

ADePT SP

Software platform for Automated Economic Analysis

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ADePT: Motivation

- Each year World Bank produces:
 - 15 poverty assessments
 - 3-5 Labor market studies
 - up to 10 Education and Health assessments
 - Reports on Social protection and Benefit-Incidence analysis, etc.
- Most reports use a similar set of tables/graphs
- Need for a software to automate the production of such reports.

ADePT suite of programs

- **ADePT Poverty:** Public Release – June 2007, Nov 2007
- **ADePT MAPS:** Public Release – October 2007
- **ADePT Labor:** Public Release – November 2007
- **ADePT Gender:** Public Release – April 2008
- **ADePT SP:** Public release – June 2008
- **ADePT EDU:** Development stage
- **ADePT PLINES:** Development stage
- **ADePT HEALTH:** Preparation stage
- Set of tools to simplify the construction of consumption aggregates: Dreaming stage

ADePT SP

- The module creates 25 standardized benefit incidence publication-ready tables and graphs based on household survey data
 - the coverage of the population with social protection programs;
 - the generosity of these programs;
 - the distribution of beneficiaries and benefits across groups;
 - summary statistics for the progressiveness/ regress. of transfers (distributional characteristics, concentration coef's);
 - simulated impact of the transfers on (reducing) inequality and poverty; and
 - estimates of the level of program overlap at household level, or the lack of coverage with such programs.
- Broken down by quintiles or deciles, poverty level, regions, areas of residence, household size or demographics, ethnicity, disability status, etc.

Step 1: Data and Output

The screenshot shows the 'ADePT Social Protection' software window. The title bar includes the application name and standard window controls. The main window has three tabs: '[1] Data and Output', 'Options', and 'About'. The 'Data and Output' tab is active and contains the following sections:

- Source data:** A section for configuring data sources. It includes a text field for 'Specify the location of data file(s):' with a 'Browse...' button. Below it is a 'Specify the label:' dropdown menu. A list box contains one entry: 'Individual-level data | L:\Ukraine\adept_sp.dta'. To the right of the list box are 'Add' and 'Remove' buttons.
- Output file:** A section for configuring the output file. It includes a text field for 'Name of the output file:' containing the path 'l:\sp_test.xml' and a 'Browse...' button. Below the text field are two checkboxes: 'replace' (checked) and 'append' (unchecked).
- Status:** A large empty text area at the bottom of the configuration section.

At the bottom of the window, there are five buttons: 'Help', 'Reset', 'Cancel', '<Back', and 'Next >'.

Step 2: Classification variables, sensitivity analysis

The screenshot shows the 'ADePT Social Protection' software window. The title bar includes the application name and standard window controls. Below the title bar are tabs for '[2] Variable definitions 1', 'Options', and 'About'. The main area is divided into two sections: 'Household-level variables' and 'Individual-level variables'. The 'Household-level variables' section includes dropdown menus for 'Household ID' (code_fam), 'Urban or rural' (tp_ns_pl=3), and 'Welfare aggregate' (pc_my_totalinc). It also features a checked checkbox for 'Use pre-transfer welfare aggregate', radio buttons for 'Number of quantiles' (5 (quintiles) selected, 10 (deciles)), a dropdown for 'Poverty line(s)' (pline2_inc pline1_inc), an empty dropdown for 'Regions', and a dropdown for 'Household weights' (w_q). A 'Survey Settings...' button is located to the right of the 'Household weights' dropdown. The 'Individual-level variables' section includes dropdown menus for 'Age', 'Ethnicity', and 'Special status'. At the bottom of the window is a 'Status' text box and a row of navigation buttons: 'Help', 'Reset', 'Cancel', '<Back', and 'Next >'.

ADePT Social Protection

[2] Variable definitions 1 | Options | About

Household-level variables:

Household ID: code_fam

Urban or rural: tp_ns_pl=3

Welfare aggregate: pc_my_totalinc

Use pre-transfer welfare aggregate

Number of quantiles: 5 (quintiles) 10 (deciles)

Poverty line(s): pline2_inc pline1_inc

Regions:

Household weights: w_q

Survey Settings...

Individual-level variables:

Age:

Ethnicity:

Special status:

Status:

Help | Reset | Cancel | <Back | Next >

Step 3: Participation in SP Programs

ADePT Social Protection

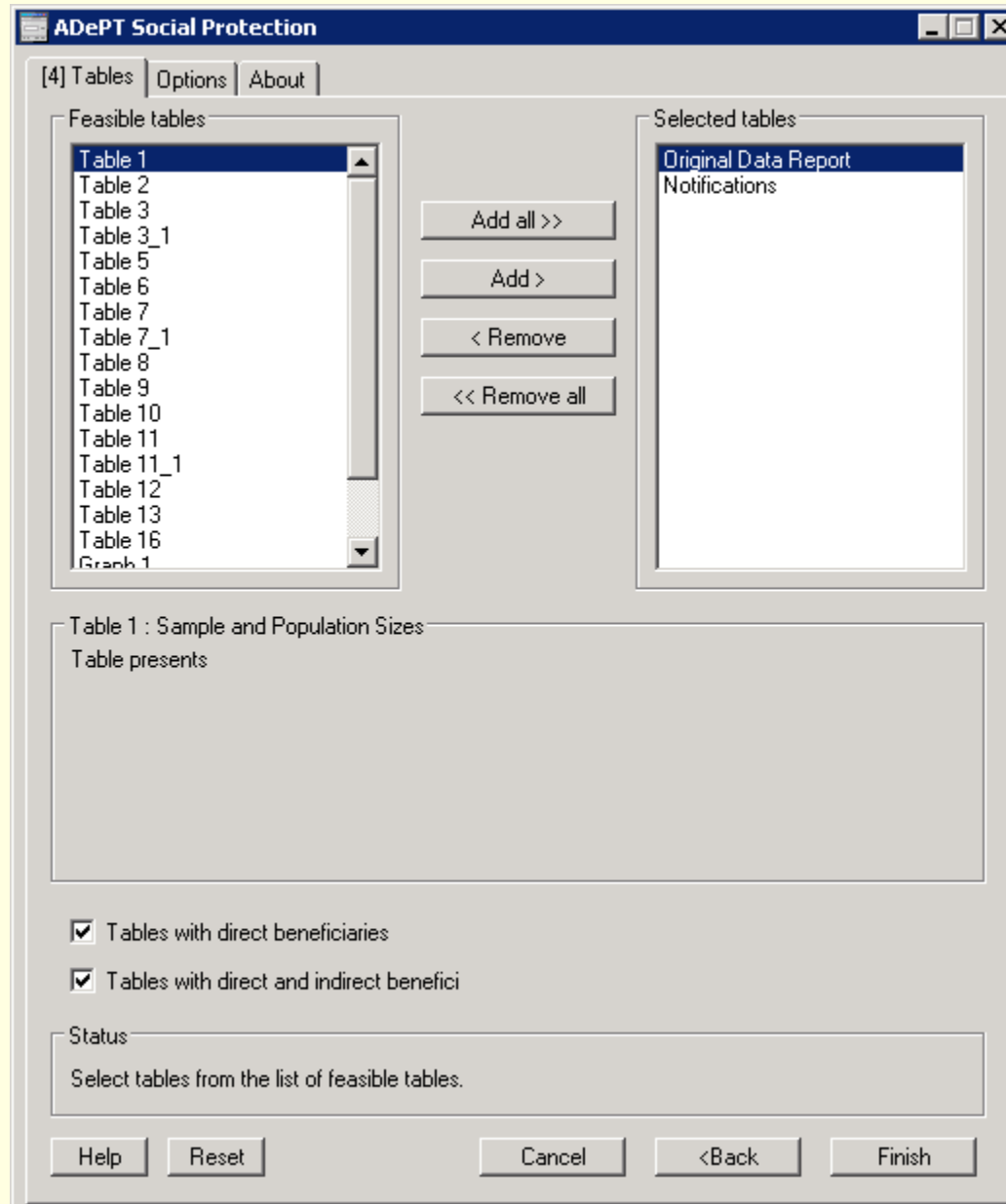
[3] Variable definitions 2 | Options | About

Number of programs: 18

	Program type	variable?	Label
Program 1	IND : Social insurance	ppinc8	pension
Program 2	IND : Labor market	ppinc10	unempl
Program 3	HHD : Social assistanc	pc_inc9	assist on children
Program 4	HHD : Social assistanc	pc_inc9_1	assist on children_1
Program 5	HHD : Social assistanc	pc_inc9_2	assist on children_2
Program 6	HHD : Social assistanc	pc_inc9_3	assist on children_3
Program 7	HHD : Social assistanc	pc_inc9_4	assist on children_4
Program 8	HHD : Social assistanc	pc_inc9_5	assist on children_5
Program 9	HHD : Social assistanc	pc_inc10	assist on needy
Program 10	HHD : Social assistanc	pc_ex1_1	ex1_1
Program 11	HHD : Social assistanc	pc_ex3_2	ex3_2
Program 12	HHD : Social assistanc	pc_lgoti	lgoti
Program 13	HHD : Social assistanc	pc_inc11	other assist
Program 14	HHD : Social assistanc	benef1	5% poorest HMT
Program 15	HHD : Social assistanc	benef2	10% poorest HMT
Program 16	HHD : Social assistanc	benef3	15% poorest HMT
Program 17	HHD : Social assistanc	benef4	20% poorest HMT
Program 18	HHD : Social assistanc	benef5	25% poorest HMT

Status

Step 4: Tables and Graphs



ADePT SP: Data and Variables

- Accepts individual-level and household data in STATA and **SPSS** format
- Up to 20 SP programs
- **Required variables:**
 - Household ID
 - Welfare aggregate
 - Poverty line: up to two lines, numbers or variables
 - Urban-rural indicator
- **Optional variables:**

■ Regions	Weights	Age
■ Ethnicity	Special status	Gender
■ Open ended fields		

ADePT SP:

Quick-but-not-dirty analysis

- Automated logical checks:
 - Correct type of variables
 - Correct values (e.g., gender has only 2 values).
- All the constructed variables are generated automatically: household size, shares of different age/gender groups, etc.
- The program produces a report with basic statistics on all variables and a list of errors, warnings and notes about the variables used in the analysis
- Control for influential outliers in terms of values or observations.

SP Assessment in a Can: Anybody can do it

- Produces basic (required) results fast
- Minimizes human errors
- Frees resources for more meaningful and interesting tasks
- Generate **standard, comparable** results across the countries/years → facilitate benchmarking.
- **Sensitivity analysis** with different consumption counterfactuals or assistance units
- Generates estimates with correct **standard errors**;
- Produces statistics that allows **comparisons between survey and administrative data**.
- Can be used to **simulate the distributional impact of new/restructured programs**.

ADePT: Website

econ.worldbank.org/programs/poverty/adept