

Bulgaria 2019

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 2019

Link to the document: <https://www.esis.org/en/missy/metadata/EU-SILC/2019/#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 14,833 individuals in the total sample and 7,025 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 - 2019

	Analysis sample	Total sample
	(N=7,025)	(N=14,833)
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	6,988 (99.5%)	14,760 (99.5%)
2 European Union	3 (0.0%)	11 (0.1%)
3 Other	34 (0.5%)	62 (0.4%)

Table 2: Parental education - 2019

	Analysis sample	Total sample
	(N=7,025)	(N=14,833)
Father's education (years)		
0 Unknown	343 (4.9%)	376 (2.5%)
1 Low	2,472 (35.2%)	2,718 (18.3%)
2 Medium	3,485 (49.6%)	3,758 (25.3%)
3 High	725 (10.3%)	749 (5.0%)
Missing	0 (0%)	7,232 (48.8%)
Mother's education (levels)		
0 Unknown	164 (2.3%)	190 (1.3%)
1 Low	2,530 (36.0%)	2,795 (18.8%)
2 Medium	3,427 (48.8%)	3,879 (26.2%)
3 High	904 (12.9%)	985 (6.6%)
Missing	0 (0%)	6,984 (47.1%)

Table 3: Parental occupation - 2019

	Analysis sample	Total sample
	(N=7,025)	(N=14,833)
Father's occupation (ISCO)		
0 Dead/unknown/not working	430 (6.1%)	468 (3.2%)
1 Manager	195 (2.8%)	199 (1.3%)
2 Professional	499 (7.1%)	508 (3.4%)
3 Technician	649 (9.2%)	658 (4.4%)
4 Clerical	99 (1.4%)	101 (0.7%)
5 Service	595 (8.5%)	612 (4.1%)
6 Agriculture	743 (10.6%)	760 (5.1%)
7 Craft/Trades	1,380 (19.6%)	1,410 (9.5%)
8 Plant Operator	968 (13.8%)	997 (6.7%)
9 Elementary	1,365 (19.4%)	1,442 (9.7%)
10 Armed forces	102 (1.5%)	104 (0.7%)
Missing	0 (0%)	7,574 (51.1%)
Mother's occupation (ISCO)		
0 Dead/unknown/not working	605 (8.6%)	666 (4.5%)
1 Manager	84 (1.2%)	92 (0.6%)
2 Professional	777 (11.1%)	837 (5.6%)
3 Technician	287 (4.1%)	307 (2.1%)
4 Clerical	640 (9.1%)	670 (4.5%)
5 Service	1,273 (18.1%)	1,358 (9.2%)
6 Agriculture	674 (9.6%)	710 (4.8%)
7 Craft/Trades	797 (11.3%)	847 (5.7%)
8 Plant Operator	391 (5.6%)	424 (2.9%)
9 Elementary	1,491 (21.2%)	1,596 (10.8%)
10 Armed forces	6 (0.1%)	6 (0.0%)
Missing	0 (0%)	7,320 (49.3%)

Table 4: Respondant's income - 2019

	N	Mean	SD	Median	Min	Max	Missing
Analysis sample	7,025	18,421	23,501	14,034	367.63	609,519	0
Total sample	14,833	15,667	19,377	11,874	52.01	609,519	0

3 Missing data analysis

3.1 Missing patterns

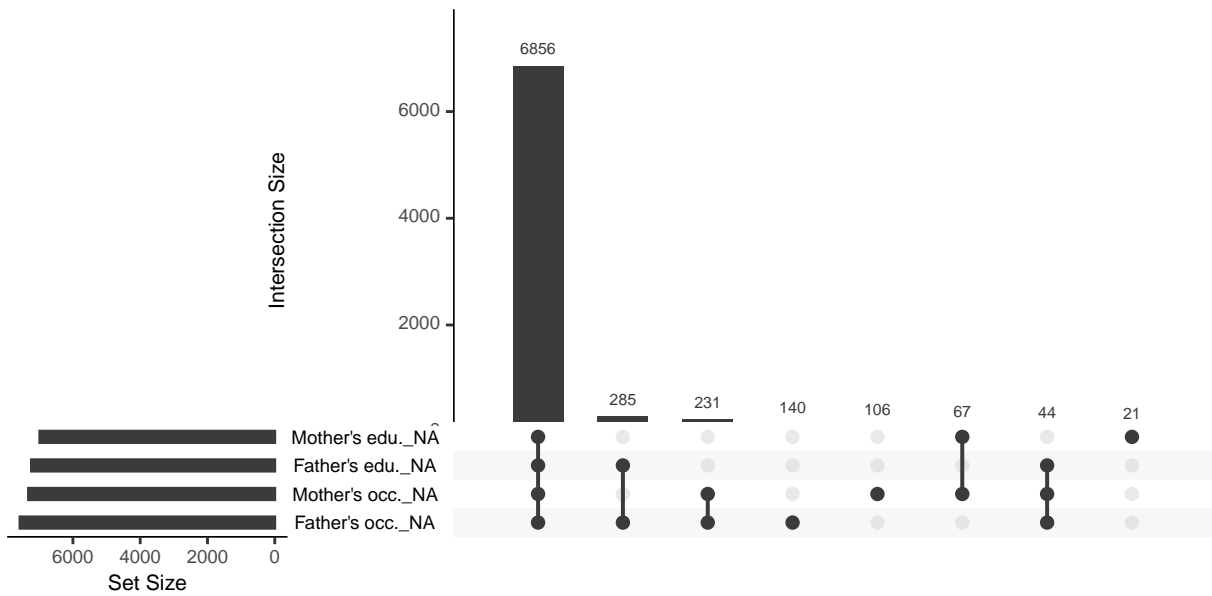


Figure 1: Missing patterns: *Left:* Marginal distribution of missing observations per variable. *Right:* Combination of missingness across cases

3.2 Differences in expected total equivalized household income between samples

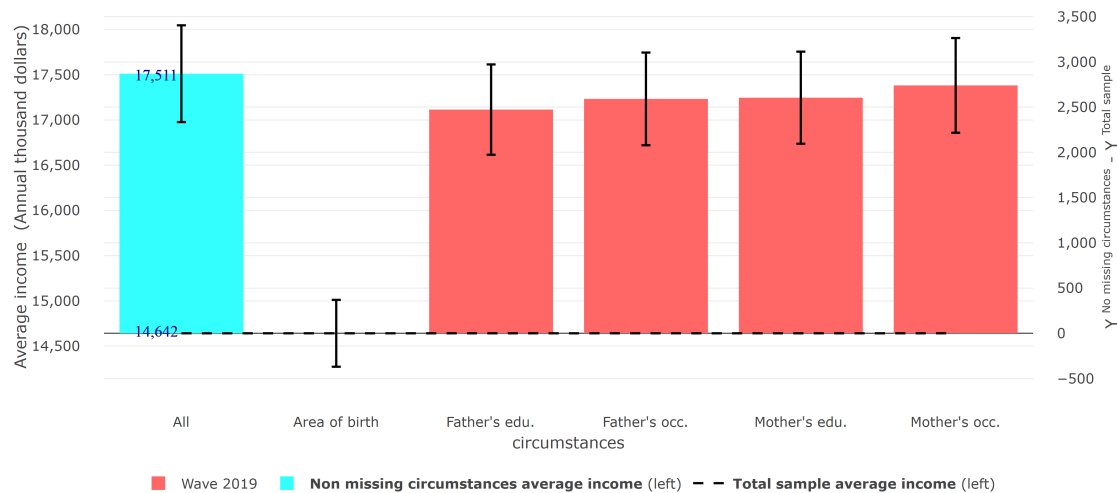


Figure 2: Differences in expected total equivalized household income between the sample with non-missing circumstances and the total sample

3.3 Gini coefficient

Table 5: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2019	Analysis sample	0.407	0.369	0.401	17,511
Wave 2019	Total sample	0.408	0.378	0.398	14,642

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