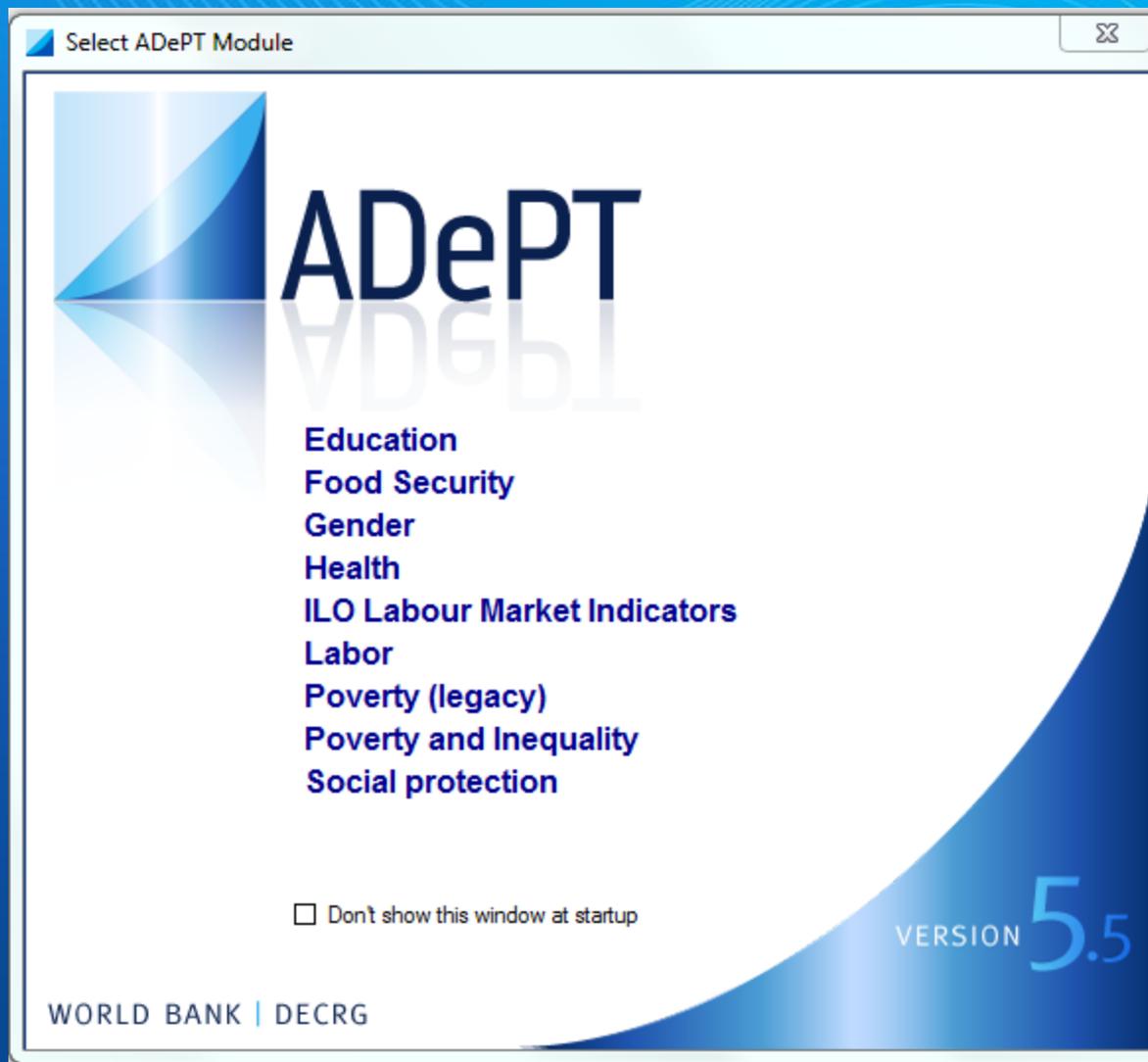


# How to use ADePT Social Protection

December 4th, 2013



# What is ADePT?

- ADePT is a software Platform for Automated Economic Analysis.
- ADePT uses micro-level data from various types of household surveys, such as Household Budget Surveys, Demographic and Health Surveys and Labor Force surveys
- **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** it is **easy** to learn and use. It minimizes human errors in programming!

Download from [www.worldbank.org/adept](http://www.worldbank.org/adept)

## INPUTS



## OUTPUTS

### Household Survey Data

Dataset prepared in STATA or SPSS

Variables needed (mandatory):

- Household ID
- Location (urban and rural)
- Household weights
- Welfare aggregate (total household consumption or income)
- Poverty line
- Social Protection programs
  - Social Insurance
  - Social Assistance
  - Labor Market Programs



### Excel Tables with indicators

- Average per capita transfer
  - Coverage
  - Distribution of beneficiaries
  - Distribution of benefits
  - Relative incidence
  - Generosity
  - Undercoverage and leakage
  - Impact of programs on poverty and inequality
  - Coady-Grosh-Hoddinott indicator
  - Program duplication and overlap
  - Cost-Benefit ratio
- Plus: statistics, profiles, demographics, charts

# ADePT-SP Interface

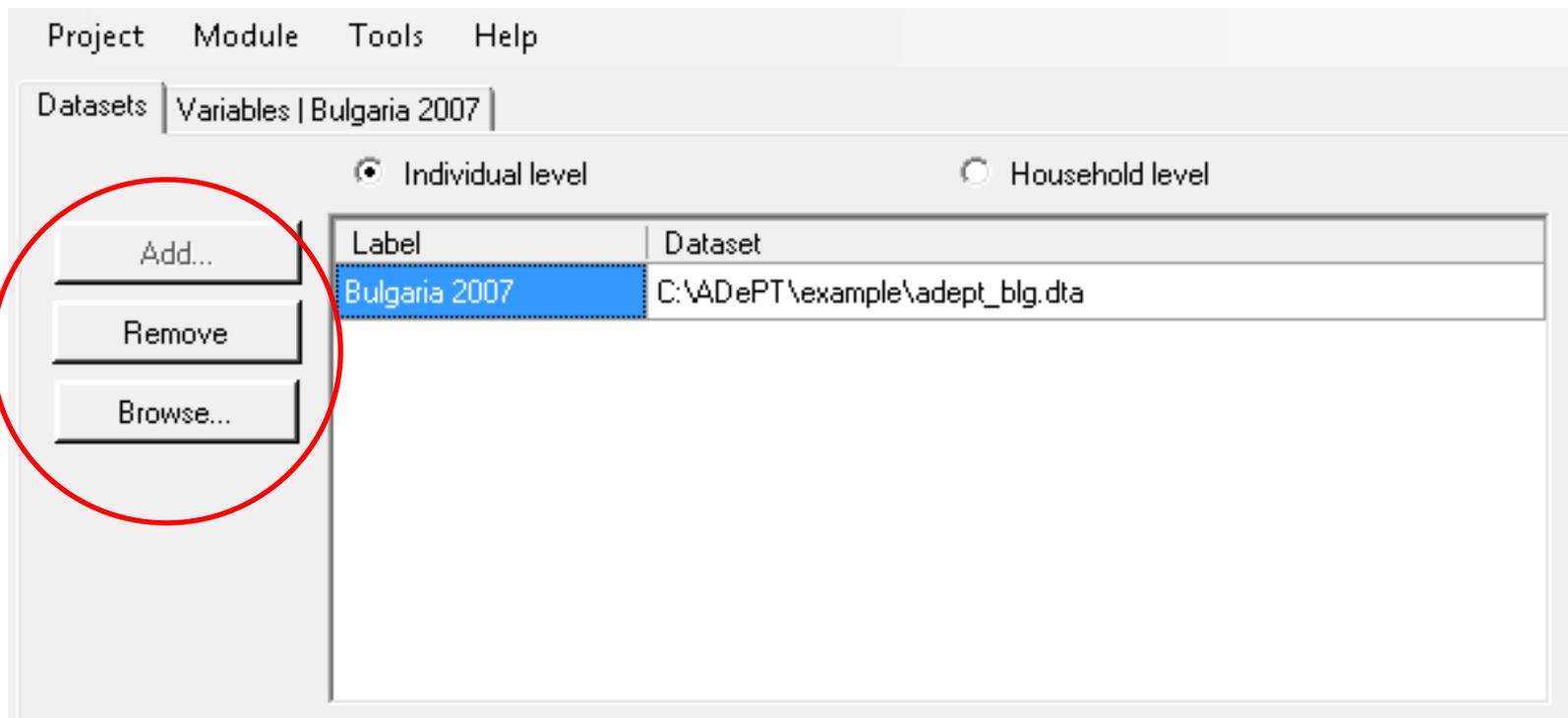
The screenshot displays the ADePT-SP software interface with four numbered callouts:

- (1) Load your dataset(s)**: A yellow box highlights the 'Datasets' tab and a table with 'Bulgaria' and the file path 'C:\ADePT\example\adept\_blg.dta'.
- (2) Tell ADePT what's what**: A yellow box highlights the configuration section for 'Household ID' (hhid), 'Urban' (location), 'Household size' (hsize), 'Household weights' (weight), 'Household head', 'Age' (age), and 'Gender' (gender).
- (3) Select tables and charts**: A yellow box highlights a tree view of data tables and charts, including 'Original Data Report', 'Direct and indirect beneficiaries (2/2/2)', 'Direct beneficiaries only (1/1/1)', and 'Profile (10/10/19)'. A 'Generate' button is visible below the list.
- (4) Choose options and hit "Generate"**: A yellow box highlights the 'Generate' button and the 'Table description and if-condition' section.

# ADePT-SP Steps

## 1. Upload your data

- Click on the Add button to open and upload the data you want to use
- Label the dataset. The label will be used in the tables and graphs to distinguish the statistics that comes from different datasets
- You can add or remove multiple datasets



# ADePT-SP Steps

## 1. Upload your data

- Specify if dataset is at the individual or household level
- Dataset can be opened by clicking on the browse button

The screenshot displays the ADePT-SP software interface. The main window has a menu bar with 'Project', 'Module', 'Tools', and 'Help'. Below the menu bar, there are tabs for 'Datasets', 'Variables', and 'Bulgaria 2007'. The 'Individual level' radio button is selected and circled in red. The 'Browse...' button is also circled in red. A table below shows the dataset details:

Label	Dataset
Bulgaria 2007	C:\ADePT\example\adept_blg.dta

A 'Data1 - ADePT Data Browser' window is open, showing a table of individual-level data. The table has columns: hhid, hhweight, location, region, ethnicity\_head, age, gender, relation, and literate. The first row is highlighted in blue.

hhid	hhweight	location	region	ethnicity_head	age	gender	relation	literate
1	627.2325	urban location	Sofia region	Turks	37	female	head	ye
2	627.2325	urban location	Sofia region	Turks	11	female	child	ye
3	627.2325	urban location	Sofia region	Turks	8	male	child	ye
4	627.2325	urban location	Haskovo	Bulgaria	73	male	head	ye
5	627.2325	urban location	Haskovo	Bulgaria	70	female	spouse/partner	ye
6	627.2325	rural location	Lovetch	Bulgaria	75	male	head	ye
7	627.2325	rural location	Lovetch	Bulgaria	79	male	head	ye
8	627.2325	rural location	Lovetch	Bulgaria	80	female	spouse/partner	ye
9	627.2325	urban location	Sofia region	Bulgaria	82	female	head	ye
10	627.2325	urban location	Sofia region	Bulgaria	83	female	head	ye
11	627.2325	urban location	Lovetch	Turks	58	male	head	ye
12	627.2325	urban location	Lovetch	Turks	57	female	spouse/partner	ye
13	627.2325	urban location	Bourgass	Bulgaria	63	male	head	ye
14	627.2325	urban location	Bourgass	Bulgaria	66	female	spouse/partner	ye
15	627.2325	urban location	Bourgass	Bulgaria	50	female	head	ye
16	627.2325	urban location	Bourgass	Bulgaria	71	female	parent, parent-in-law	ye
17	627.2325	urban location	Bourgass	Bulgaria	19	male	child	ye
18	627.2325	urban location	Sofia region	Bulgaria	42	male	head	ye

# ADePT-SP Steps

## 1. Individual level data

Household Identification	Individual Identification	STRATA	PSU	Urban location =1; Rural location=2	Household expansion factor	Household Size	Adult equivalent scale	Head of the household	Age of the household member	Total household income	Poverty line	Amount received from old age pensions	Participation in scholarship programs	Amount received by the household from Oportunidades	Amount received by the household from Pro-Campo
id_bh	id_ind	strata	pcu	urban	hhweight	hhsize	adul_eq	head	age	hh_income	pob_ing	apoc	becac_	toport	tprocam
20060150282	1	1	2	2	305	3	2	1	18	2459.34	938.61		0	180.49	
20060150282	2	1	2	2	305	3	2	0	18	2459.34	938.61		0	180.49	
20060150282	3	1	2	2	305	3	2	0	1	2459.34	938.61		0	180.49	
20060150280	1	1	2	2	305	7	6	1	56	9094.69	938.61		0		334.24
20060150280	2	1	2	2	305	7	6	0	53	9094.69	938.61		0		334.24
20060150280	3	1	2	2	305	7	6	0	29	9094.69	938.61		0		334.24
20060150280	4	1	2	2	305	7	6	0	26	9094.69	938.61		0		334.24
20060150280	5	1	2	2	305	7	6	0	15	9094.69	938.61		0		334.24
20060150280	6	1	2	2	305	7	6	0	13	9094.69	938.61		0		334.24
20060150280	7	1	2	2	305	7	6	0	7	9094.69	938.61		1		334.24
20060150030	1	1	1	1	777	4	3	1	77	18183.37	938.61	1403.81	0		
20060150030	2	1	1	1	777	4	3	0	51	18183.37	938.61		0		
20060150030	3	1	1	1	777	4	3	0	43	18183.37	938.61		0		
20060150030	4	1	1	1	777	4	3	0	9	18183.37	938.61		0		
20060150040	1	1	1	1	777	1	1	1	92	4458.78	938.61	1604.35	0		
20060150050	1	1	1	1	777	2	2	1	83	6397.05	938.61	1640.45	0		
20060150050	2	1	1	1	777	2	2	0	39	6397.05	938.61		0		
20060150060	1	1	1	1	859	5	2	1	41	12988.27	938.61		0		
20060150060	2	1	1	1	859	5	2	0	32	12988.27	938.61		0		
20060150060	3	1	1	1	859	5	2	0	11	12988.27	938.61		0		
20060140410	1	1	7	1	638	10	6	1	56	10730.62	938.61		0	514.18	
20060140410	2	1	7	1	638	10	6	0	58	10730.62	938.61		0	514.18	
20060140410	3	1	7	1	638	10	6	0	86	10730.62	938.61	1411.48	0	514.18	
20060140410	4	1	7	1	638	10	6	0	30	10730.62	938.61		0	514.18	
20060140410	5	1	7	1	638	10	6	0	29	10730.62	938.61		0	514.18	
20060140410	6	1	7	1	638	10	6	0	10	10730.62	938.61		0	514.18	
20060140410	7	1	7	1	638	10	6	0	9	10730.62	938.61		0	514.18	
20060140410	8	1	7	1	638	10	6	0	4	10730.62	938.61		0	514.18	

# ADePT-SP Steps

## 1. Household level data

Household Identification	Individual Identification	STRATA	PSU	Urban location =1; Rural location=2	Household expansion factor	Household Size	Adult equivalent scale	Head of the household	Age of the household member	Total household income	Poverty line	Amount received from old age pensions	Participation in scholarship programs	Amount received by the household from Oportunidades	Amount received by the household from Pro-Campo
id_hh	id_ind	strata	psu	urban	hhweight	hhsize	adul_eq	head	age	hh_income	poverty_line	apos	becas_	toport	tprocam
20060150282	1	1	2	2	305	3	2	1	18	2459.34	938.61		0	180.49	
20060150280	1	1	2	2	305	7	6	1	56	9094.69	938.61		1		334.24
20060150030	1	1	1	1	777	4	3	1	77	18183.37	938.61	1403.81	0		
20060150040	1	1	1	1	777	1	1	1	92	4458.78	938.61	1604.35	0		
20060150050	1	1	1	1	777	2	2	1	83	6397.05	938.61	1640.45	0		
20060150060	1	1	1	1	859	5	2	1	41	12988.27	938.61		0		
20060140410	1	1	7	1	638	10	6	1	56	10730.62	938.61	1411.48	0	514.18	

# ADePT-SP Steps

## 2. Specify variables

- Once data has been uploaded, the variables names and labels are shown in the second tab of the first window to the left.
- The bottom window to the left has three tabs to specify main, program and consumption variables

The screenshot displays the ADePT-SP software interface. The title bar reads 'NewProject\_sp\_0001\* - ADePT: Social protection'. The menu bar includes 'Project', 'Module', 'Tools', and 'Help'. The 'Variables | Bulgaria 2007' tab is active, showing a table of variables:

Variable name	Variable label
hhid	Household ID
hhweight	Household Expansion Factor
location	Urban/Rural
region	Region
ethnicity_head	Ethnicity
age	Age
gender	Gender
relation	Relation to household head

Below the table is a search field. At the bottom, three tabs are visible: 'Main', 'Programs', and 'Consumption'. The 'Main' tab is selected and circled in red. It contains several dropdown menus for variable selection:

- Household ID: *hhid*
- Urban: *location*
- Household size: (empty)
- Household weights: *weight*
- Regions: *region*
- Ethnicity: (empty)
- Special status: (empty)
- Custom variable: (empty)

A list of available variables is shown on the right, with 'region' highlighted in green. Other variables in the list include ethnicity\_head, age, gender, relation, literate, and income\_mnt.

# ADePT-SP Steps

## 2. Specify variables

### Tab 1. Main variables

- Some main variables such as Household ID, urban, household weights, and household size, are mandatory to generate ADePT tables
- If the dataset is at the individual level, variables of individual characteristics can be specified
- Variables can be selected by dragging them from the upper window or by using the dropdown menu in the variable field

The screenshot displays the 'Main' tab of the ADePT-SP software interface. The 'Main' tab is highlighted with a red circle. The interface is divided into two sections: 'Household level variables' and 'Individual level variables'. The 'Household level variables' section includes dropdown menus for 'Household ID' (set to 'hhid'), 'Urban' (set to 'location'), 'Household size', and 'Household weights' (set to 'weight'). The 'Individual level variables' section includes dropdown menus for 'Household head', 'Age', and 'Gender'. Both sections also have dropdown menus for 'Regions', 'Ethnicity', 'Special status', and 'Custom variable'. The 'Custom variable' dropdown is highlighted with a red box.

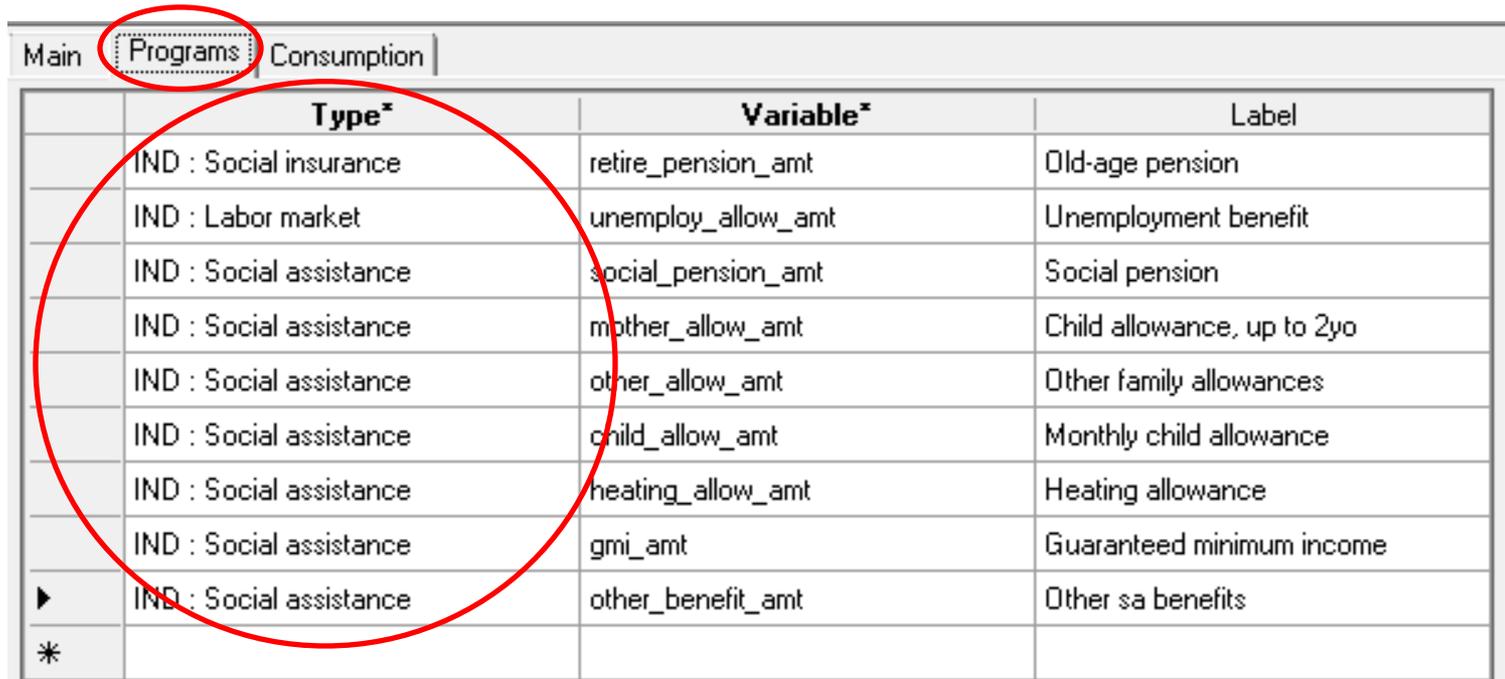
Level	Variable	Selected Value	Other Options
Household level variables	Household ID	hhid	Regions
	Urban	location	Ethnicity
	Household size		Special status
	Household weights	weight	Custom variable
Individual level variables	Household head		Education
	Age		Economic status
	Gender		Custom variable

# ADePT-SP Steps

## 2. Specify variables

### Tab 2. Program variables

- These are the programs which impact you are trying to measure
- Each program variable needs to be classified under a Social Protection Program Type: Social Insurance, Labor Market, Social Assistant or Remittances
- In addition the level of the variable (individual or household) needs to be specified



	Type*	Variable*	Label
	IND : Social insurance	retire_pension_amt	Old-age pension
	IND : Labor market	unemploy_allow_amt	Unemployment benefit
	IND : Social assistance	social_pension_amt	Social pension
	IND : Social assistance	mother_allow_amt	Child allowance, up to 2yo
	IND : Social assistance	other_allow_amt	Other family allowances
	IND : Social assistance	child_allow_amt	Monthly child allowance
	IND : Social assistance	heating_allow_amt	Heating allowance
	IND : Social assistance	gmi_amt	Guaranteed minimum income
▶	IND : Social assistance	other_benefit_amt	Other sa benefits
*			

# ADePT-SP Steps

## Types of Social Protection Programs

Category I	Category II	Type of program	
Pensions and other social insurance	Old age	Old age pension	
		Old age civil servant pension	
		Veteran's old age pension	
		Early retirement pension	
	Survivors	Survivors pension	
		Survivors civil servant pension	
	Occupational injury/sickness benefits	Occupational injury benefits/ pension	
		Paid sick leave	
Disability	Disability pension		
Labor market programs	Unemployment	Unemployment compensation	
		Severance pay	
		Early retirement for labor market reasons	
	Active labor market programs	Labor market training	
		Youth measures	
		Subsidized employment	
		Employment measures for disabled	
		Employment service and administration	
	Social safety net programs	Cash or near-cash transfers	Low income/ Last-resort program
			Non-contributory/ Social pension
Family allowances*			
Disability benefits			
Housing allowances			
Food stamps/ Vouchers			
Conditional cash transfers		Conditional cash transfers	
In-kind food transfers		Food rations	
		Supplementary feeding	
		School feeding	
		Emergency food distribution	
Fee waivers and scholarships		Fee waivers, education	
		Scholarships	
		Fee waivers, health	
General subsidies		Food price subsidies	
		Public distribution systems	
		Energy and utility subsidies	
Public works		Public works	

# ADePT-SP Steps

## 2. Specify variables

### Tab 3. Consumption variables

- In this tab you can rank into poor or non-poor, quintiles or decile groups by using either a monetary or non-monetary welfare aggregate.
- If monetary value is chosen, in the “total consumption” field a variable containing total consumption, total expenditures or total income can be selected

The screenshot shows the 'Consumption' tab in the ADePT-SP software. The 'Welfare aggregate' section has 'Monetary value' selected. The 'Total consumption' field is highlighted with a red circle and contains the text 'aggregate'. The 'Pre-transfer adjustment of welfare' section has 'No adjustments (V0)' selected. The 'Number of quantiles' section has '5 (quintiles)' selected. The 'Poverty line(s)' section has 'Absolute' selected and 'ae\_povertyline' entered in the field.

# ADePT-SP Steps

## 2. Specify variables

### Tab 3. Consumption variables

- The type of adjustment to the welfare aggregate or counterfactual welfare indicator should be selected in this tab. ADePT SP can rank the households using three simplified counterfactuals 4:
  - No adjustments (post transfer or observed income or consumption) (V0)
  - Net of all Social Protection Transfers (V1)
  - Net of each Social Protection Transfers (V2)
  - Net of all Social Assistance Transfers (V3)

The screenshot displays the 'Consumption' tab in the ADePT-SP software. The 'Welfare aggregate' section includes options for 'Monetary value' (selected) and 'Non-monetary value'. The 'Pre-transfer adjustment of welfare' section is circled in red, showing 'No adjustments (V0)' selected, with other options being 'Net of all SP transfers (V1)', 'Net of each SP transfer (V2)', and 'Net of all SA transfers (V3)'. The 'Number of quantiles' section has '5 (quintiles)' selected. The 'Poverty line(s)' section has 'Absolute' selected, with a reference of 'ae\_povertyline' and a percentile of '10 20'.

# ADePT-SP Steps

## 3. Select tables and charts

- A total of 51 tables can be generated by ADePT, depending on the level of the dataset. You can select the tables and charts relevant to your analysis.

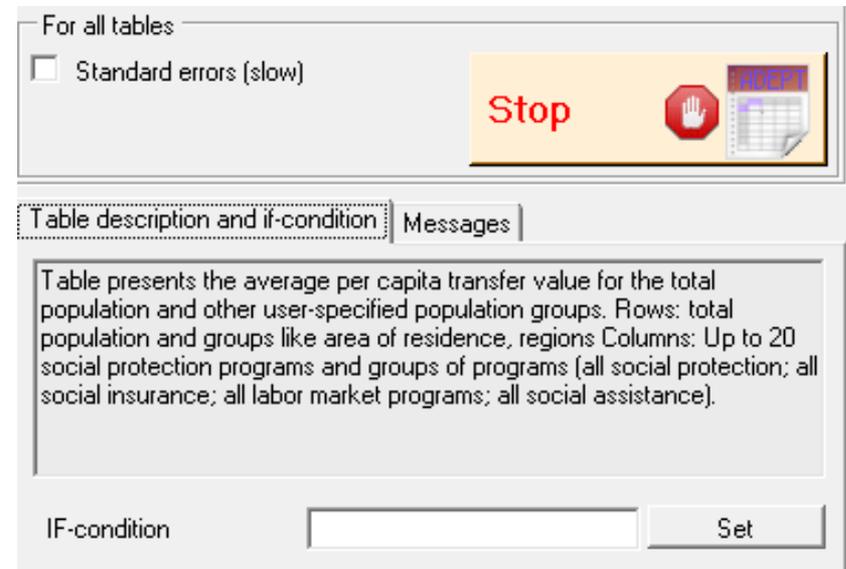
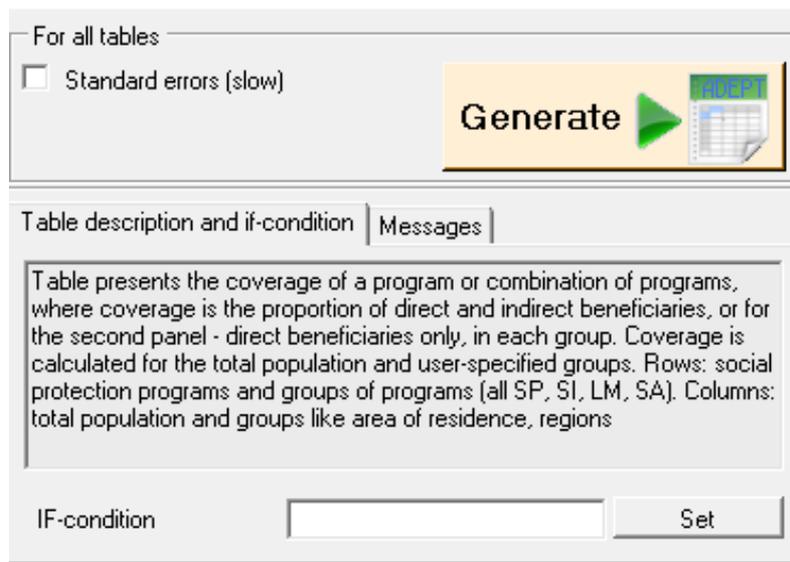
Social protection tables selected:41 | feasible:41 | total:51

- Original Data Report
- Direct and indirect beneficiaries (2/2/2)**
  - T12: Coady-Grosh-Hoddinott indicator
  - T13: Coady-Grosh-Hoddinott indicator, benefits' incidence
- Direct beneficiaries only (1/1/1)**
  - T12.1: Coady-Grosh-Hoddinott indicator
- Profile (10/10/19)**
  - TP1 : Profile by age and gender
  - TP2 : Profile by household head's age and gender
  - TP3 : Profile by education
  - TP4 : Profile by household head's education
  - TP5 : Profile by economic status
  - TP6 : Profile by household head's economic status
  - TP7 : Profile by custom individual characteristic
  - TP8 : Profile by custom individual characteristic of household head
  - TP9 : Profile by custom household characteristic
  - T1: Sample and Population Sizes
  - T2a: Population Demographics
  - T2b: Population Demographics, V2
  - T3\_1 : Average Transfer Value, Per Capita
  - T4\_1 : Average Transfer Value, Per Capita, Beneficiary Households Of Indicated Transfer Only
  - T5\_1 : Coverage
  - T6\_1 : Distribution of Beneficiaries
  - T7\_1 : Distribution of Benefits (Targeting Accuracy)
  - T8\_1 : Relative Incidence
  - T9\_1 : Generosity
- Poverty (12/12/12)**
  - T19: Cost-Benefit Ratios
  - G3: Cost-Benefit Ratios
  - T3\_2 : Average Transfer Value, Per Capita
  - T4\_2 : Average Transfer Value, Per Capita, Beneficiary Households Of Indicated Transfer Only

# ADePT-SP Steps

## 4. Generate Excel output tables

- The lower window to the right displays the “Generate” button, which activates once the tables have been selected
- Conditions can be specified to generate the tables (eg. If gender ==1, etc)
- The table description window displays the definition of the tables being generated
- Errors or other messages are displayed in the second tab



# ADePT-SP Tables

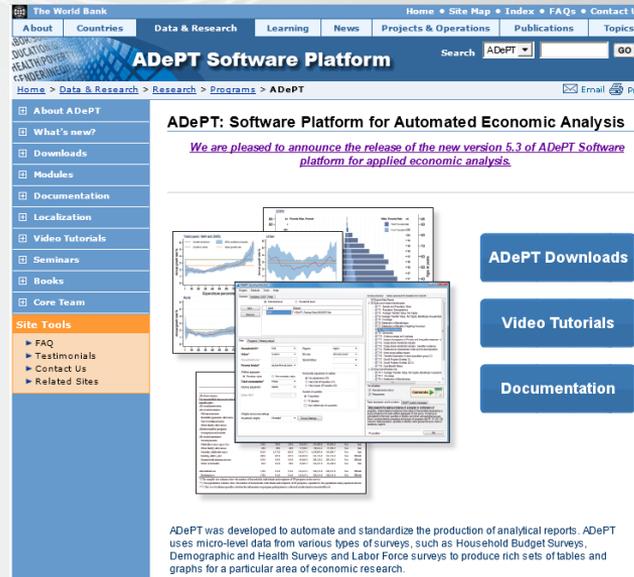
ADePT generates an Excel file with the tables and charts displayed in individual tabs.

 Copy of sp\_out.xls [Compatibility Mode]

	A	B	C	D	E	F	G
1	<b>Table 3_3 : Average Transfer Value, Per Capita</b>						
2	<i>All households</i>						
3		<b>Total</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>
4	All social protection	48.3	67.7	61.9	50.3	37.4	24.1
5	All social insurance	43.4	59.7	56.6	46.8	33.1	20.8
6	Old age pension	37.4	52.0	49.1	40.2	28.6	17.2
7	Disability pension/allowance	4.7	6.0	5.9	5.3	3.6	2.7
8	Survivorship pension	1.3	1.7	1.6	1.3	0.8	0.8
9	All labor market programs	0.4	0.5	0.6	0.4	0.4	0.3
10	Unemployment benefit	0.4	0.5	0.6	0.4	0.4	0.3
11	All social assistance	4.5	7.6	4.7	3.2	3.9	3.0
12	Social assistance	0.2	0.5	0.1	0.0	0.1	0.1
13	Child allowance, up to 2 yo	1.6	1.9	1.7	1.2	1.9	1.4
14	Other family allowances	0.2	0.2	0.2	0.3	0.2	0.2
15	Monthly child allowance	1.3	1.6	1.2	1.2	1.4	1.1
16	Heating allowance	0.3	1.1	0.2	0.1	0.0	0.0
17	Guaranteed minimum income	0.7	2.1	0.7	0.3	0.0	0.2
18	Other sa benefits	0.3	0.3	0.6	0.2	0.2	0.0
19	All remittances	6.1	2.2	4.8	3.8	4.0	15.8
20	Remittances	6.1	2.2	4.8	3.8	4.0	15.8
22	Notes:						
23	Table entries are the average per capita transfer received by all households in a group. It does include households that did not receive the transfer.						
24	Averages are calculated setting as expansion factor the household expansion factor multiplied by the household size.						
25	Averages in LCU.						

# Download ADePT for free

## [www.worldbank.org/adept](http://www.worldbank.org/adept)



For more information about how to use the program please contact:

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