The EUROMOD platform III

Sanja Vujackov

UNU-WIDER Training course

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Outline

1. Running EUROMOD

The aim of this part is to help you to learn how to Run EUROMOD with one, more, or all existing countries depending on the data that you have/want to use;

2. Summary statistics tool

This part will help you to learn how to produce basic statistics with EUROMOD depending on the system year(s) that you are interested in;

3. Error handlings & documentation

The aim of this part is to help you handling with different errors and to show you what kind of documentation comes with this model;









1. Running EUROMOD









1. Running EUROMOD (1/15)

What does the process "Running" mean?

Input data

Input data





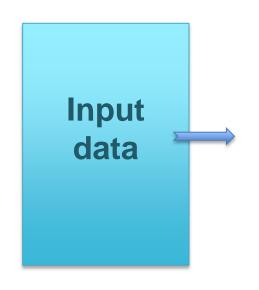




	idhh	idperson	idpartner	idmother	idfather	det	dwt	dag	dec	les	yem	dgn
1	1	101	102	0	0	0	10	65	0	4	0	1
2	1	102	101	0	0	0	10	60	0	7	0	0
3	1	103	0	102	101	0	10	30	0	5	0	1
4	1	104	0	102	101	0	10	28	0	6	157.4188	1
5	2	201	202	0	0	0	10	29	0	3	1075.353	1
6	2	202	201	0	0	0	10	25	0	3	951.3614	0
7	2	203	0	202	201	0	10	3	0	0	0	0
8	2	204	0	202	201	0	10	2	0	0	0	1
9	3	301	302	0	0	0	10	72	0	2	0	1
10	3	302	301	0	0	0	10	59	0	7	0	0
11	4	401	402	0	0	0	10	50	0	3	3614.218	1
12	4	402	401	0	0	0	10	42	0	7	0	0
13	4	403	0	402	401	0	10	14	3	6	0	0
14	4	404	0	402	401	0	10	10	2	6	0	1
15	5	501	0	0	0	0	10	86	0	4	0	1
16	6	601	0	0	0	0	10	36	0	3	2495.051	1
17	7	701	702	0	0	0	10	64	0	4	0	1
18	7	702	701	0	0	0	10	51	0	7	0	0
19	7	703	0	702	701	0	10	26	0	5	937.9483	1
20	8	801	0	0	0	0	10	25	6	5	0	0
21	9	901	902	0	0	0	10	52	0	3	2928.078	1
22	9	902	901	0	0	0	10	48	0	7	0	0
23	10	1001	1002	0	0	0	10	48	0	3	2733.85	1
24	10	1002	1001	0	0	0	10	42	0	3	2711.126	0
25	11	1101	0	0	0	0	10	24	6	3	994.6108	0
26	12	1201	0	0	0	0	10	24	6	6	0	0
27	13	1301	1302	0	0	0	10	40	0	3	8108.625	1
28	13	1302	1301	0	0	0	10	37	0	7	0	0
29	13	1303	0	1302	1301	0	10	13	3	6	0	0
30	13	1304	0	1302	1301	0	10	8	2	6	0	1

1. Running EUROMOD (1/15)

What does the process "Running" mean?



Policy parameters (XML files)

	Po	licy				SL_demo
	v	0	Upr	ate_sl		on
1.1		Ŧ		Uprate		on
1.1.1				dataset		sl_demo_v4
1.1.2				def_factor		1
1.1.3				poa		1
1.1.4				yem		1
1.1.5				yiy		1
1.1.6				yse		1
2	v	_		ef_sl		on
2.1		Ŧ	fx	DefIl		on
2.1.1				name		ils_earns
2.1.2				yem	yem +	
2.1.3				yse		+
2.2		¥	fx	DefIl		on
2.2.1				name		ils_origy
2.2.2				yem		+
2.2.3				yse		+
2.2.4				yiy		+
2.3		Ŧ	fx	DefIl		on
2.3.1				name		ils_bensim

Output data

Back







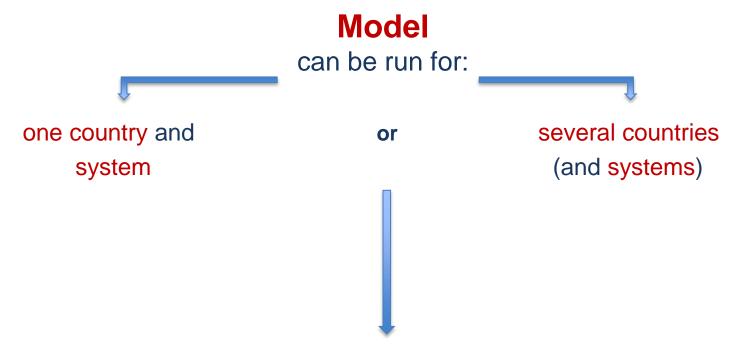


1. Running EUROMOD (2/15)





1. Running EUROMOD (3/15)



all existing countries and systems and for all existing data









1. Running EUROMOD (3/15)

When we open EUROMOD, the tab in the ribbon bar – *Countries* will be automatically shown



Two ways of Running EUROMOD:

- 1. By clicking on one country
- 2. By clicking on button Run EUROMOD





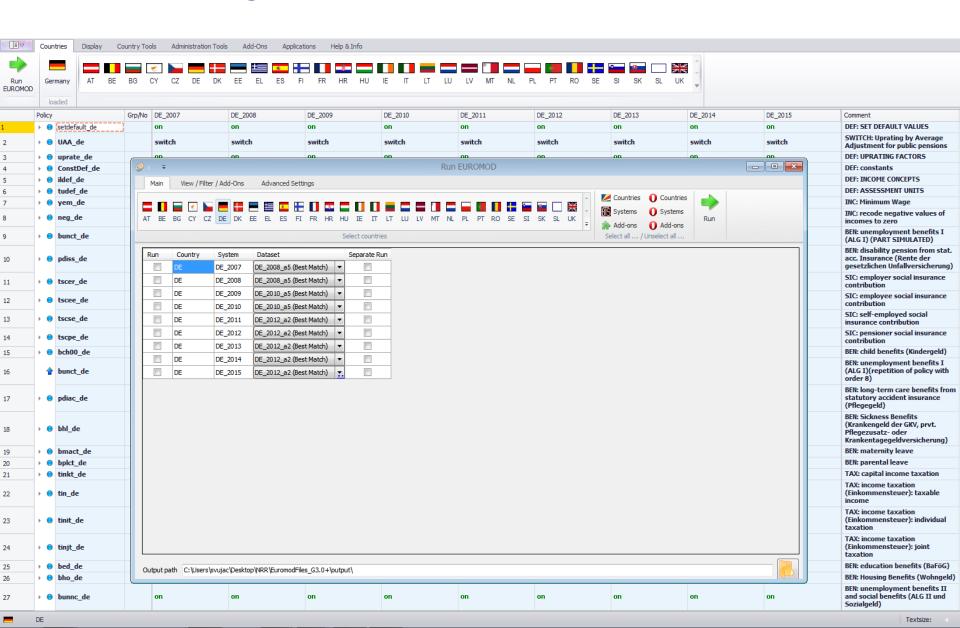




1. Running EUROMOD (4/15)



1. Running EUROMOD (4/15)



and social benefits (ALG II und

Textsize:

Sozialgeld)

1. Running EUROMOD (4/15)

on

10

13

15

17

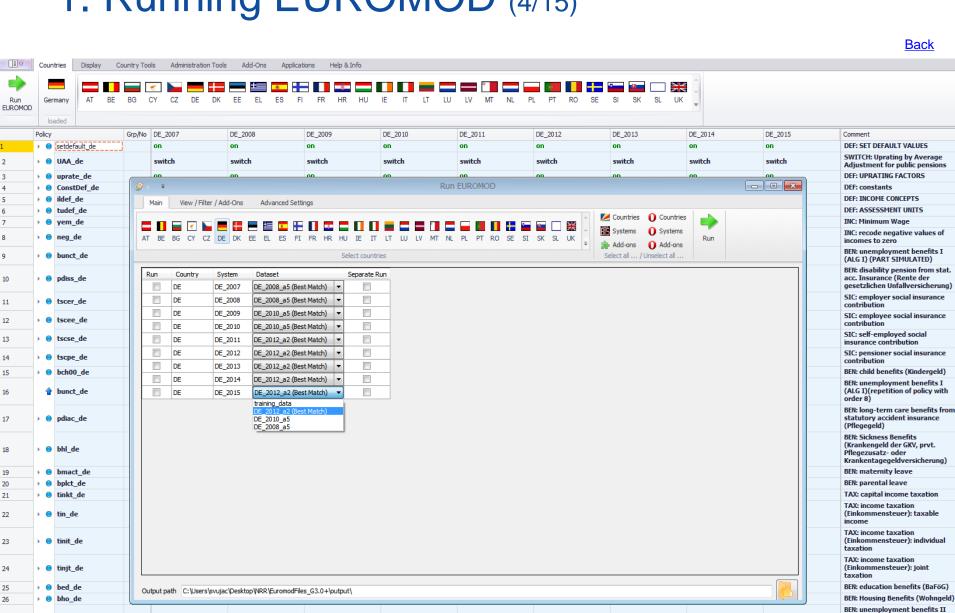
21

22

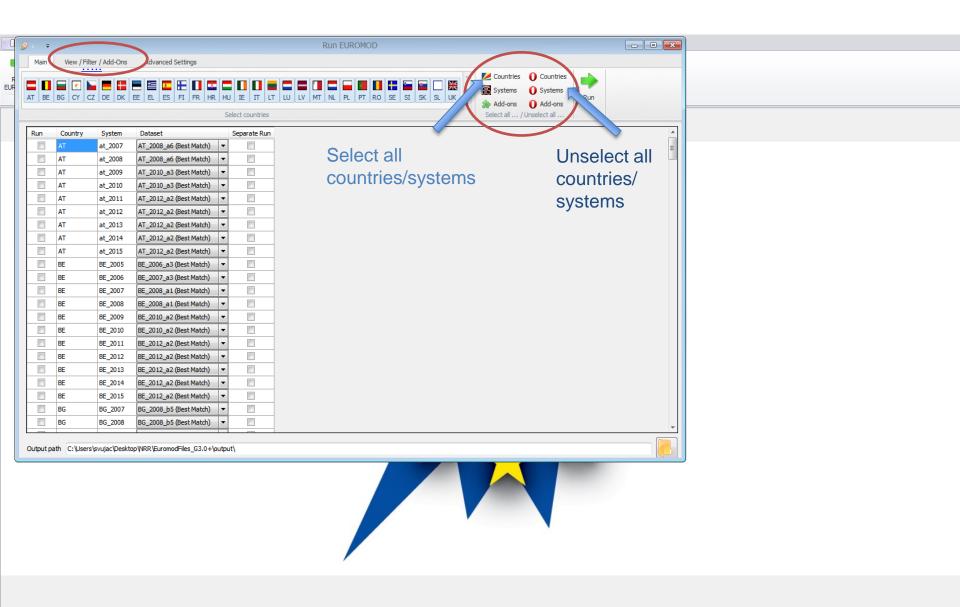
23

bunnc de

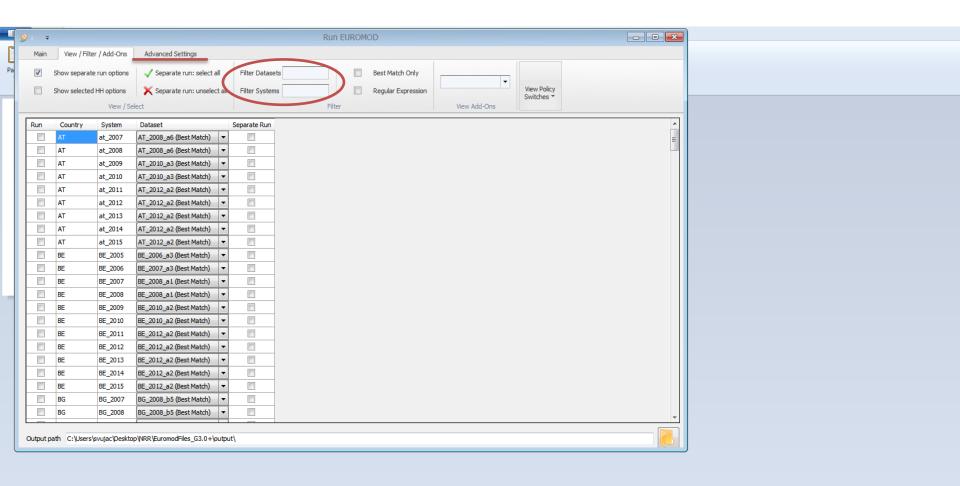
DE



1. Running EUROMOD (5/15)



1. Running EUROMOD (5/15)



1. Running EUROMOD (6/15)

Examples – using *training data*

- 1. Running one country and one system Austria 2014
- 2. Running one country and all systems Greece
- 3. Running two countries and one system Bulgaria and Sweden (2015)
- 4. Running all countries and all systems

*** How to use filters to make the process easier

See/show simple exercise in EUROMOD



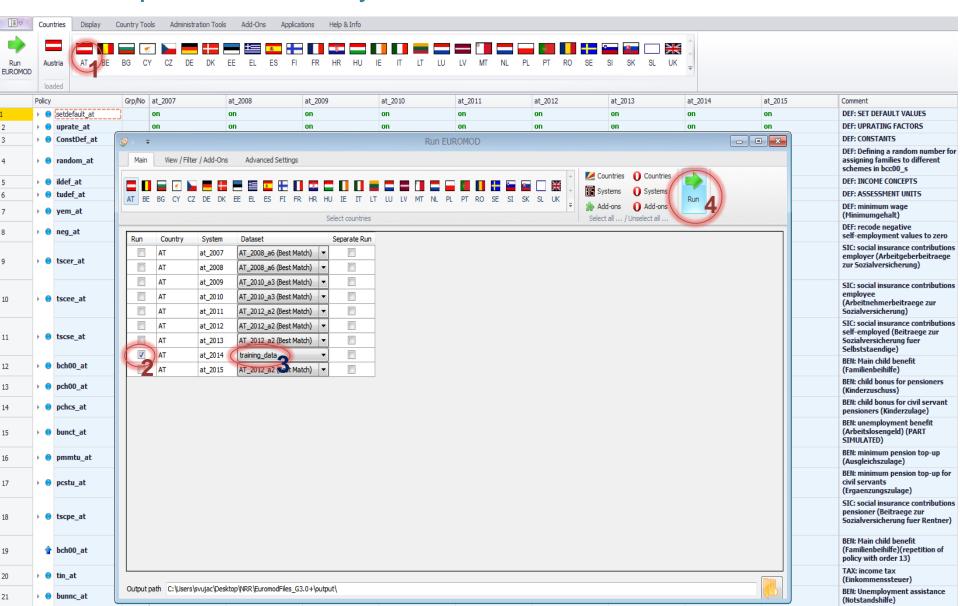






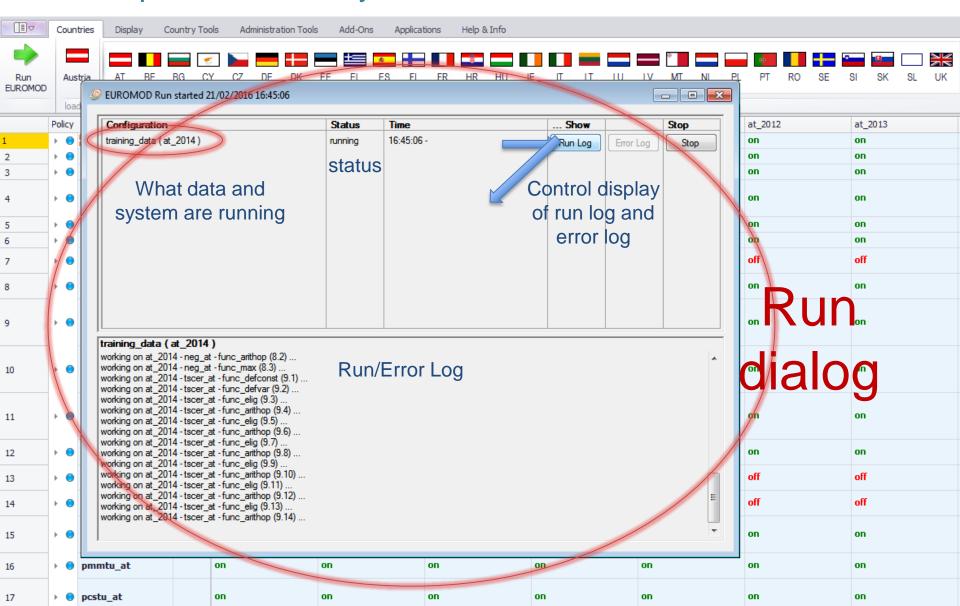
1. Running EUROMOD (7/15)

Example 1: Austria, system = 2014



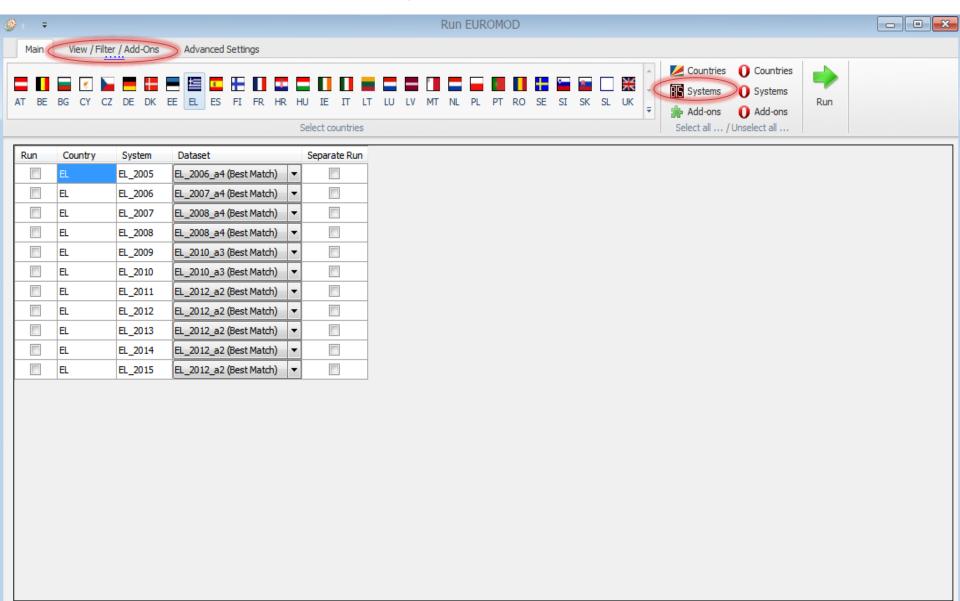
1. Running EUROMOD (7/15)

Example 1: Austria, system = 2014



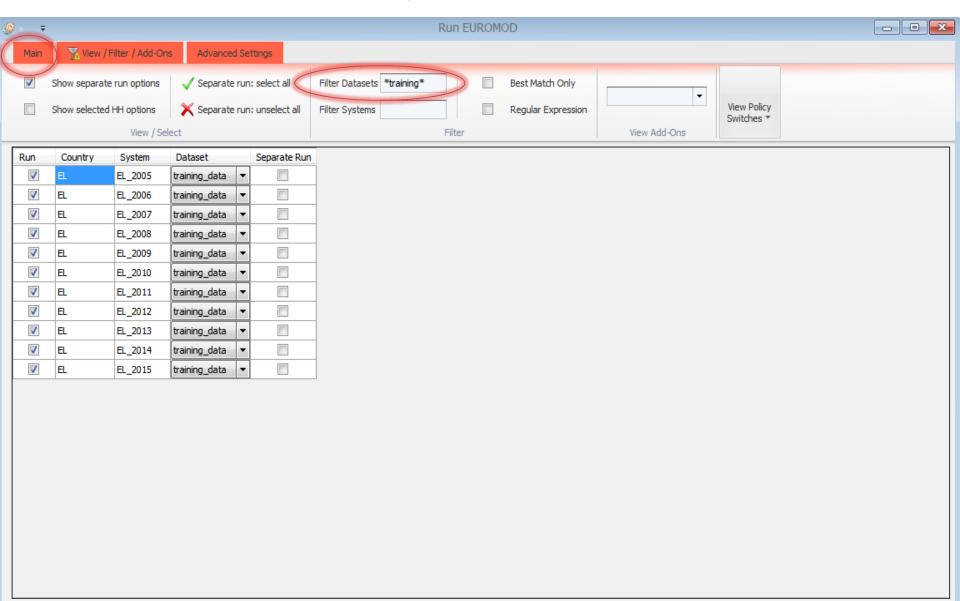
1. Running EUROMOD (8/15)

Example 2: Greece, all systems



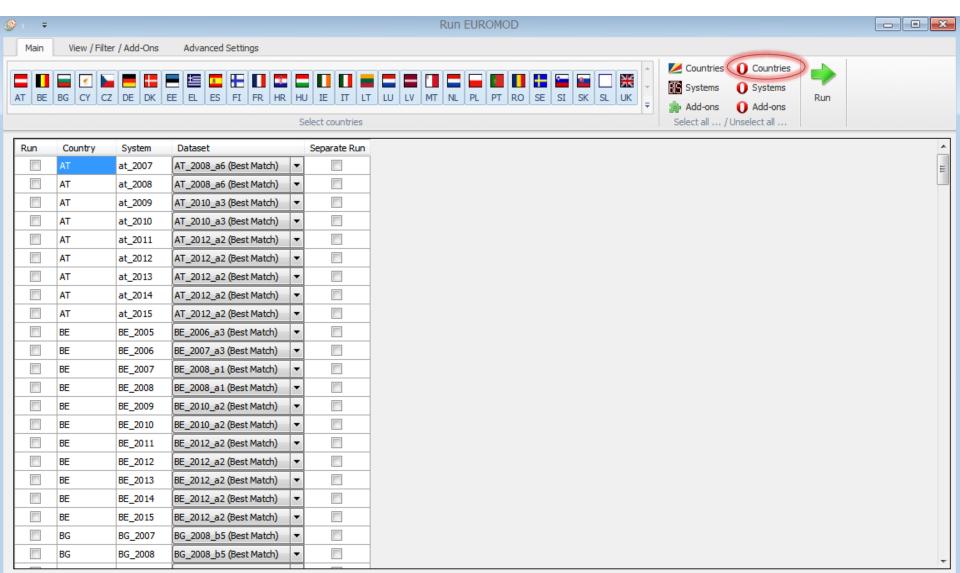
1. Running EUROMOD (8/15)

Example 2: Greece, all systems



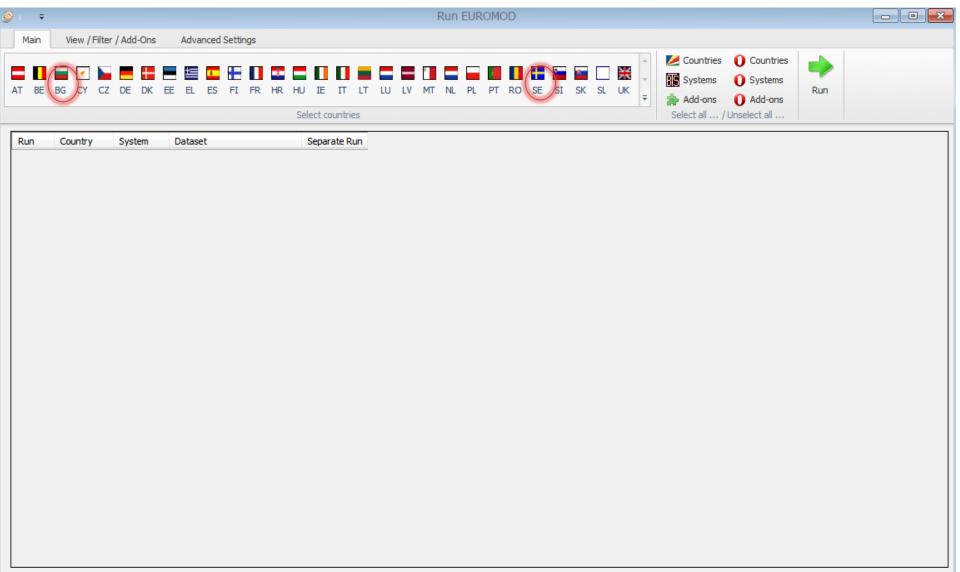
1. Running EUROMOD (9/15)

Example 3: Two countries (Bulgaria and Sweden), one system (2015)



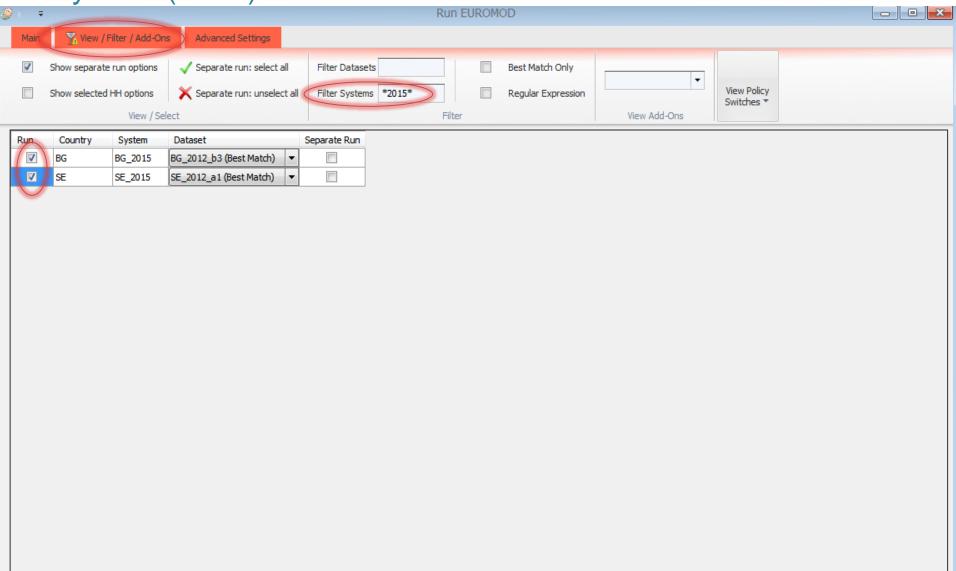
1. Running EUROMOD (9/15)

Example 3: Two countries (Bulgaria and Sweden), one system (2015)



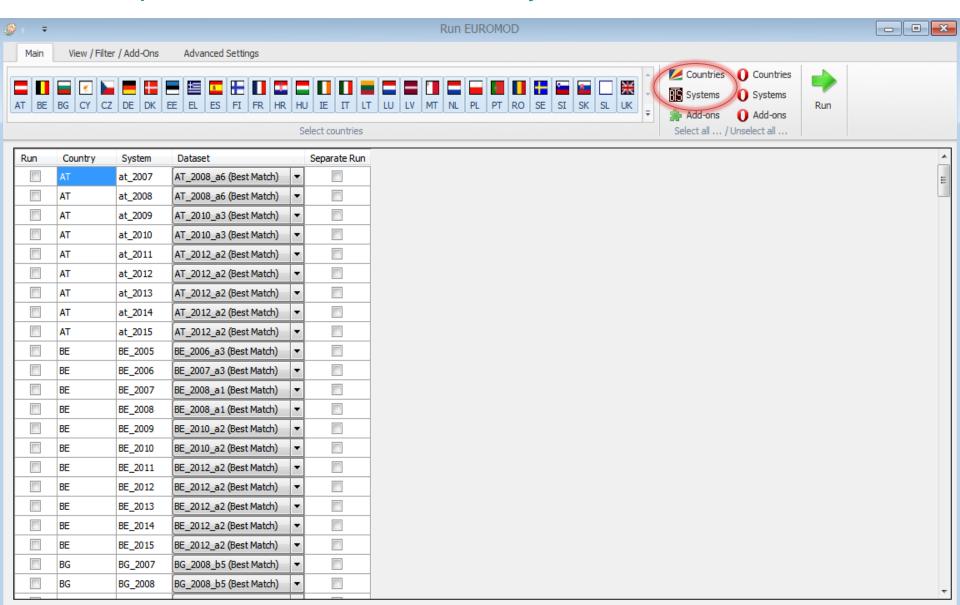
1. Running EUROMOD (9/15)

Example 3: Two countries (Bulgaria and Sweden), one system (2015)



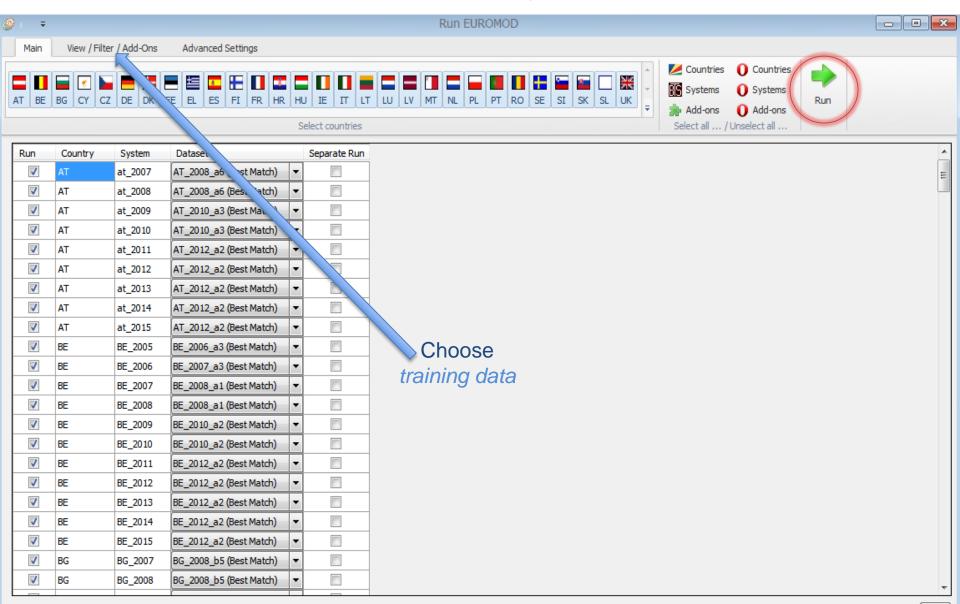
1. Running EUROMOD (10/15)

Example 4: All countries and all systems



1. Running EUROMOD (10/15)

Example 4: All countries and all systems



1. Running EUROMOD (11/15)

What is exactly Output file?

Policy parameters (XML files)

	Policy	Grp/No SL_demo	Cammant
1	→ O Uprate sl	on	
1.1	√ ∫k Uprate	on	
1.1.1	dataset	sl_demo_v4	
1.1.2	def_factor	1	
1.1.3	poa	1	
1.1.4	yem	1	
1.1.5	yiy	1	
1.1.6	yse	1	
2	→ O ILDef_sl	on	DEF: INCOME CONCEPTS
2.1	√ f x Defil	on	
2.1.1	name	ils_earns	
2.1.2	yem	+	Employment Income
2.1.3	yse	+	Self-employment income
2.2	√ f x Defil	on	original income
2.2.1	name	ils_origy	
2.2.2	yem	+	Employment Income
2.2.3	yse	+	Self-employment income
2.2.4	yiy	+	income : investment
2.3	√ f x Defil	on	simulated benefits
2.3.1	name	ils_bensim	



text format









1. Running EUROMOD (12/15)

How and where we define Output file?

- Content manipulated in policy output_std_cc
- Control level at which info is outputted (ex: individual, household etc.)

	C	ount	tries	Display	C	ountry T	ools	Admini	stration	Tools	Add	d-Ons	App	lications	Н	elp & In	fo							
		Г										+=	*			8							0	
Run EUROMOD		Simp	oleland	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	ΙE	IT	LT	LU	LV	MT	NL
		lo	aded																					
	Pol	icy				Grp/No	SL_de	mo					Commen	t										
1	F	0	Uprate_	sl			on						DEF: UP	RATIN	G FAC	OR5								
2	١		ILDef_				on						DEF: IN	COME C	ONCE	TS								
3	١	0	TUDef	_sl			on						DEF: AS	SESSM	ENT U	VITS								
4	١	0	yem_s	ı			on						DEF: Mi	nimum	Wage	:								
5	١	0	neg_sl				on						DEF: re	code ne	egativ	e self-	employ	yment	incom	e to zei	ю			
6	۰	0	sic_sl				on						SIC: So	cial Ins	uranc	e Cont	ributio	ns						
7	١	0	bch_sl				on						BEN: Ch	ild Ben	efit									
8	۰	0	tin_sl				on						TAX: In	come 1	ax									
9	٢	0	bsa_sl				on						BEN: So	cial As	sistan	ce								
10	1	0	output	_std_sl			on						DEF: ST	ANDAR	D OUT	PUT II	IDIVID	UAL LE	VEL					
11	1	0	output	_std_hl	h_sl		off						DEF: ST	ANDAR	D OUT	PUT H	OUSEH	OLD LE	VEL					









1. Running EUROMOD (13/15)

How Output file looks like? Example: Stata

Ⅲ Da	ata Ed	ditor (Brows	e) - [Untitled]										
File	Edit	t View [Data Tools										
<u> </u>			1 • • • • • • • • • • • • • • • • • • •										
		idhl	n[1]	1									
		idhh	idperson	idpartner	idmother	idfather	det	dwt	dag	dec	les	yem	dgn
	1	1	101	102	0	0	0	10	65	0	4	0	1
	2	1	102	101	0	0	0	10	60	0	7	0	0
	3	1	103	0	102	101	0	10	30	0	5	0	1
	4	1	104	0	102	101	0	10	28	0	6	157.42	1
	5	2	201	202	0	0	0	10	29	0	3	1075.35	1
	6	2	202	201	0	0	0	10	25	0	3	951.36	0
	7	2	203	0	202	201	0	10	3	0	0	0	0
	8	2	204	0	202	201	0	10	2	0	0	0	1
	9	3	301	302	0	0	0	10	72	0	2	0	1
1	0	3	302	301	0	0	0	10	59	0	7	0	0
1	1	4	401	402	0	0	0	10	50	0	3	3614.22	1
1	2	4	402	401	0	0	0	10	42	0	7	0	0
1	.3	4	403	0	402	401	0	10	14	3	6	0	0
1	4	4	404	0	402	401	0	10	10	2	6	0	1









1. Running EUROMOD (14/15)

What Output file usually includes?

- All variables present in the input microdata file
- Simulated variables (i.e. simulated taxes and benefits)
- Standardized income lists
- (optional) non-standard income lists
- (optional) temporary variables
- (optional) Tax unit identification info



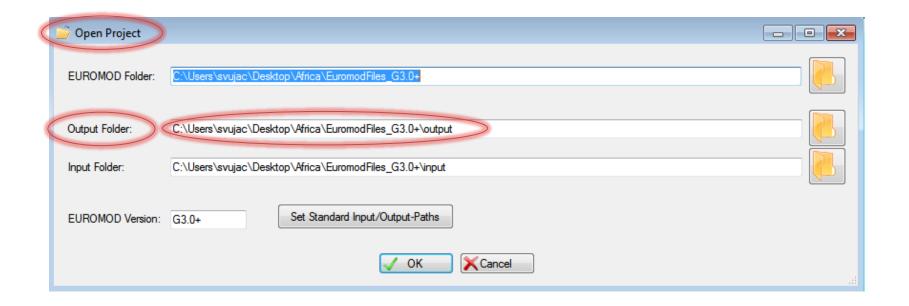






1. Running EUROMOD (15/15)

Where we can find Output file?



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2. Summary Statistics tool









2. Summary statistics tool (1/8)

What it actually does?

Computes a range of commonly used indicators and statistics:

- poverty rates for the overall population and for selected groups and the Gini coefficient
- distribution of household income, taxes and benefits by income group
- demographic information on households by income group

Computed indicators are fixed and cannot be changed

However, we would like to hear your opinion regarding this – do you think that it gives enough information; would you like to remove/add some new indicators or equivalence scale and similar?









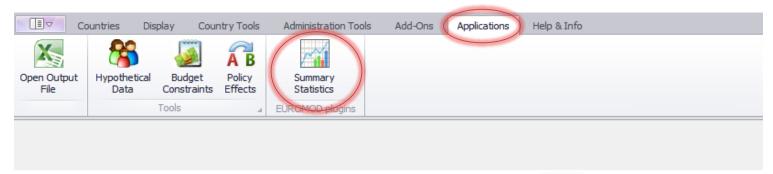
2. Summary statistics tool (2/8)

How we use it?

Output of EUROMOD => micro-data

Where is stored?

What we need to do?







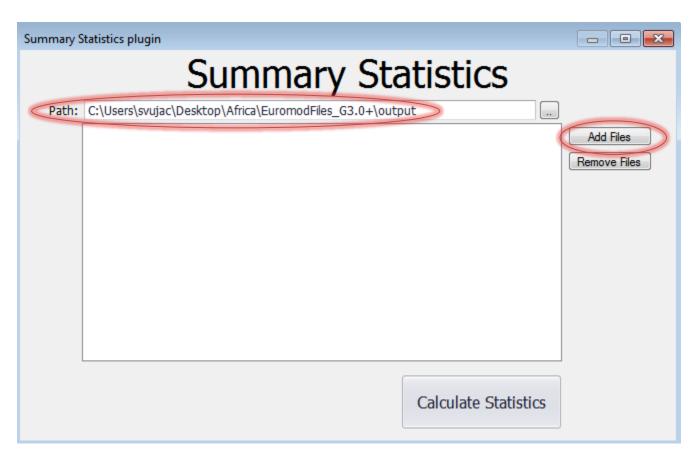






2. Summary statistics tool (3/8)

How we use it?





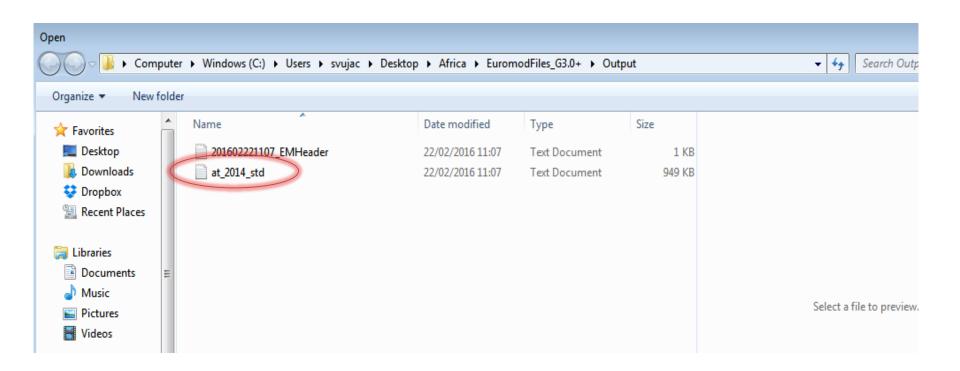






2. Summary statistics tool (4/8)

How we use it?





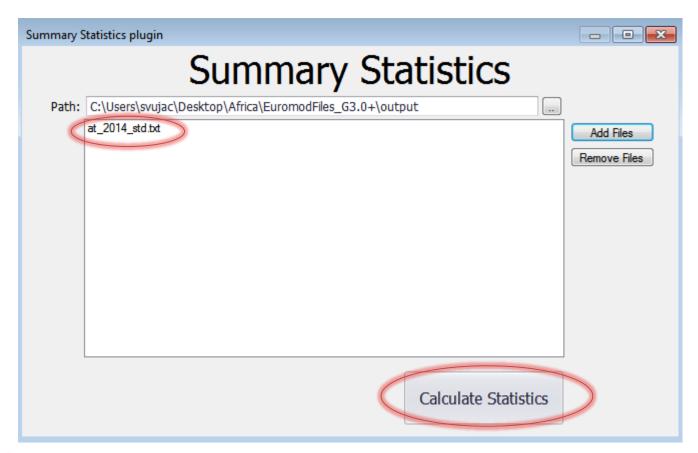






2. Summary statistics tool (5/8)

How we use it?











2. Summary statistics tool (6/8)

What we get? What are the indicators?

Summary Statistics p	lugin - Results									
	Results for Austria 2014 (at_2014_std.txt)									
	Table 1 Table 2 Table 3 Table 4 Table 5 Table 6									
Basic poverty and	inequality indices									
Poverty	Headcount									
Population	18.33 %									
Children	10.14 %									
Working Age (24.90 %									
WA Econ. Act.	14.07 %									
Elderly	3.98 %									
Inequality	Gini									
Original Income	0.4788									
Disposable income	0.2488									
Disposable income	0.2400									
at_2014_std.txt										
_										
Definitions		Export	Close							







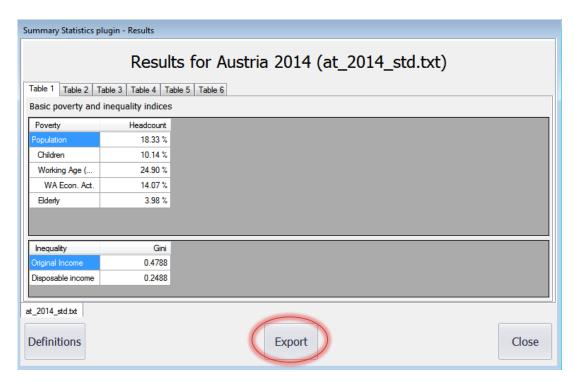


2. Summary statistics tool (7/8)

How we export the results?

By default – stored in *Output folder* where are output files

By default - name is "export" but this can be changed









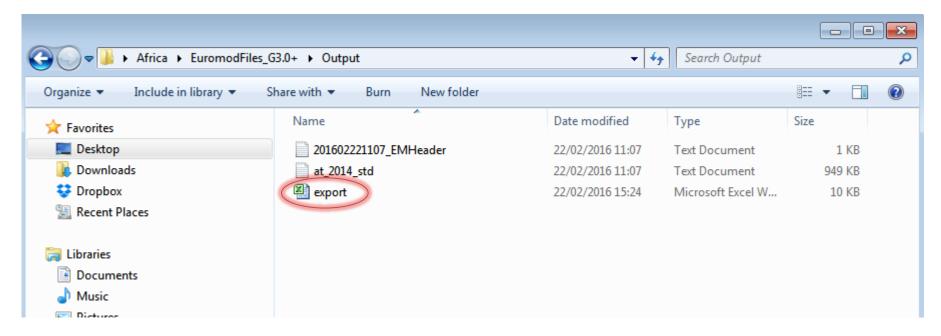


2. Summary statistics tool (8/8)

How we export the results?

By default – stored in *Output folder* where are output files

By default – name is "export" but this can be changed











3.1 Error handlings









3.1 Error handlings (1/13)

Implementing a simple reform – step by step

Task: Increase the amount of child benefit in Simpleland from 200 units per month to 250 units per month (make it more generous)

Steps:

- 1. Find Simpleland in the country list and select (open) it;
- 2. Add a new system where the reform will be implemented and name it as SL_reform
- Modify Conditional formatting
- 4. Analyze the policy spine
- 5. Find the Child Benefit and expand all functions
- 6. Make a change from 200#m to 250#m
- 7. Run EUROMOD
- 8. Analyse results with the Summary Statistics Tool









3.1 Error handlings (2/13)

Implementing a simple reform – step by step

Step 1: Find Simpleland in the country list and select (open) it







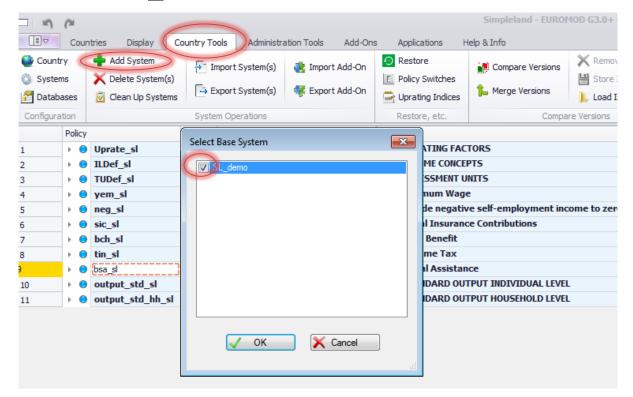




3.1 Error handlings (3/13)

Implementing a simple reform – step by step

Step 2: Add a new system where the reform will be implemented and name it as *SL_reform*











3.1 Error handlings (4/13)

Implementing a simple reform – step by step

Step 2: Add a new system where the reform will be implemented and name it as *SL_reform*







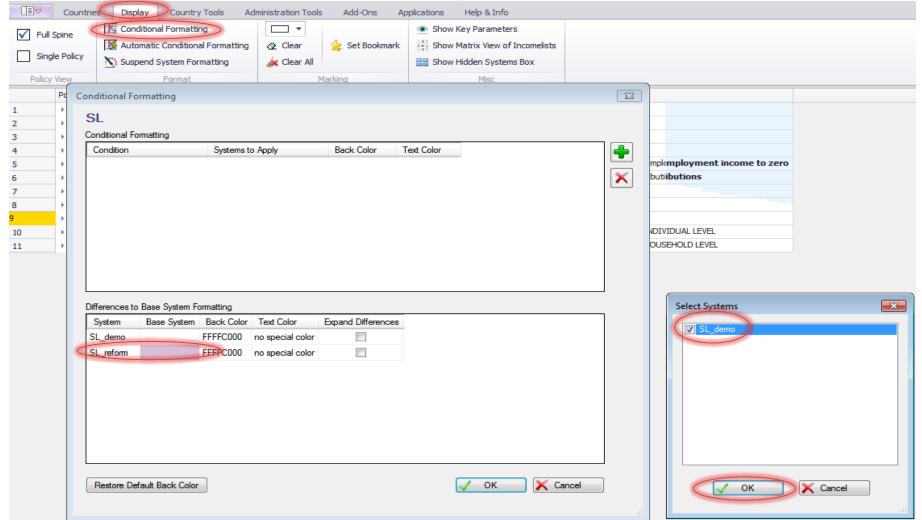




3.1 Error handlings (5/13)

Implementing a simple reform – step by step

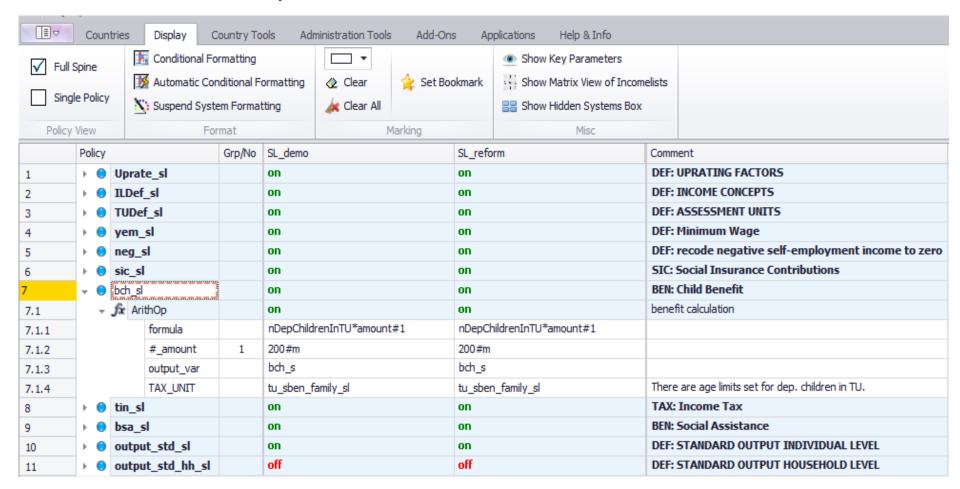
Step 3: Modify Conditional formatting



3.1 Error handlings (6/13)

Implementing a simple reform – step by step

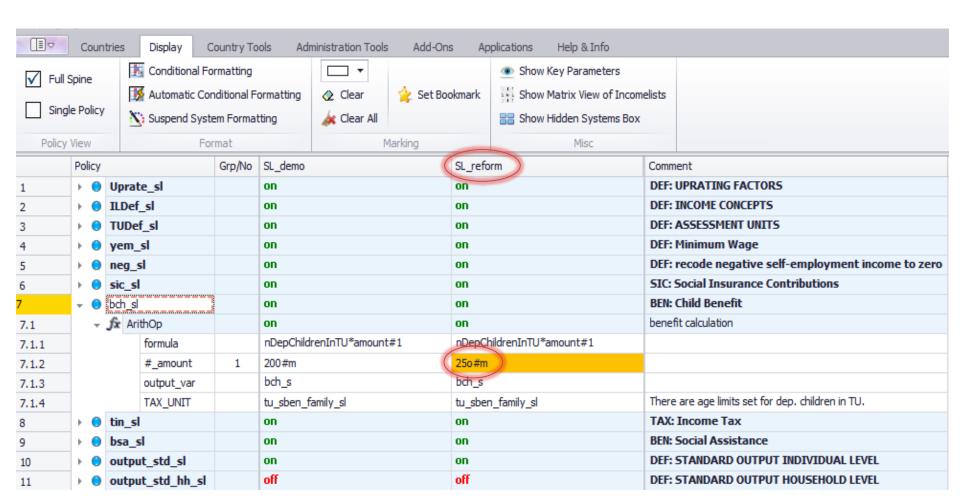
Steps 4 and 5: Analyze the policy spine, find the Child Benefit and expand all functions inside the benefit



3.1 Error handlings (7/13)

Implementing a simple reform – step by step

Step 6: Make a change from 200#m to 250#m



3.1 Error handlings (8/13)

Implementing a simple reform – step by step

Step 7: Run EUROMOD with sl_demo_v4 data







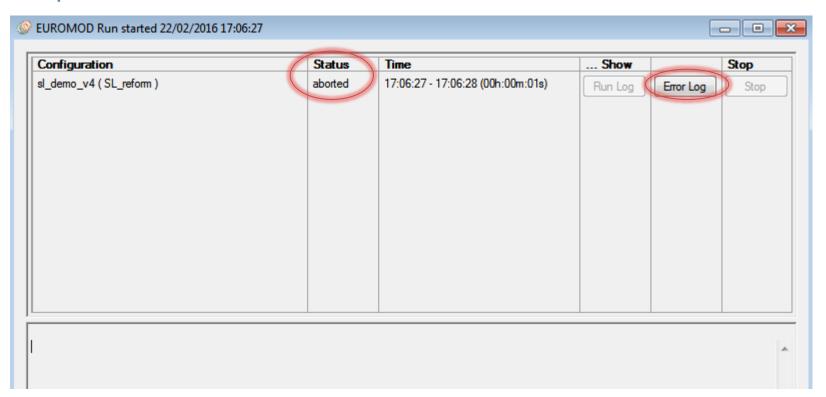




3.1 Error handlings (9/13)

Implementing a simple reform – step by step

Step 7: Run EUROMOD with sl_demo_v4 data









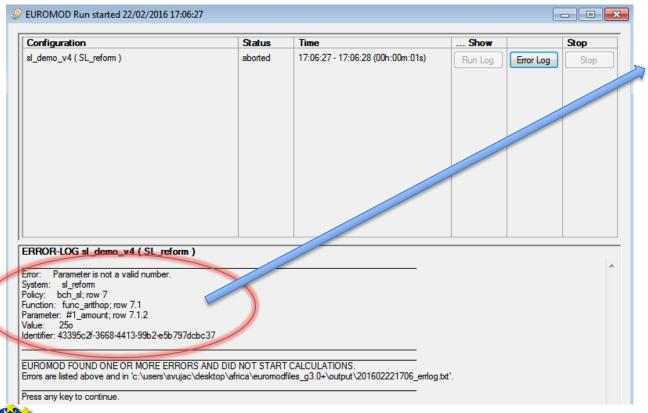


3.1 Error handlings (10/13)

Implementing a simple reform

Back

Step 7: Run EUROMOD with sl_demo_v4 data – ERROR!



- From details (row, policy, function, etc.)
- 2. Using *Identifier*









3.1 Error handlings (11/13)

Implementing a simple reform

Step 7: Run EUROMOD with sl_demo_v4 data – ERROR!

Error log file

- Where can be found? Output folder (text format)
- What is shows? Same information as in the running dialog box
- What contains? Contains time stamp of their creation
- What kind of the information? Information about EUROMOD version, policy system where error occurred and dataset used

```
File Edit Format View Help

FILE EDIT FORMAT VIEW Help

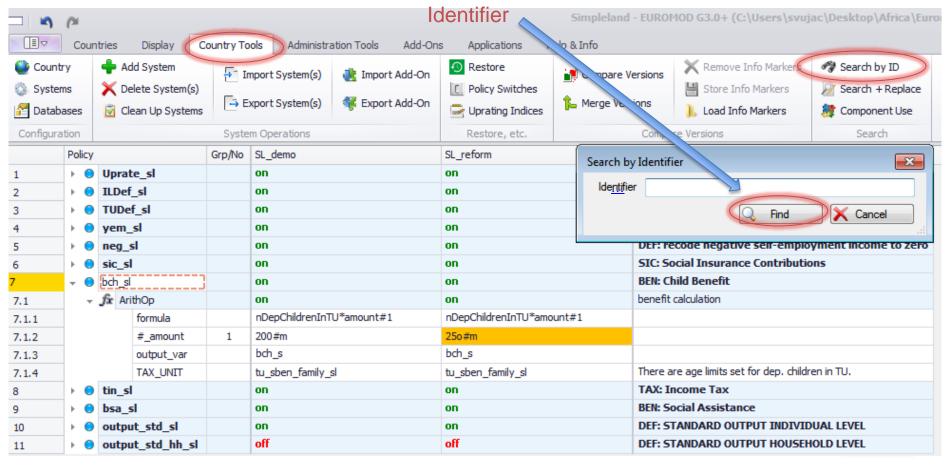
EUROMOD ERROR LOG FOR sl
Dataset: sl_demo_v4.txt; EM-version: g3.0+; Executable-version: 1.12.9; User-Interface-version: 1.12.9

Error: Parameter is not a valid number.
System: sl_reform
Policy: bch_sl; row 7
Function: func_arithop; row 7.1
Parameter: #1_amount; row 7.1.2
Value: 250
Identifier: 43395c2f-3668-4413-99b2-e5b797dcbc37
```

3.1 Error handlings (12/13)

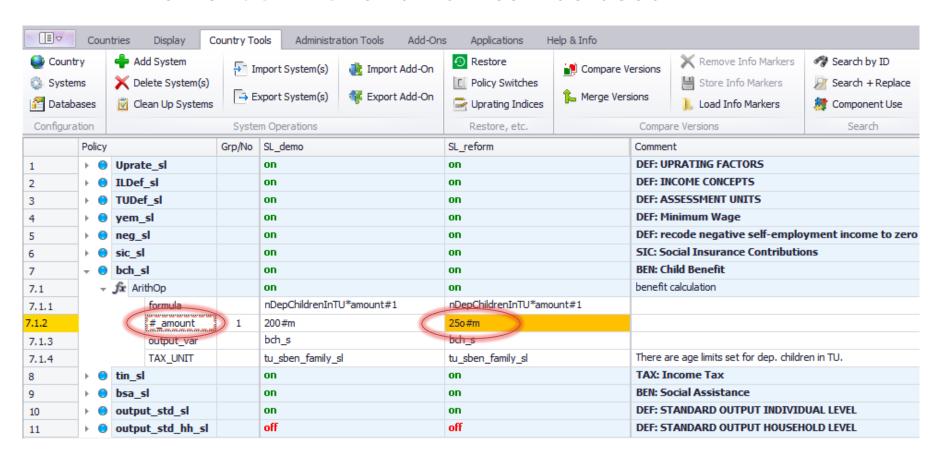
What is Identifier and how can be used?





3.1 Error handlings (13/13)

What is Identifier and how can be used?











3.2 Documentation

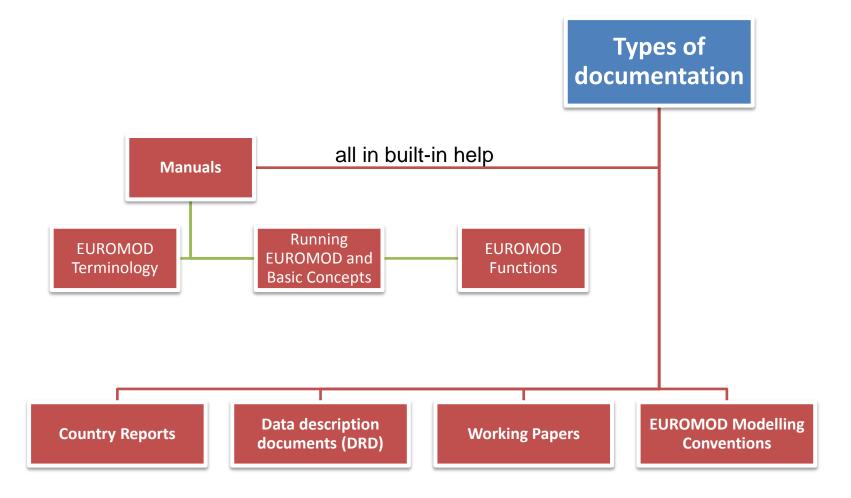








3.2 Documentation (1/2)







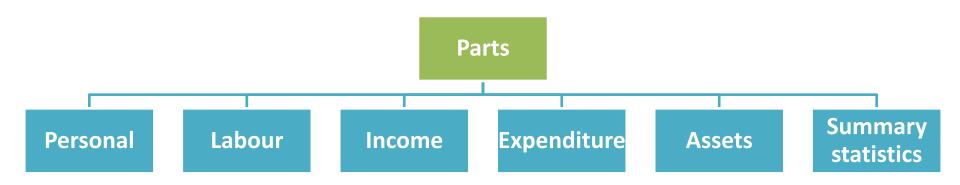




3.2 Documentation (2/2)

Data Description Document (DRD)

Data – sample size: number of households and individuals











Thank you!









