

Bulgaria 2011

1 Survey Description

Survey: EU Statistics on Income and Living Conditions household and individual survey (EU-SILC), carried out by the Statistical Office of the European Union, for the 2011

Link to the document: <https://www.geis.org/en/missy/metadata/EU-SILC/2011/#BG>

Sample: The survey employed a comprehensive sampling approach, incorporating probabilistic, systematic, stratified, and multi-stage designs for a robust representation of the population. There are 15,143 individuals in the total sample and 6,639 individuals in the analysis sample. Section 3 of this document describes the prevalence and pattern of missing data.

Weights: The survey employs the household as unit of analysis and utilizes the inverse of selection probability as a weighting method

Outcome: The outcome variables are annual equivalized household disposable total (*eq_iinc*) income in dollars PPP 2017.¹

Circumstances:

- Sex (female, male)
- Country of birth 'Birthplace' (Same country as country of residence, any european country except country of residence or, any other country, described in table 1)
- Fathers's edu. (levels of education, described in Table 2)
- Mother's edu. (levels of education, described in Table 2)
- Father's occ. (11 categories, 10 from 1-Digit ISCO + one category including death/unknown/unemployed, described in Table 3)
- Mother's occ. (11 categories, 10 from 1-Digit ISCO + one category including death-unknown-unemployed, described in Table 3)

¹Income variable was equivalized using the square root scale.

2 Descriptive Statistics

Table 1: Respondant's socio-demographics - 2011

	Analysis sample	Total sample
	(N=6,639)	(N=15,143)
Gender		
Mean (SD)	1.49 (0.500)	1.53 (0.499)
Median [Min, Max]	1.00 [1.00, 2.00]	2.00 [1.00, 2.00]
Region of birth		
1 Local	6,608 (99.5%)	15,063 (99.5%)
2 European Union	6 (0.1%)	24 (0.2%)
3 Other	25 (0.4%)	56 (0.4%)

Table 2: Parental education - 2011

	Analysis sample	Total sample
	(N=6,639)	(N=15,143)
Father's education (years)		
0 Unknown	435 (6.6%)	474 (3.1%)
1 None	136 (2.0%)	201 (1.3%)
2 Low	3,170 (47.7%)	3,592 (23.7%)
3 Medium	2,264 (34.1%)	3,377 (22.3%)
4 High	634 (9.5%)	867 (5.7%)
Missing	0 (0%)	6,632 (43.8%)
Mother's education (levels)		
0 Unknown	95 (1.4%)	104 (0.7%)
1 None	169 (2.5%)	261 (1.7%)
2 Low	3,232 (48.7%)	3,617 (23.9%)
3 Medium	2,407 (36.3%)	2,906 (19.2%)
4 High	736 (11.1%)	832 (5.5%)
Missing	0 (0%)	7,423 (49.0%)

Table 3: Parental occupation - 2011

	Analysis sample	Total sample
	(N=6,639)	(N=15,143)
Father's occupation (ISCO)		
0 Dead/unknown/not working	503 (7.6%)	542 (3.6%)
1 Manager	156 (2.3%)	244 (1.6%)
2 Professional	439 (6.6%)	533 (3.5%)
3 Technician	331 (5.0%)	417 (2.8%)
4 Clerical	183 (2.8%)	208 (1.4%)
5 Service	255 (3.8%)	394 (2.6%)
6 Agriculture	928 (14.0%)	1,020 (6.7%)
7 Craft/Trades	1,425 (21.5%)	1,775 (11.7%)
8 Plant Operator	1,355 (20.4%)	1,631 (10.8%)
9 Elementary	914 (13.8%)	1,144 (7.6%)
10 Armed forces	150 (2.3%)	155 (1.0%)
Missing	0 (0%)	7,080 (46.8%)
Mother's occupation (ISCO)		
0 Dead/unknown/not working	593 (8.9%)	680 (4.5%)
1 Manager	49 (0.7%)	96 (0.6%)
2 Professional	810 (12.2%)	1,057 (7.0%)
3 Technician	258 (3.9%)	351 (2.3%)
4 Clerical	585 (8.8%)	692 (4.6%)
5 Service	932 (14.0%)	1,265 (8.4%)
6 Agriculture	1,241 (18.7%)	1,399 (9.2%)
7 Craft/Trades	674 (10.2%)	855 (5.6%)
8 Plant Operator	445 (6.7%)	591 (3.9%)
9 Elementary	1,050 (15.8%)	1,334 (8.8%)
10 Armed forces	2 (0.0%)	2 (0.0%)
Missing	0 (0%)	6,821 (45.0%)

Table 4: Respondant's income - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analysis sample	6,639	12,318	8,414	10,676	160.6	105,977	0
Total sample	15,143	11,151	8,708	9,465	160.6	349,114	3

3 Missing data analysis

3.1 Missing patterns

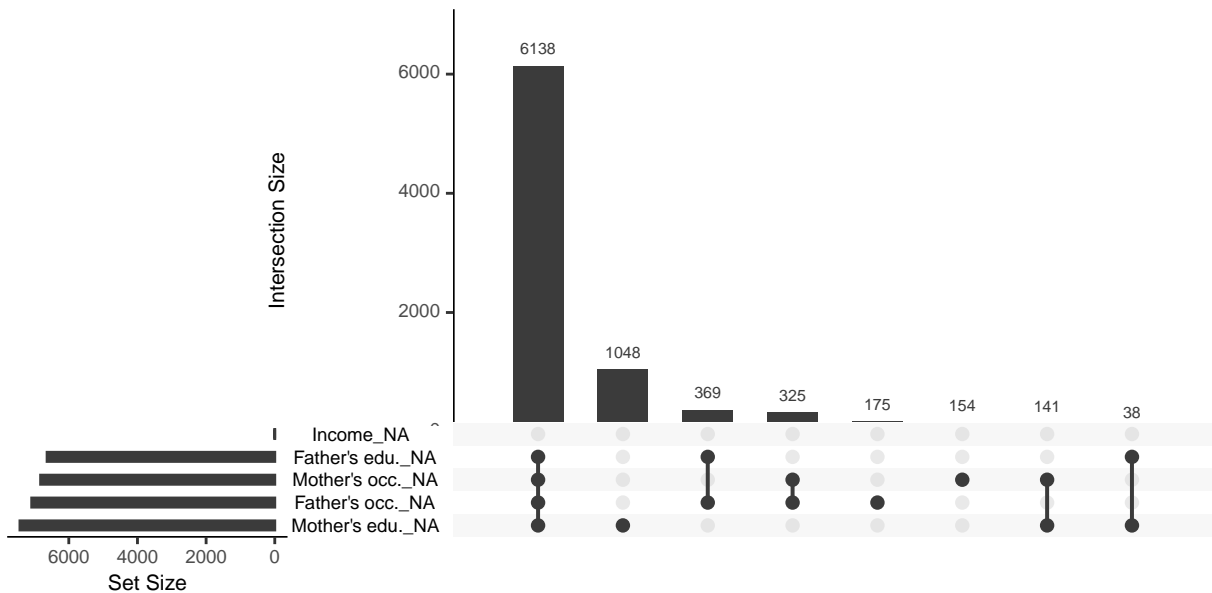


Figure 1: Missing patterns: *Left*: Marginal distribution of missing observations per variable. *Right*: Combination of missingness across cases

3.2 Differences in expected total equivalized household income between samples

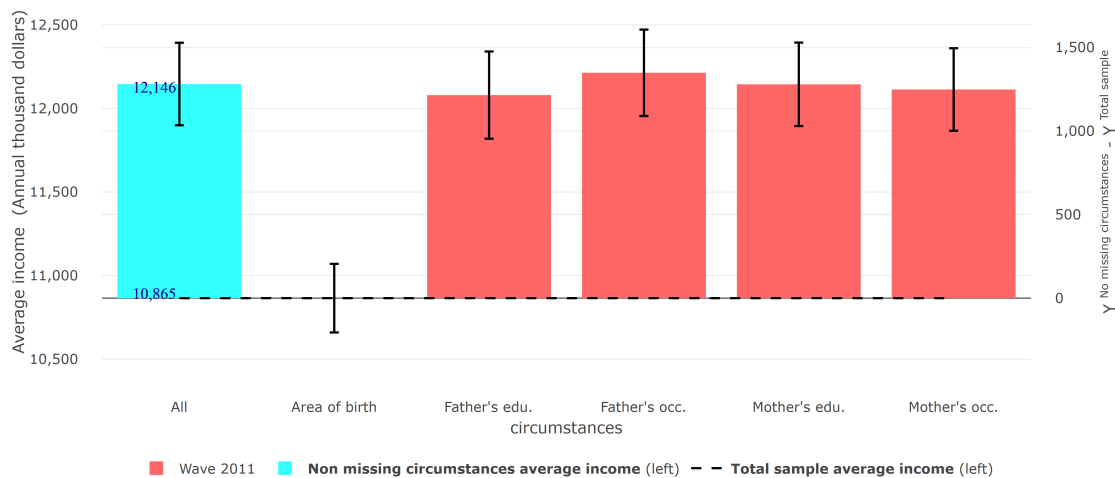


Figure 2: Differences in expected total equivalized household income between the sample with non-missing circumstances and the total sample

3.3 Gini coefficient

Table 5: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2011	Analysis sample	0.328	0.320	0.335	12,146
Wave 2011	Total sample	0.347	0.343	0.358	10,865

3.4 Differences in Gini coefficient between samples

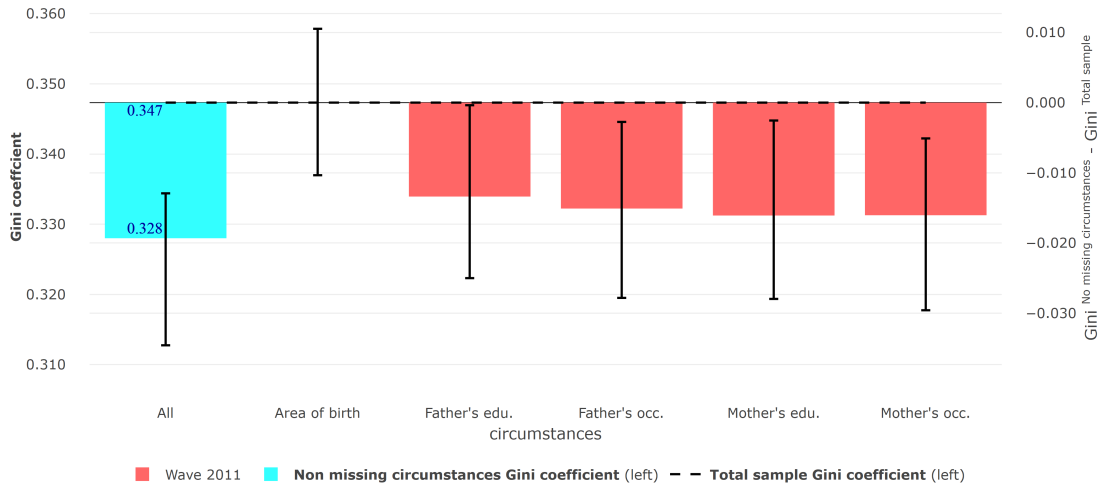


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample