

# Luxembourg 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.geis.org/en/missy/metadata/EU-SILC/2019/#LU>

**Sample:** The survey employed a comprehensive sampling approach, incorporating probabilistic, random, stratified, and one stage designs for a robust representation of the population. There are 8,358 individuals in the total sample and 4,284 individuals in the analysis sample. Section 3 of this document describes the prevalence and pattern of missing data.

**Weights:** To explore the weithing method see Eurostat (2019). National Reference Metadata in ESS Standard for Quality Reports Structure (ESQRSSI)

**Outcome:** The outcome variables are annual equivalized household disposable total (*eq\_iinc*) income in dollars PPP 2017.<sup>1</sup>

**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)

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<sup>1</sup>Income variable was equivalized using the square root scale.

## 2 Descriptive Statistics

Table 1: Respondant's socio-demographics - 2019

	Analysis sample	Total sample
	(N=4,284)	(N=8,358)
<b>Gender</b>		
Mean (SD)	1.51 (0.500)	1.51 (0.500)
Median [Min, Max]	2.00 [1.00, 2.00]	2.00 [1.00, 2.00]
<b>Region of birth</b>		
1 Local	1,962 (45.8%)	4,308 (51.5%)
2 European Union	1,723 (40.2%)	3,109 (37.2%)
3 Other	599 (14.0%)	928 (11.1%)
Missing	0 (0%)	13 (0.2%)

Table 2: Parental education - 2019

	Analysis sample	Total sample
	(N=4,284)	(N=8,358)
<b>Father's education (years)</b>		
0 Unknown	417 (9.7%)	526 (6.3%)
1 Low	1,844 (43.0%)	2,537 (30.4%)
2 Medium	1,075 (25.1%)	1,520 (18.2%)
3 High	948 (22.1%)	1,233 (14.8%)
Missing	0 (0%)	2,542 (30.4%)
<b>Mother's education (levels)</b>		
0 Unknown	162 (3.8%)	199 (2.4%)
1 Low	2,280 (53.2%)	3,157 (37.8%)
2 Medium	1,112 (26.0%)	1,636 (19.6%)
3 High	730 (17.0%)	973 (11.6%)
Missing	0 (0%)	2,393 (28.6%)

Table 3: Parental occupation - 2019

	Analysis sample	Total sample
	(N=4,284)	(N=8,358)
<b>Father's occupation (ISCO)</b>		
0 Dead/unknown/not working	537 (12.5%)	695 (8.3%)
1 Manager	304 (7.1%)	326 (3.9%)
2 Professional	518 (12.1%)	574 (6.9%)
3 Technician	251 (5.9%)	303 (3.6%)
4 Clerical	356 (8.3%)	377 (4.5%)
5 Service	191 (4.5%)	210 (2.5%)
6 Agriculture	363 (8.5%)	397 (4.8%)
7 Craft/Trades	1,088 (25.4%)	1,193 (14.3%)
8 Plant Operator	202 (4.7%)	237 (2.8%)
9 Elementary	401 (9.4%)	461 (5.5%)
10 Armed forces	73 (1.7%)	76 (0.9%)
Missing	0 (0%)	3,509 (42.0%)
<b>Mother's occupation (ISCO)</b>		
0 Dead/unknown/not working	1,960 (45.8%)	2,699 (32.3%)
1 Manager	72 (1.7%)	86 (1.0%)
2 Professional	436 (10.2%)	483 (5.8%)
3 Technician	239 (5.6%)	321 (3.8%)
4 Clerical	367 (8.6%)	424 (5.1%)
5 Service	404 (9.4%)	461 (5.5%)
6 Agriculture	129 (3.0%)	144 (1.7%)
7 Craft/Trades	154 (3.6%)	165 (2.0%)
8 Plant Operator	5 (0.1%)	10 (0.1%)
9 Elementary	517 (12.1%)	623 (7.5%)
10 Armed forces	1 (0.0%)	1 (0.0%)
Missing	0 (0%)	2,941 (35.2%)

Table 4: Respondant's income - 2019

	N	Mean	SD	Median	Min	Max	Missing
Analysis sample	4,284	48,903	37,996	41,677	20.06	806,806	0
Total sample	8,358	48,308	35,741	42,021	20.06	806,806	27

### 3 Missing data analysis

#### 3.1 Missing patterns

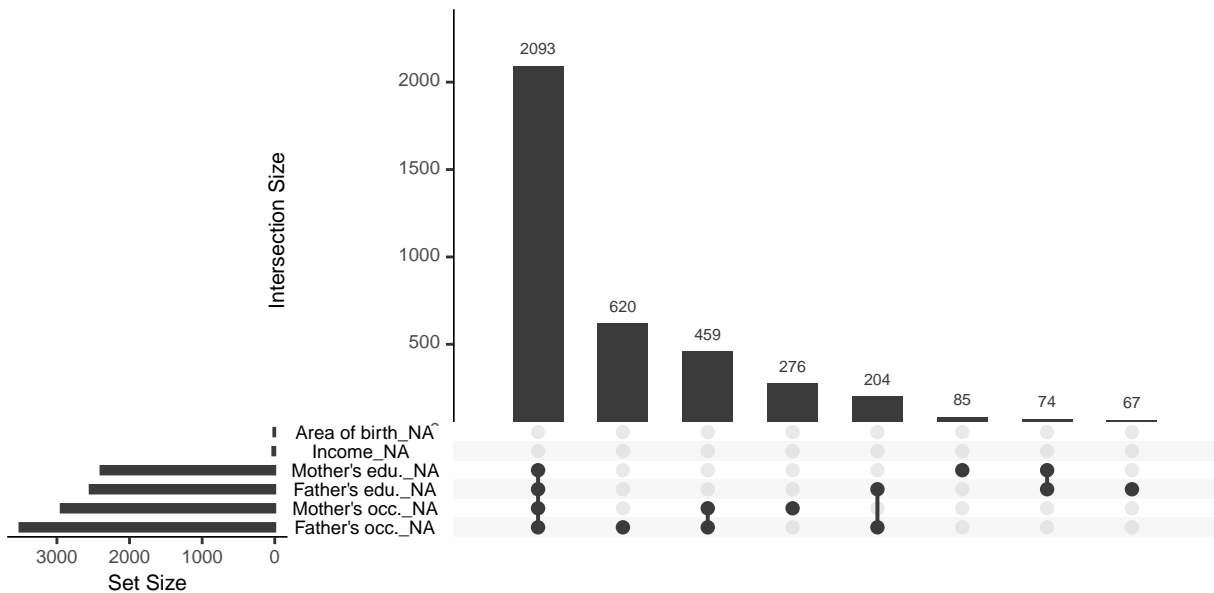


Figure 1: Missing patterns: *Left*: Marginal distribution of missing observations per variable. *Right*: Combination of missingness across cases

#### 3.2 Differences in expected total equivalized household income between samples

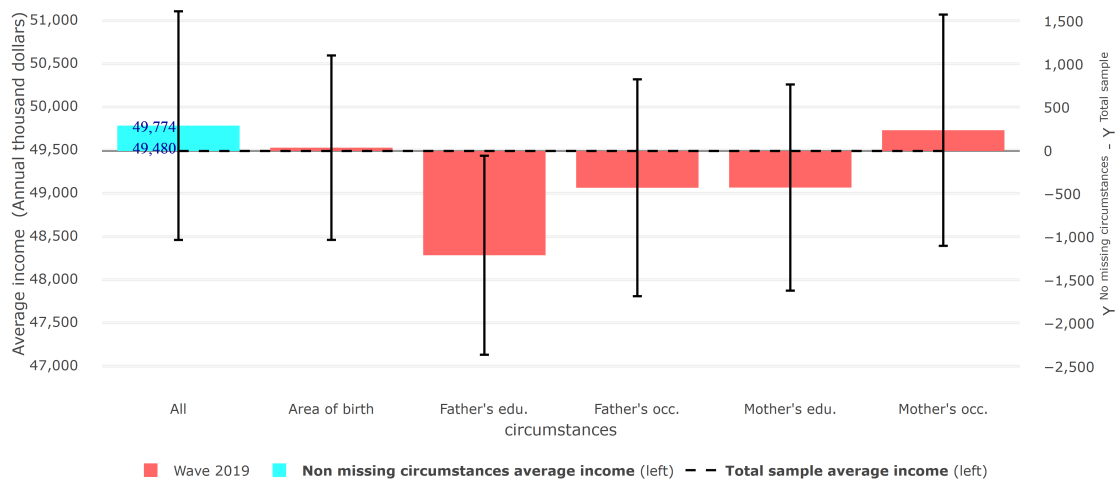


Figure 2: Differences in expected total equivalized household income between the sample with non-missing circumstances and the total sample

### 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	0.322	0.295	0.324	49,774
Wave 2019	Total sample	0.313	0.295	0.313	49,480

### 3.4 Differences in Gini coefficient between samples

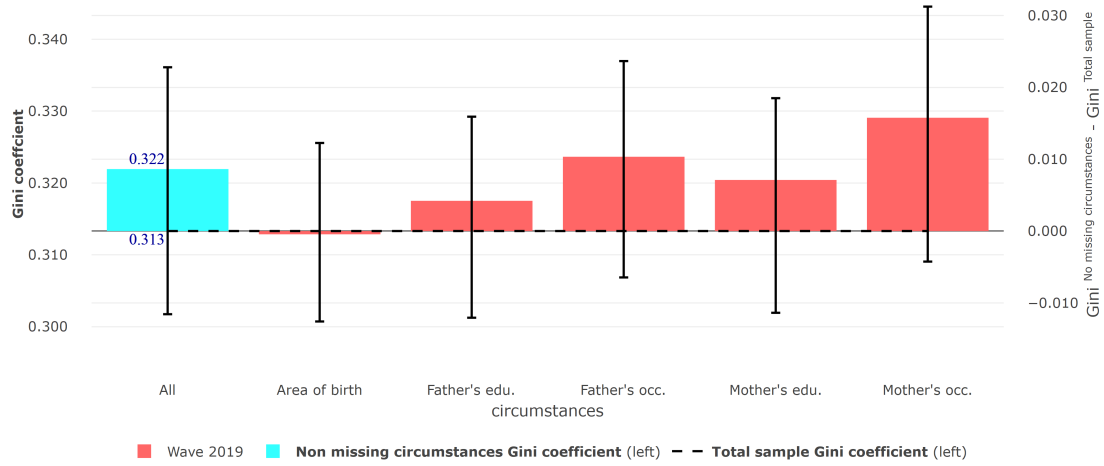


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample