

# Guatemala 2011

## 1 Survey Description

**Survey:** Encuesta Nacional sobre Condiciones de Vida (ENCOVI), carried out by the National Institute of Statistics of Guatemala (INE), for the year 2011.

**Link to the document:** <https://www.ine.gob.gt/ine/pobreza-menu/>

**Sample:** The survey was conducted between March 22th and August 27th 2011. The ENCOVI collects information from 8 regions (13,693 households and 66,480 individuals) and is nationally representative. The sample considered is restricted to adult individuals aged 17 to 56 with information about outcome and circumstances, 35,161 individuals in the total sample and 29,008 individuals in the analysis sample. Section 3 of this document describes the prevalence and pattern of missing data.

**Weights:** The weights are the inverse of the probability that the observation is included because of the sampling design. It could be understood as the number of individuals in the population that an individual represents in the sample according to the 1994 Population Census and demographic projections (*weights*).

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

**Circumstances:**

- Sex (female, male)
- Race ‘Ethnicity’ (indigenous, afro-descendant and others, described in Table 1)
- Region of birth ‘Birthplace’ ( 22 departments and foreign, described in Table 1)
- Father’s edu. (years of education (maximum 15), described in Table 2)
- Mother’s edu. (years of education (maximum 15), described in Table 2)

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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 - 2011

	Analysis sample	Total sample
	(N=29,008)	(N=35,161)
<b>Gender</b>		
0 Female	15,423 (53.2%)	18,648 (53.0%)
1 Male	13,585 (46.8%)	16,513 (47.0%)
<b>Ethnicity</b>		
1 White	19 (0.1%)	26 (0.1%)
2 Mix-race	18,492 (63.7%)	22,643 (64.4%)
3 Indigenous	10,467 (36.1%)	12,207 (34.7%)
4 Afro-descendant	30 (0.1%)	49 (0.1%)
Missing	0 (0%)	236 (0.7%)
<b>Region of birth</b>		
1 Guatemala	1,695 (5.8%)	2,326 (6.6%)
2 El progreso	1,519 (5.2%)	1,849 (5.3%)
3 Sacatepequez	1,719 (5.9%)	2,113 (6.0%)
4 Chimaltenango	1,473 (5.1%)	1,714 (4.9%)
5 Escuintla	1,175 (4.1%)	1,468 (4.2%)
6 Santa Rosa	960 (3.3%)	1,126 (3.2%)
7 Solola	1,081 (3.7%)	1,281 (3.6%)
8 Totonicapan	1,578 (5.4%)	1,850 (5.3%)
9 Quetzaltenango	1,572 (5.4%)	1,973 (5.6%)
10 Suchitepequez	1,067 (3.7%)	1,301 (3.7%)
11 Retalhuleu	1,698 (5.9%)	2,121 (6.0%)
12 San Marcos	1,271 (4.4%)	1,464 (4.2%)
13 Huehuetenango	1,154 (4.0%)	1,370 (3.9%)
14 Quiche	1,301 (4.5%)	1,553 (4.4%)
15 Baja Verapaz	972 (3.4%)	1,149 (3.3%)
16 Alta Verapaz	1,280 (4.4%)	1,534 (4.4%)
17 Peten	575 (2.0%)	670 (1.9%)
18 Izabal	1,403 (4.8%)	1,732 (4.9%)
19 Zacapa	1,653 (5.7%)	2,057 (5.9%)
20 Chiquimula	1,320 (4.6%)	1,550 (4.4%)
21 Jalapa	1,087 (3.7%)	1,223 (3.5%)
22 Jutiapa	1,328 (4.6%)	1,563 (4.4%)
23 Other country	127 (0.4%)	164 (0.5%)
Missing	0 (0%)	10 (0.0%)

Table 2: Parental education - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analysis sample - Mother's edu	29,008	2.136	3.350	0	0	15	0
Analysis sample - Father's edu	29,008	1.950	3.272	0	0	15	0
Total sample - Mother's edu	35,161	2.325	3.544	0	0	15	2,911
Total sample - Father's edu	35,161	1.979	3.303	0	0	15	4,310

Table 3: Respondant's income - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analysis sample	29,008	6,666	16,159	4,108	3.906	762,050	0
Total sample	35,161	6,686	15,282	4,189	3.906	762,050	0

### 3 Missing data analysis

#### 3.1 Missing patterns

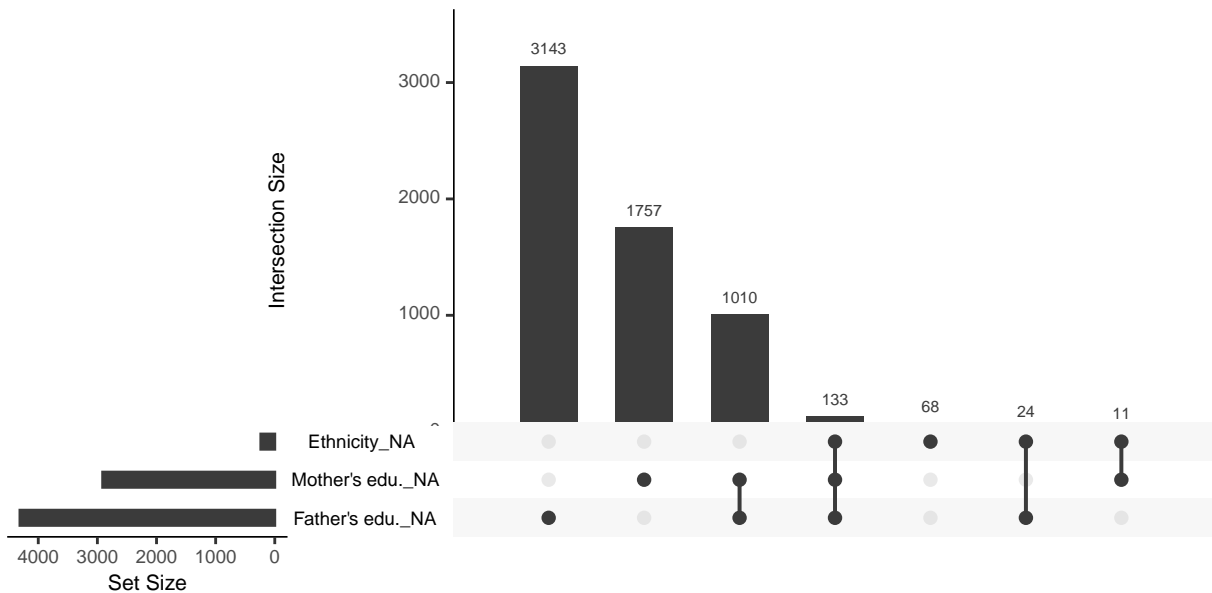


Figure 1: Missing patterns: *Left:* Marginal distribution of missing observations per variable. *Right:* Combination of missingness across cases

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

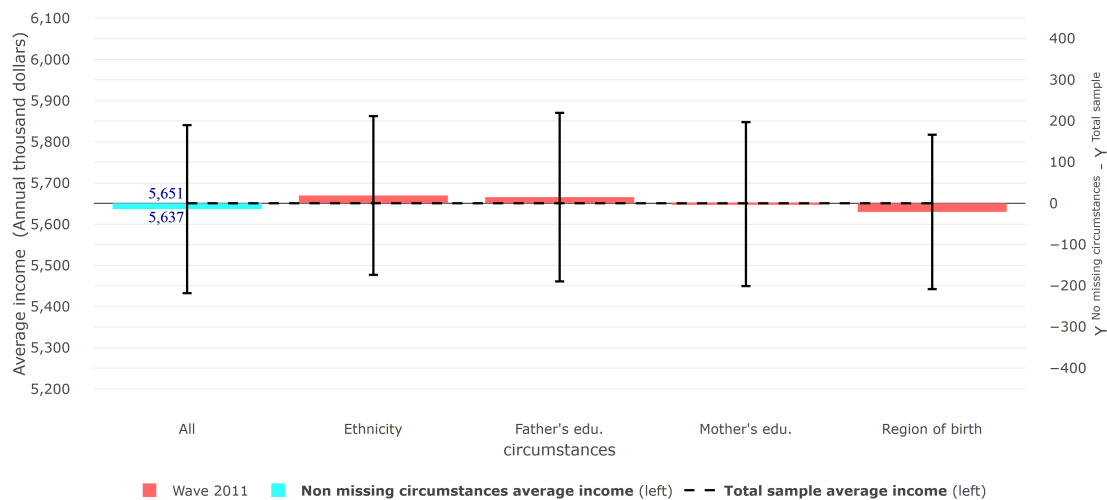


Figure 2: Differences in expected total equivalized household income between the sample with non-missing circumstances and the total sample

### 3.3 Gini coefficient

Table 4: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2011	Analysis sample	0.522	0.481	0.518	5,637
Wave 2011	Total sample	0.515	0.478	0.514	5,651

### 3.4 Differences in Gini coefficient between samples

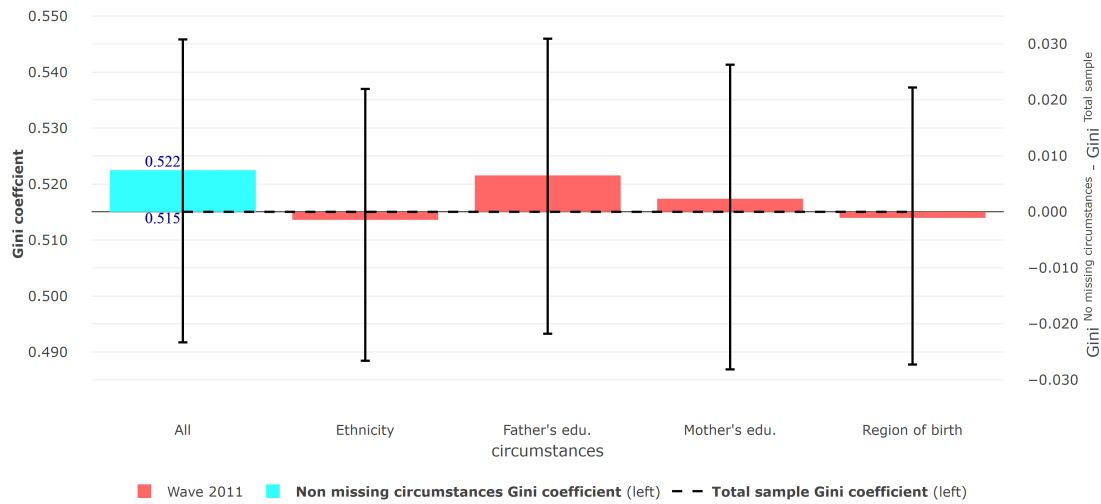


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample