CCT Impact Evaluation in the Philippines

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Regional Impact Evaluation Workshop
Outline

• Overview of the CCT in the Philippines
• Relevance of the impact evaluation
• 1st Round Impact Evaluation
  – RCT and RDD
  – IE report: main results and policy recommendation
• 2nd Round Impact Evaluation
  – RDD and DID using panel data
  – DSWD, WB and local researchers partnership
  – IE report: key for policy dialogue
• Lessons learned thus far
What is the Pantawid Pamilyang Pilipino Program or the Conditional Cash Transfer (CCT) program?

A social protection and development strategy of the Philippine government that provides conditional cash grants to poor households in order to improve health, nutrition and education of children aged 0-14 y/o. (* Old program design)
Impact Evaluation Relevance

• Critics think CCT does not work
  – Opinions and anecdotal evidence only

• Rigorous impact evaluation:
  – Informs the general public by providing scientific evidence
  – Serves as basis for program design modification
  – Transparency: all data sets and analysis do-files are publicly available
    • Encourage researchers to use data and do more analysis
  – Three rounds of impact evaluations embedded in CCT design
1st Round Impact Evaluation

• A quantitative impact evaluation needed to estimate the project’s impact on target indicators

• Two methodologies:
  – Randomized control trial (RCT): 130 villages in 4 provinces
    • Unit of randomization is barangay/village
  – Regression discontinuity design (RDD): 150 villages in 5 provinces

• IE study started after 2.5 years of CCT implementation
RCT

- **Randomize Control Trial**
  - Random assignment to *treatment* (*with program intervention*) and *control* (*without program intervention*) groups
  - Simple comparison of average of indicators between treatment and control group

**Figure 1: Illustration of RCT approach to impact evaluation**

<table>
<thead>
<tr>
<th>Without program</th>
<th>With program</th>
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Note: Vertical dashed line at an index value of 50 shows the hypothetical cutoff for program eligibility.
RDD

Regression Discontinuity Design

- Impact of the program is estimated around the cutoff for program eligibility
- RD estimates the magnitude of that discontinuity and uses it to determine the impact of the program

Figure 2: Illustration of Regression Discontinuity approach to impact evaluation

Without program

With program

Note: Vertical dashed line at an index value of 50 shows the hypothetical cutoff for program eligibility.
1st Round Impact Evaluation

Results Highlights
More children stay in school

10 percentage points higher in enrollment rate in day care or pre-school

5 percentage points higher in enrollment rate in elementary

4 percentage points higher not statistically significant (T-stat 1.69)
More children use health services

- Having their weight monitored: 16.9% in Non-Pantawid Households vs. 33.3% in Pantawid Households
- Taking deworming pills: 55.3% in Non-Pantawid Households vs. 63.3% in Pantawid Households
- Taking Vitamin A: 74.9% in Non-Pantawid Households vs. 80.6% in Pantawid Households
More pregnant mothers avail health care

- 54% with 4 prenatal care visits
- 64% with postnatal care within 24 hours after delivery at home

- 14% without prenatal care
- 24% without postnatal care
More families prioritize education and health in their household budget

Pantawid families spend:
- 32% more on EDUCATION
- 29% more on MEDICINE & MEDICAL SERVICES

=P = household budget
How did the IE results affect policy?

• Policy recommendation: program to expand coverage to cover children **0-18 years old** or until they finish high school

• IE results supported the scale-up of the program
  – Results were presented to policy makers in congress to secure funds necessary for scale-up

• Triangulation of data: use administrative data and qualitative studies to explain/support results
2\textsuperscript{nd} Round Impact Evaluation

- CCT expanded to 4 million beneficiaries
  - Demand for a nationally representative study
  - No more control groups

- Two methodologies:
  - Regression discontinuity design
    - National representation possible, however RD method looks at narrows bandwidth
  - Difference in difference
    - Panel data: going back to interview RCT households
2\textsuperscript{nd} Round IE: WB-DSWD partnership

- DSWD, World Bank and local researchers collaboration:
  - DSWD fully involved in all IE related matters: e.g. questionnaire design, data collection, encoding, analysis, etc.
  - WB provides technical guidance and capacity building for local researchers and DSWD staff
    - DSWD’s staff learns by doing while providing insightful information about their program
  - DSWD hired a senior local researcher who leads both RD and DID studies, 1 RDD lead researcher, 1 DID lead researcher and 3 research assistants

- IE technical working group – provides advice in IE
  - National agencies, development partners, members from academe
2nd IE report: key for policy dialogue

• Preliminary findings of report presented to congress during budget hearings
• Results feed into possible program design enhancement
• Transparency assured as all data sets and analysis do-files will be published for anyone to replicate
Lessons learned thus far

• IE should be part of program design
• Have clear intermediate and outcome indicators
• Quality data = good quality analysis
• Triangulation of admin data and qualitative studies to complement quantitative IE results is necessary
• Proper interpretation and communication of IE results is key!