

The EU harmonisation of the Household Budget Surveys

State of play and future developments



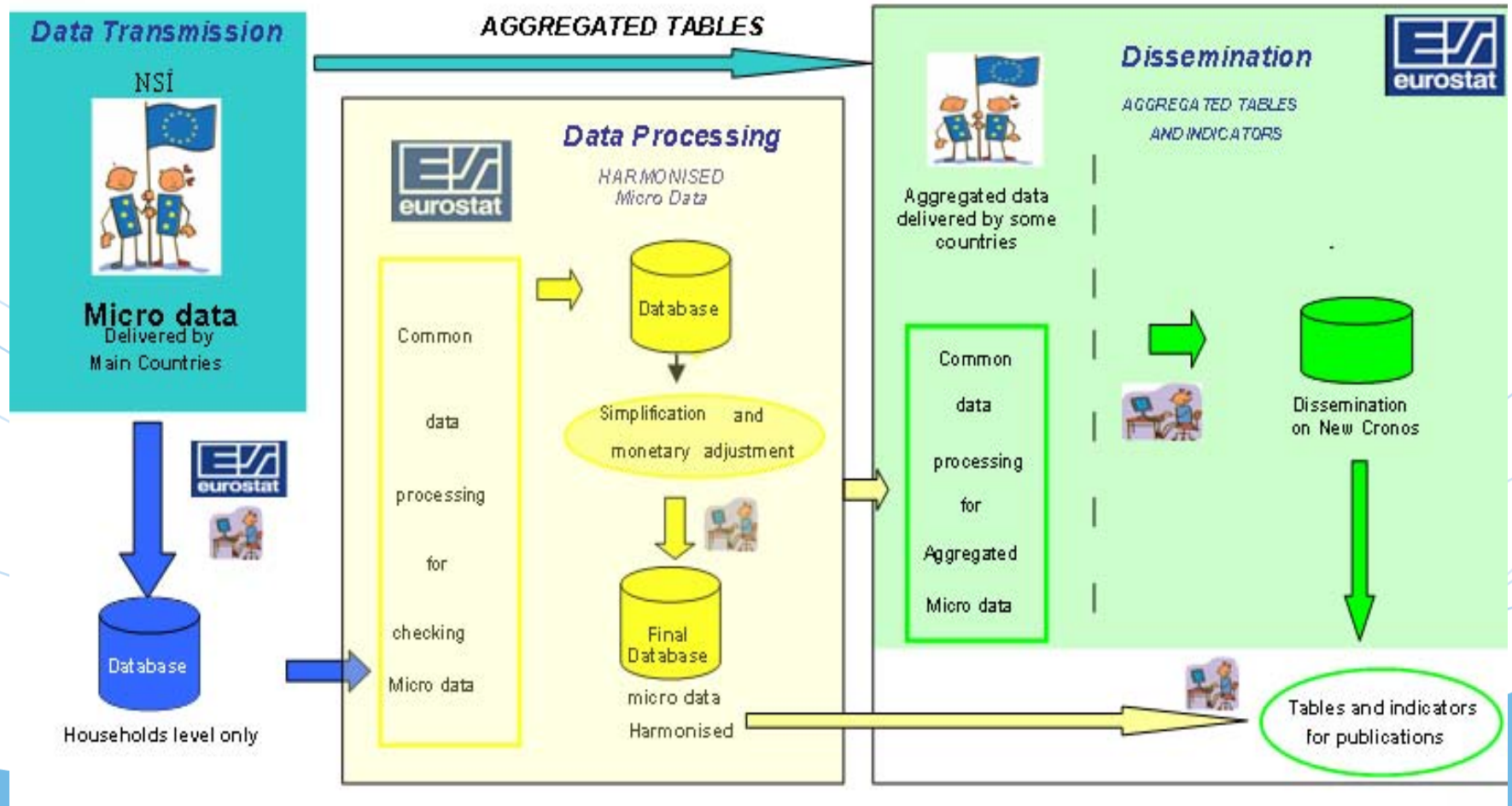
The Household Budget Surveys at National level

- A household survey aiming at collecting detailed household consumption expenditures on different kinds of goods and services (COICOP categories) over a specified period of time (generally two weeks)
- Conducted on a regular basis in all the European countries (annual/every five years)
- Main purpose: provide the weights for the Consumer Price Index (CPI)

The Household Budget Surveys at European level

- In 1989, it was decided that national HBS data would be collected by Eurostat approximately on a five-year basis
- Last HBS reference years: 1988, 1994, 1999, 2005, 2010 (forthcoming)
- The EU data collection is run under a « gentlemen's agreement »: no EU regulation exists, but only recommendations for harmonisation

The EU data collection: main steps



The HBS target indicators

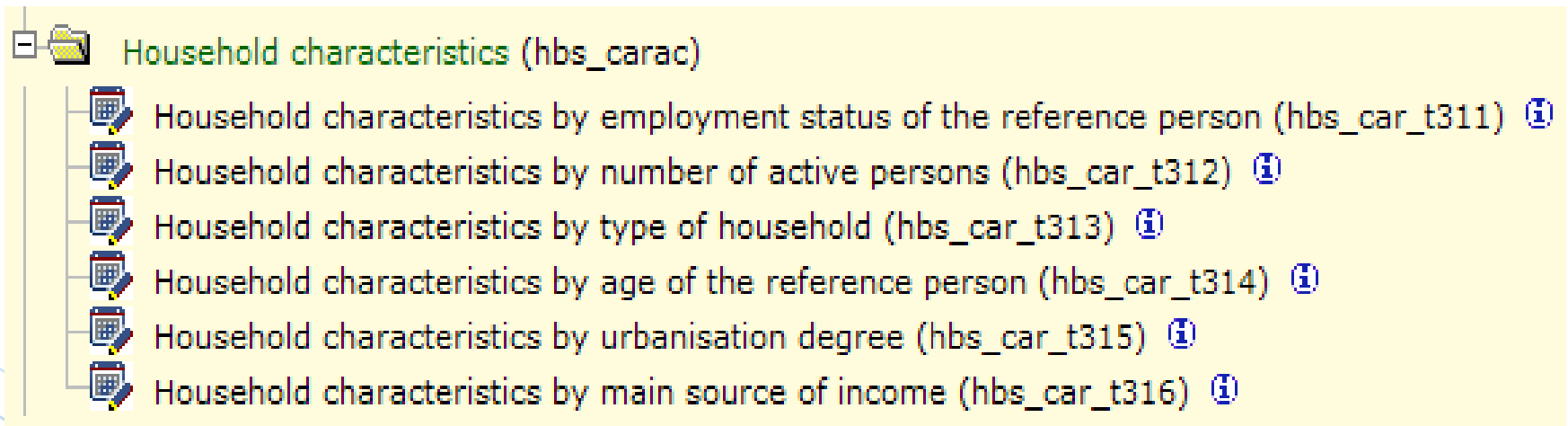
1. Consumption expenditure of private households

- Consumption expenditure of private households (hbs)
 - Mean consumption expenditure of private households (hbs_exp)
 - Mean consumption expenditure by household and per adult equivalent (EUR,NAC,PPS) (hbs_exp_t111)
 - Mean consumption expenditure by detailed COICOP level (in PPS) (hbs_exp_t121)
 - Mean consumption expenditure per household with expenditure greater than zero by detailed COICOP level (in PPS) (hbs_exp_t123)
 - Mean consumption expenditure by employment status of the reference person (in PPS) (hbs_exp_t131)
 - Mean consumption expenditure by number of active persons (in PPS) (hbs_exp_t132)
 - Mean consumption expenditure by income quintile (in PPS) (hbs_exp_t133)
 - Mean consumption expenditure by type of household (in PPS) (hbs_exp_t134)
 - Mean consumption expenditure by age of the reference person (in PPS) (hbs_exp_t135)
 - Mean consumption expenditure by degree of urbanisation (in PPS) (hbs_exp_t136)
 - Mean consumption expenditure by main source of the household's income (in PPS) (hbs_exp_t137)

2. Structure of mean consumption expenditure

- Structure of mean consumption expenditure (hbs_struc)
 - Overall structure of consumption expenditure by detailed COICOP level (per thousands) (hbs_str_t211)
 - Structure of consumption expenditure by socio-economic category of the reference person (COICOP level 2) (per thousands) (hbs_str_t221)
 - Structure of consumption expenditure by number of active persons (COICOP level 2) (per thousands) (hbs_str_t222)
 - Structure of consumption expenditure by income quintile (COICOP level 2) (per thousands) (hbs_str_t223)
 - Structure of consumption expenditure by type of household (COICOP level 2) (per thousands) (hbs_str_t224)
 - Structure of consumption expenditure by age of the reference person (COICOP level 2) (per thousands) (hbs_str_t225)
 - Structure of consumption expenditure by degree of urbanisation (COICOP level 2) (per thousands) (hbs_str_t226)
 - Structure of consumption expenditure by main source of income (COICOP level 2) (per thousands) (hbs_str_t227)

3. Household characteristics



Household characteristics (hbs_carac)

- Household characteristics by employment status of the reference person (hbs_car_t311) ⓘ
- Household characteristics by number of active persons (hbs_car_t312) ⓘ
- Household characteristics by type of household (hbs_car_t313) ⓘ
- Household characteristics by age of the reference person (hbs_car_t314) ⓘ
- Household characteristics by urbanisation degree (hbs_car_t315) ⓘ
- Household characteristics by main source of income (hbs_car_t316) ⓘ

The 2005 HBS round of data collection

- Took place over the period 2007-2008
- Geographical scope: 30 countries (all EU-27 countries + Croatia, Norway and Former Republic of Macedonia)
- Aggregated tables and/or micro-data files sent by the countries to Eurostat
- A first batch of HBS indicators released in April 2008 on Eurostat's website

Accuracy: sample sizes

Country	HBS 2005	SILC 2005
AT	8400	5148
BE	3550	5166
BG	2870	-
HR	2727	-
CY	2990	3746
CZ	2965	4351
DK	2449	5957
EE	3432	4208
FI	4007	11229
FR	10240	9775
DE	52217	13111
GR	6555	5568
HU	9058	6927
IE	6884	6085
IT	24107	22032
LV	3774	3846
LT	7586	4441

Country	HBS 2005	SILC 2005
LU	3202	3622
MT	2586	3459
NL	1570	9562
NO	3376	5996
PL	34767	16395
PT	10403	4615
RO	33066	-
SK	4710	5414
SI	3725	8287
ES	8881	13027
SE	2079	6133
UK	6785	10826
EU-15	151329	131856
EU-25	226922	192930
EU-27	262858	192930
NMS-10	75593	61074

- The sample sizes range from 1570 (NL) to 52217 households (DE)
- Substitutions have been allowed by certain countries (BG, GR, ES, HU and IT) in order to increase the sample size
- However, the sample sizes may happen to vary drastically from one country to another → Problem of comparability across the countries (see next)

Accuracy: coefficients of variation (%)

COUNTRY	CP00	CP01	CP02	CP03	CP04	CP05	CP06	CP07	CP08	CP09	CP10	CP11	CP12
AT	2,2	2,0	2,7	3,0	2,9	4,7	4,4	4,2	2,1	3,1	1,7	3,5	3,8
BE	3,1	2,9	5,9	6,5	2,5	8,0	6,2	9,5	4,4	5,2	20,0	5,9	7,8
BG	2,0	1,7	5,0	5,2	2,3	5,9	4,4	7,6	3,8	6,0	27,8	6,6	5,2
CY	2,5	2,2	3,2	3,6	2,8	4,3	4,4	5,4	3,1	4,1	4,2	4,0	3,5
DE	0,7	0,7	1,5	1,0	0,8	2,2	2,7	2,3	1,0	1,2	2,8	1,4	1,1
DK	4,0	4,2	6,9	8,4	3,9	7,2	13,2	8,9	5,5	6,4	17,4	6,8	5,2
EE	4,5	3,9	9,7	8,3	4,0	18,6	7,4	14,7	5,2	9,3	33,4	10,8	8,6
ES	1,9	1,9	3,3	2,6	2,1	3,6	4,6	4,8	2,3	3,1	8,0	3,1	2,7
FI	2,6	2,4	5,9	7,7	2,5	4,9	5,5	5,4	3,5	5,4	19,5	5,0	3,3
FR	1,2	1,4	3,8	2,8	1,0	3,5	5,1	3,3	2,2	2,9	13,6	4,0	2,4
GR	1,9	1,6	2,3	2,9	1,7	4,4	3,6	4,4	2,3	4,2	1,9	2,8	3,5
HR	2,6	2,5	5,2	5,3	2,8	5,9	8,7	7,8	3,9	5,3	18,7	7,2	4,6
HU	1,9	1,8	2,5	2,8	1,8	3,2	2,6	3,0	2,2	2,9	2,2	2,3	3,1
IE	1,8	1,5	3,4	3,9	1,9	7,2	6,9	3,7	2,3	2,8	11,2	4,6	3,0
IT	1,2	1,2	2,4	2,7	1,2	5,1	3,7	3,5	1,4	2,7	9,4	3,9	1,8
LT	2,3	1,6	2,6	3,8	2,5	8,4	4,9	6,2	3,4	7,2	21,6	7,0	5,8
LU	2,0	2,4	6,6	4,3	2,1	7,2	5,4	4,7	3,0	3,4	23,8	3,7	3,4
LV	3,9	3,3	6,9	7,3	3,2	7,7	7,2	8,4	4,8	6,9	12,9	8,9	7,3
NL	3,5	4,1	8,6	6,5	3,5	8,5	8,1	6,9	4,8	5,2	12,9	6,3	4,0
NO	2,4	1,9	4,2	4,4	3,2	5,1	6,4	5,5	4,4	4,6	2,6	5,0	4,9
PL	1,2	0,8	2,0	2,9	1,0	3,1	2,0	4,9	1,4	2,9	5,5	5,3	2,5
PT	2,0	2,0	4,5	4,7	2,4	5,3	4,7	5,7	2,9	4,5	12,3	3,9	3,7
RO	1,3	0,9	1,8	2,7	1,8	5,2	3,8	8,7	2,0	4,3	11,2	8,0	3,7
SE	2,7	2,4	7,8	7,9	3,0	8,7	16,4	6,7	3,9	5,7	61,1	7,1	7,6
SI	2,4	2,2	4,7	4,3	1,8	5,0	5,7	6,6	2,6	6,0	10,9	12,2	3,1
SK	2,7	1,6	3,7	4,4	2,6	8,5	5,1	20,6	3,2	7,1	23,3	4,2	7,7
UK	1,9	1,9	3,8	4,5	1,6	6,6	15,2	4,3	2,9	3,9	18,6	3,3	4,2

- The relative accuracy for the total mean expenditure (CP00) appears to be acceptable in most of the countries in that, except for Estonia, it lies below 4%. For Estonia, we got a relative confidence interval of 4.5%
- On the other hand, it seems that the level of accuracy is going down when considering two-digit COICOPs, especially those for which the expenditure distribution should be strongly skewed, like Health (CP06), Transport (CP07) or Education (CP10)

Accuracy: response rates

AT	42
BE	6
BG	65
HR	71
CY	89
DK	55
EE	49
FI	53
FR	57
GR	60
HU	50
IT	75

LV	52
LT	70
LU	18
NO	52
PL	55
PT	62
RO	90
SK	75
SI	74
ES	65
SE	52
UK	57

- The response rates range from 6% (BE) to 90% (RO). In fact, the HBS puts a heavy burden on the households (keeping diaries)
- Such a high level of nonresponse may hamper the accuracy of the data (nonresponse bias) as well as the comparability between the countries
- In order to tackle the nonresponse issue, in 2010 two Task Forces have been organised at Eurostat level on Dealing with nonresponse (3rd March) and Preventing nonresponse (4th March) → Recommendations were made on this topic

Comparability: various issues under consideration

■ *Comparability issues in the HBS methodology*

1. The achieved sample sizes in the HBS countries
2. The non provision of Imputed Rent by certain countries (CZ, MT, RO, IE and UK)
3. The use of non-random sample selections by certain countries (CZ and DE)

- 4. The treatment of unit non-response**
- 5. The concept of household's reference person (self-assessment/main income earner)**
- 6. The recording of health and education expenditures**

■ *Comparability issues in the structure of the HBS data files*

1. Different HBS reference years

2. The provision of aggregated tables by certain countries (CZ, IT, PL, PT and MT) rather than micro-data files

3. No micro-information available at individual level

4. The scaling of the weights

■ ***HBS metadata reporting***

■ ***Core Variables***

For more information:

- Eurostat; “Household Budget Surveys in the EU: Methodology and Recommendations for Harmonisation”; Luxembourg, 2003
- Eurostat; “Household Budget Surveys in the Candidate Countries. Methodological analysis, 2003”; Luxembourg, 2004
- Eurostat; “Data transmission for the HBS round of the reference year 2005”
- Eurostat; “Quality Report of the „Household Budget Surveys’ 2005”

These documents have been published only electronically on the internet site of Eurostat.

Summary and way forward

- The HBS collection at EU level has provided a valuable data source on household living conditions
- Quality issues remain, mostly comparability issues, but they are not that different from the issues faced by EU Statistics under Regulation (SILC, LFS)
- Next steps:
 - 2010 round of data collection coming soon
 - Task Forces on preventing/dealing with nonresponse: further tests to be made on Calmar2
 - Regulation to grant access to microdata to researchers
 - HBS « revisited » (Stiglitz report, absolute poverty)