and the effect of the quality of services in the results;
- Methods: Interviews, focal groups, studies ethnographic cases of communities and households, and Observation of the service provided in health units and schools
Impact Evaluation Methodology

- Randomization
- Matching: Propensity-score matching, covariate matching
- Regression Discontinuity Design (DDR)

Impact = $Y_1 - Y_1^*$

Source: IFPRI/FUSADES, 2007
How does DDR measures impacts?

Source: IFPRI/FUSADES, 2007)
Double Difference method

Difference before the program: A
Difference after the program: B
Double Difference: B-A

Source: IFPRI/FUSADES, 2007)
Consider 3 comparisons (treatment & control groups)

2006

• 2007

2007

• 2008

2008*

(beginning)

(ending)

*Without intervention before baseline
## Main Impact Indicators

<table>
<thead>
<tr>
<th>Impact on:</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>Income per capita</td>
</tr>
<tr>
<td>Education</td>
<td>1st grade Repetition rate</td>
</tr>
<tr>
<td>Health</td>
<td>Diarrhea prevalence 5 yr. under</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Malnutrition prevalence (weight/age) children 0-23 months</td>
</tr>
<tr>
<td>Utilization of Educational Services</td>
<td>School enrolment children 7-12 yrs.</td>
</tr>
<tr>
<td>Utilization of Health Services</td>
<td>Coverage of MMR vaccine children 12-23 months</td>
</tr>
<tr>
<td></td>
<td>Registration coverage of growth monitoring of children under 1 year old</td>
</tr>
<tr>
<td></td>
<td>Registration coverage of prenatal care</td>
</tr>
<tr>
<td></td>
<td>Births attended by qualified personnel</td>
</tr>
</tbody>
</table>
Main Impact Results

1. CSR has been effective in improving the situation of the poorest municipalities of El Salvador.

2. CCT and basic services (water & sanitation).
   - Basic services interventions decreased between 6.0 and 6.3 percentage points the percentage of children under 5 years who have had diarrhea.

3. Impact on per household per capita income

4. Recipient decides the use of transfer: education & food.

5. Repetition rate declined & the average enrollment rate of children 7-12 years increased by 4 points.

6. Diarrhea Prevalence in children under 3 yrs. dropped about 8 percentage points.

7. Stunting prevalence declined 8 percentage points in poorest municipalities.
### Targeting Effectiveness

Coady-Grosh-Hoddinott indices calculated by 45 social assistance programs in Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Program Description</th>
<th>Targeting Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRA</td>
<td>2004</td>
<td>Bolsa Familia-PNAD 2004</td>
<td>3.65</td>
</tr>
<tr>
<td>CHL</td>
<td>2003</td>
<td>SUF</td>
<td>2.98</td>
</tr>
<tr>
<td>ES</td>
<td>2008</td>
<td>Red Solidaria</td>
<td>2.94</td>
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<tr>
<td>CHL</td>
<td>2003</td>
<td>Solidario</td>
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<tr>
<td>BRA</td>
<td>2004</td>
<td>Pre-BFP (BA, BE, PCA, AG) PNAD 2004</td>
<td>2.70</td>
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<tr>
<td>BRA</td>
<td>2004</td>
<td>PETI PNAD 2004</td>
<td>2.50</td>
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<tr>
<td>BRA</td>
<td>2003</td>
<td>Auxilio Gas (POF 2003)</td>
<td>2.39</td>
</tr>
<tr>
<td>PER</td>
<td>2003</td>
<td>Almuerzo escolar</td>
<td>2.25</td>
</tr>
<tr>
<td>PER</td>
<td>2003</td>
<td>Comedor infantil</td>
<td>2.13</td>
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<tr>
<td>ARG</td>
<td>2003</td>
<td>Head of household program</td>
<td>1.60</td>
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<tr>
<td>PER</td>
<td>2003</td>
<td>Desayuno escolar</td>
<td>2.22</td>
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<tr>
<td>BRA</td>
<td>2004</td>
<td>School Feeding (7-15), PNAD 2004</td>
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<tr>
<td>CHL</td>
<td>2003</td>
<td>Disability PASIS</td>
<td>1.74</td>
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<tr>
<td>BRA</td>
<td>2003</td>
<td>Bolsa Escola (POF 2003)</td>
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<tr>
<td>MEX</td>
<td>2002</td>
<td>Oportunidades (PROGRESA)</td>
<td>1.73</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>FAMI</td>
<td>1.91</td>
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<tr>
<td>BRA</td>
<td>2003</td>
<td>Renda minima (POF 2003)</td>
<td>1.30</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>Community child care or kindergarten</td>
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<tr>
<td>DOM</td>
<td>2004</td>
<td>TAE-School Assist. Card</td>
<td>1.75</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>Restaurante escolar</td>
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<tr>
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<td>2003</td>
<td>Old age PASIS</td>
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<tr>
<td>DOM</td>
<td>2004</td>
<td>PAE-School Feeding</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>Preschool lunch</td>
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<tr>
<td>BRA</td>
<td>2004</td>
<td>BPC PNAD 2004</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>School snack or lunch</td>
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</tr>
<tr>
<td>PER</td>
<td>2003</td>
<td>Vaso de leche</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>Preschool snack</td>
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<tr>
<td>CHL</td>
<td>2003</td>
<td>Family allowance</td>
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<tr>
<td>CHL</td>
<td>2003</td>
<td>Potable water subsidy</td>
<td>1.18</td>
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<tr>
<td>GUA</td>
<td>2000</td>
<td>Powdered milk or glass of milk</td>
<td>1.03</td>
</tr>
<tr>
<td>GUA</td>
<td>2000</td>
<td>School breakfast</td>
<td>0.89</td>
</tr>
<tr>
<td>GUA</td>
<td>2000</td>
<td>School materials packet</td>
<td>0.89</td>
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<tr>
<td>PER</td>
<td>2003</td>
<td>Comedor popular</td>
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</tr>
<tr>
<td>GUA</td>
<td>2000</td>
<td>Glass of corn mush (atol)</td>
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<tr>
<td>DOM</td>
<td>2004</td>
<td>PROMESE-medicines</td>
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<tr>
<td>DOM</td>
<td>2004</td>
<td>INESPRE/Popular markets</td>
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<tr>
<td>GUA</td>
<td>2000</td>
<td>School snack</td>
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<tr>
<td>COL</td>
<td>2003</td>
<td>School scholarship</td>
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<tr>
<td>CHL</td>
<td>2003</td>
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<td>2002</td>
<td>PROCAMPO</td>
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<td>Gas Subsidy</td>
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<tr>
<td>MEX</td>
<td>2002</td>
<td>Other Gov transfers</td>
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<tr>
<td>MEX</td>
<td>2002</td>
<td>Scholarships &amp; Donations</td>
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<tr>
<td>GUA</td>
<td>2000</td>
<td>Nutrition pension (alimenticia)</td>
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<tr>
<td>GUA</td>
<td>2000</td>
<td>School transport subsidy</td>
<td>0.13</td>
</tr>
</tbody>
</table>

**PROMEDIO**

<table>
<thead>
<tr>
<th>Targeting Effectiveness</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.44</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Source: IFPRI/FUSADES 2007
4. Policy challenges

• Impact Evaluation as a strategy:
  • provide depth information on the efficacy and importance of social programs
  • Contributes for program administrators and policymakers to support the program
  • International financial institutions & cooperation have a role
• The importance of a rigorous impact evaluation of Comunidades Solidarias in El Salvador has contributed to incorporate evaluations of main social programs as an essential policy instrument.
• Efforts & attainments in social & human development aspects can easily backlash by external shock, particularly with climate related events
• Social protection schemes need to transit from a conceptual & theoretical proposal to a set of policy instruments that can responds to variety of events – life cycle & others related to external shocks