Social Protection Policy and Program Analysis – Using Household Survey Data to Assess Welfare, Poverty and Program Efficiency and Effectiveness

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Pensions Core Course
Session objective

Learn how survey data can be used to improve evidence-based Social Protection and Labor policies:

- Analyze household survey data
- Interpret poverty and performance indicators
- Familiarize with ADEPT
- Understand and formulate SPL policy reforms
AGENDA

1. Social Protection Framework
2. Overview of household survey data
3. Applications of household survey data:
   o Poverty analysis
   o Performance analysis for SPL policy
4. ADePT - Poverty & Social protection
Social Protection Framework

Social Protection

Social Assistance
(Non contributory)
To prevent and protect from risks and shocks
- Unconditional cash transfers (UCT)
- Conditional cash transfers (CT)
- Non-contributory social pensions
- Food and in-kind programs
- School feeding
- Public works and food for works
- Fee waivers and targeted subsidies
- Other social assistance

Social Insurance
(Contributory)
To ensure adequate living standards in the face of shocks and life changes
- Contributory pensions
- Other social insurance

Labor Market Programs
(Contributory and non contributory)
(To promote labor inclusion and reintegration)
- Active labor market programs
- Passive labor market programs
Why is it Important to Analyze Social Protection Programs?

Social Protection has increasingly become an important tool to reduce poverty and improve resilience, equity and opportunity.

As significant amount of public resources are devoted to these programs, it is crucial to analyze social protection to:

- **Promote evidence-base policy making**: Policymakers would like to track progress, and find answers to the questions such as: Is the targeting of programs improving? Are we achieving impact? How the performance of the country’s SPL programs compares to that in countries? (benchmarking tool)

- **Increase accountability and transparency**: all citizen would like to know how public resources are spent and if the social investment is efficient and effective at reaching the intended results.
Overview of Household Surveys for Program Analysis

Administrative and household survey data both provide useful information on social protection programs, but from a different perspective. While administrative data provides key information on program beneficiaries and spending, HH survey data is useful because it makes it possible to:

- Monitor programs
- Assess program performance
- Assess program impact
- Plan and simulate program reforms
Administrative and Household survey data both have pros and cons:

**Administrative data**
- Limited population coverage - only “covered” (program beneficiaries) included/captured;
- Comprehensive data on contributors, beneficiaries;
- Cumulative (over life cycle);
- Narrow variables (e.g., age, gender, contribution);
- Data fragmentation;
- Double counting of beneficiaries if people receives more than one program.

**Household survey data**
+ Entire population represented (covered and non-covered by programs);
-/+ Generally lack data on contributors, though extensive info on recipients/beneficiaries (and non-recipients);
- Static (single year, usually not panel, though can use multiple surveys);
+ Much more comprehensive (demographic, poverty, public & private transfers);
- No all SP programs are included in surveys (!)
The ASPIRE* administrative data universe – captures almost 3,000 individual SSN/SA programs from 144 countries representing 80% of the global population → HH surveys capture only 1/3 of that!

*ASPIRE: Atlas of Social Protection: Indicators of Resilience and Equity
What is household survey data?

- **Household survey** → a tool to capture nationally representative data (sample) at the HH and individual level; it only captures what is asked in the survey instrument!
- **Examples**: LSMS, HBS, LFS, DHS, Census
- **Organization**: Household or individual level
- **Timing**: Generally collected every 2-3 years, more frequent than census (~ 10 years)
- **Information**: Core demographics (e.g., age and gender), expenditure/ income, employment status, public and private transfers, etc.
Example of a household survey
Example survey (cont’d)

INTRODUCTION TO THE HOUSEHOLD TO BE INTERVIEWED

CONVEY THE FOLLOWING INFORMATION TO THE RESPONDENT:

In 2000/2009, the National Bureau of Statistics in Tanzania selected over one hundred households in each region of the country to ask them questions about how they were living. The responses which were provided by the households to these questions were used to help the government of Tanzania do a better job in meeting the needs of all Tanzanians.

NEW HOUSEHOLDS IN MOROGORO, DAR ES SALAAM AND PWAHI:
Now in 2010/2011 we are expanding these efforts. Your household was selected as one of those to whom the questions will be asked this time. You were not selected for any specific reason. Simply your name appeared on a list of all the households in this area, and your name was chosen randomly.

NPS HOUSEHOLDS:
Now in 2010/2011, we are returning these same households to see how things are progressing.

SPLIT-OFF HOUSEHOLDS:
At the time of that survey, one of your household members was living in a selected household, and we would like to see how things are progressing and how they and the rest of their new household, are living now.

ALL:
I would like to ask the questions in this form to you as head of household or spouse of the head. I will also need to ask questions to other members of your household, as well as weigh and measure the height of everyone who lives in your household. These questions will take several hours to complete. All of your answers will be held in confidence. The answers which you and the members of your household might give me will only be used by the NBS or under its supervision.

Before I start, do you have any questions or is there anything which I have said on which you would like any further clarification? May I proceed with interviewing you and members of your household?

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SECTION I: FOOD SECURITY
SECTION J: HOUSING, WATER AND SANITATION
SECTION K: CONSUMPTION OF FOOD OVER PAST ONE WEEK
Example survey (cont’d)
## Overview of Household Survey Data

### Individual level data

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Applications of Household Survey Data

(1) Socio-economic status and Poverty Analysis
  o Demographics
  o Living arrangements (household composition)
  o Poverty estimations

(2) Performance Analysis of Social Protection Programs
  – Coverage
  – Incidence of benefits and beneficiaries
  – Level of benefits (adequacy, generosity)
  – Poverty impact of SSN programs
  – Program overlap
  – Cost-benefit analysis

(3) Simulation of program reforms
Poverty Analysis

What is ‘poverty’?

• No common consensus exists, contentious;
• General agreement: insufficient resources leading to constrained choices;
• More narrow definition: lack of specific consumptions (e.g., too little food energy intake);
• Less narrow definition: Poverty as lack of “welfare”, lack of “capability” → inability to achieve certain level of “functioning” (“beings and doings”) (Amartya Sen)
How poverty is commonly measured

• Individuals or households are ranked by income or consumption
• The measure of income or income is referred to as the “welfare aggregate”
• Poverty lines are then set either on a relative or absolute basis
• Those with income or consumption below a given poverty line are considered poor
Poverty measures

A. **Poverty headcount** (FGT0) - % of individuals or households with welfare below the poverty line

B. **Poverty gap** (FGT1) - the average distance of poor from the poverty line as share of poverty line

C. **Poverty severity** (FGT2) – the squared distance from the poverty line
“Absolute” vs. “relative” poverty?

- **Absolute**
  - Lower poverty line – based on food needs;
  - Upper poverty line – food and basic non-food needs;
  - Some international global measure (e.g., PPP $1.90 per day);

- **Relative**
  - Welfare depends on relative income/expenditure (e.g., poorest 20% of population or 50% median income)
Poverty by age, gender, etc.:

• Are elderly households more poor than non-elderly households? Or elderly individuals compared to children?
• Are women poorer than men?
• Who cares?
  – Profile population to understand best/ worst off
  – Inform allocation of fiscal resources
  – Design or reform programs
    • Social/basic/minimum pensions – adequacy focus for low-earners/poor
    • Savings/earnings-related – replacement rate focus
Performance Analysis of Social Protection Programs

Coverage
- Coverage
- Program duplication and overlap

Targeting
- Distribution of beneficiaries
- Distribution of benefits

Benefit Level
- Average per capita transfer
- Generosity/Adequacy

Impact on poverty and inequality
- Poverty headcount, poverty gap, Gini reduction
- Cost-Benefit ratio

(3) Survey data applications: SPL performance analysis
Process to generate performance indicators

1. Household Survey Data
2. Data file
   - STATA
   - SPSS
3. Coding in the program to generate indicators
4. Formatting and presenting results
5. Risk of inconsistent results, human errors, etc.
6. Beautiful automated tables

(3) Survey data applications: SPL performance analysis
What is ADePT?

ADePT is a software Platform for Automated Economic Analysis.

ADePT uses micro-level data from various types of surveys, such as Household Budget Surveys, Demographic and Health Surveys and Labor Force surveys to produce rich sets of tables and graphs for a particular area of economic research.

User requires knowledge of statistical packages -e.g. Stata and SPSS – to prepare the dataset. Construction of key variables is not trivial but a statistician can do it.
Why ADePT?

• **ADePT** ensures **comparability** of results across countries/years, in a standardized format.

• **ADePT saves time** because users do not need to write commands and code to produce the tables and charts. It is automated!

• **ADePT** is **easy** to learn and use. It minimizes human errors in programming!

Download from [surveys.worldbank.org/adept](surveys.worldbank.org/adept)
(4) ADEPT - Poverty and Social Protection

ADePT-SP Interface

(1) Load your dataset(s)

(2) Tell ADePT what’s what

(3) Select tables and charts

(4) Choose options and hit “Generate”
Trainings
If your country office is interested in a training on ADEPT Social Protection and/or Poverty (1/2 day to 3 day courses) Please contact:

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THANK YOU!

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