Estonia 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.gesis.org/en/missy/metadata/EU-SILC/2011/#EE

Sample: The survey employed a comprehensive sampling approach, incorporating probabilistic, systematic, stratified, and one stage designs for a robust representation of the population. There are 10,981 individuals in the total sample and 5,070 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)

 $^{^{1}}$ Income variable was equivalized using the square root scale.

2 Descriptive Statistics

Table 1: Respondant's socio-demographics - $2011\,$

	Analisis sample	Total sample
	(N=5,070)	(N=10,981)
Gender Mean (SD) Median [Min, Max]	1.52 (0.500) 2.00 [1.00, 2.00]	1.54 (0.499) 2.00 [1.00, 2.00]
Region of birth 1 Local 3 Other	4,517 (89.1%) 553 (10.9%)	9,531 (86.8%) 1,450 (13.2%)

Table 2: Parental education - 2011

	Analisis sample	Total sample			
	(N=5,070)	(N=10,981)			
Father's education (years)					
0 Unknown	667 (13.2%)	705~(6.4%)			
2 Low	1,815 (35.8%)	$1,914 \ (17.4\%)$			
3 Medium	1,866 (36.8%)	1,959 (17.8%)			
4 High	722 (14.2%)	755~(6.9%)			
Missing	0 (0%)	5,648 (51.4%)			
Mother's education (levels)					
0 Unknown	$133 \ (2.6\%)$	$141 \ (1.3\%)$			
1 None	6 (0.1%)	6 (0.1%)			
2 Low	1,917 (37.8%)	$2,152 \ (19.6\%)$			
3 Medium	2,066 (40.7%)	3,196 (29.1%)			
4 High	948 (18.7%)	1,587 (14.5%)			
Missing	0 (0%)	3,899 (35.5%)			

Table 3: Parental occupation - 2011

	Analisis sample	Total sample
	(N=5,070)	(N=10,981)
Father's occupation (ISCO)		
0 Dead/unknown/not working	879 (17.3%)	983 (9.0%)
1 Manager	351 (6.9%)	378 (3.4%)
2 Professional	$372 \ (7.3\%)$	387 (3.5%)
3 Technician	235 (4.6%)	248 (2.3%)
4 Clerical	68 (1.3%)	70~(0.6%)
5 Service	77 (1.5%)	82 (0.7%)
6 Agriculture	230 (4.5%)	250(2.3%)
7 Craft/Trades	1,077 (21.2%)	1,194 (10.9%)
8 Plant Operator	1,405 (27.7%)	1,546 (14.1%)
9 Elementary	329 (6.5%)	352 (3.2%)
10 Armed forces	47 (0.9%)	49 (0.4%)
Missing	0 (0%)	$5,442 \ (49.6\%)$
Mother's occupation (ISCO)		
0 Dead/unknown/not working	512 (10.1%)	570 (5.2%)
1 Manager	249 (4.9%)	375 (3.4%)
2 Professional	778 (15.3%)	1,166 (10.6%)
3 Technician	472 (9.3%)	695 (6.3%)
4 Clerical	487 (9.6%)	632 (5.8%)
5 Service	555 (10.9%)	921 (8.4%)
6 Agriculture	618 (12.2%)	799~(7.3%)
7 Craft/Trades	251 (5.0%)	368 (3.4%)
8 Plant Operator	522 (10.3%)	752 (6.8%)
9 Elementary	625 (12.3%)	904 (8.2%)
10 Armed forces	1 (0.0%)	1 (0.0%)
Missing	0 (0%)	3,798 (34.6%)

Table 4: Respondant's income - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample	5,070	14,561	9,103	12,939	172.2	102,980	0
Total sample	10,981	13,246	8,238	$11,\!331$	172.2	102,980	14

3 Missing data analysis

3.1 Missing patterns

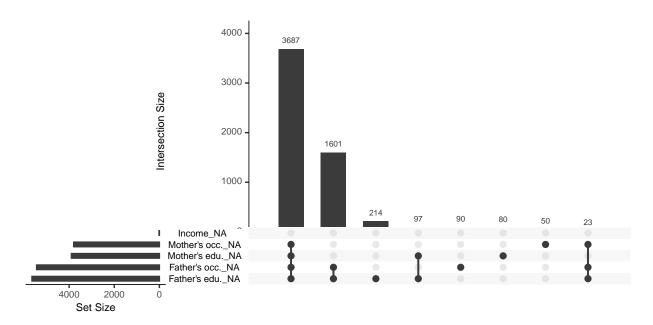


Figure 1: Missing patterns: Left: Marginal distribution of missing observations per variable. Right: Combination of missingness across cases

3.2 Differences in expected total equivalized household income between samples

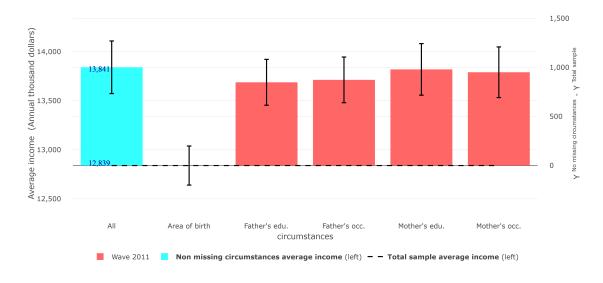


Figure 2: Differences in expected equivalized household income between the sample with non-missing circumstances and the total sample

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 Total sample	0.324	0.303	0.320	13,841
Wave 2011		0.317	0.294	0.306	12,839

3.4 Differences in Gini coefficient between samples

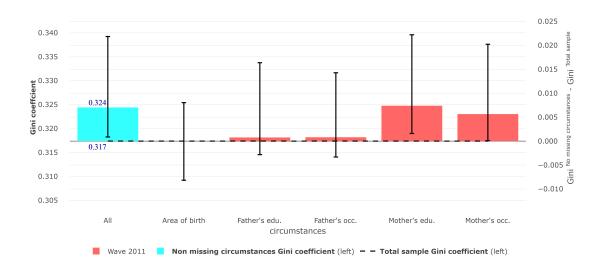


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample $\frac{1}{2}$