#### Chile 2011

### 1 Survey Description

**Survey:** The Encuesta de Caracterización Socioeconómica Nacional (CASEN) carried out by the Ministry of Social Development and Family of Chile, for the year 2011.

Link to the document: http://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen-2011

**Sample:** The survey was conducted between October 17th 2011 and January 22th 2012. The CASEN collects information from 15 regions and is nationally representative. The sample considered is restricted to adult individuals aged 31 to 72 with information about outcome and circumstances, 145,318 individuals in the total sample and 64,756 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 adjusted by the projection of the number of individuals living in each household at each communa. It could be understood as the number of individuals in the population that an individual represents in the sample according to the 2002 Population Census for the rural area and the 2008 sampling frame (MM2008) for the urban area, ajusted by a non-response factor (weights).

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

#### Circumstances:

- Sex (female, male)
- Race (ethnicity: Aymara, Mapuche and others, described in Table 1)
- Region of birth 'Birthplace' (15 regions, 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)

 $<sup>^{1}</sup>$ Income variable was equivalized using the square root scale.

# 2 Descriptive Statistics

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

	Analisis sample	Total sample
	(N=64,756)	(N=145,318)
Gender	, ,	, ,
0 Female	38,540 (59.5%)	77,148 (53.1%)
1 Male	26,216 (40.5%)	68,170 (46.9%)
Ethnicity		
1 Aymara	$1,052 \ (1.6\%)$	$2,550 \ (1.8\%)$
2 Rapa Nui	17 (0.0%)	40 (0.0%)
3 Quechua	102~(0.2%)	236~(0.2%)
4 Mapuche	5,523~(8.5%)	$11,666 \ (8.0\%)$
5 Atacameño	$220 \ (0.3\%)$	479~(0.3%)
6 Coya	96 (0.1%)	204~(0.1%)
7 Kawaskar	32 (0.0%)	47~(0.0%)
8 Yagan	8 (0.0%)	17 (0.0%)
9 Diaguita	244 (0.4%)	587 (0.4%)
10 Other	$57,462 \ (88.7\%)$	$129,492 \ (89.1\%)$
Region of birth		
1 Tarapcá	$456 \ (0.7\%)$	888~(0.6%)
2 Antofagasta	$1,866 \ (2.9\%)$	$5{,}159~(3.6\%)$
3 Atacama	3,767 (5.8%)	$9,117 \ (6.3\%)$
4 Coquimbo	2,565 (4.0%)	$6,233 \ (4.3\%)$
5 Valparaíso	$3,971 \ (6.1\%)$	$9,303 \ (6.4\%)$
6 Libertador Gral.Bdo. O'Higgins	$3,883 \ (6.0\%)$	$9,783 \ (6.7\%)$
7 Maule	$4,036 \ (6.2\%)$	8,837 (6.1%)
8 Biobío	$5,504 \ (8.5\%)$	$12,532 \ (8.6\%)$
9 Araucanía	$7,627 \ (11.8\%)$	$16,685 \ (11.5\%)$
10 Los Lagos	$4,860 \ (7.5\%)$	$10,880 \ (7.5\%)$
12 Magallanes	$5,803 \ (9.0\%)$	$12,206 \ (8.4\%)$
13 Metropolitana de Santiago	2,587 (4.0%)	4,672 (3.2%)
14 Los Ríos	$6,695 \ (10.3\%)$	$12,856 \ (8.8\%)$
15 Arica and Perinacota	11,136 (17.2%)	26,167 (18.0%)

Table 2: Parental education - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample - Mother's edu	64,756	6.051	4.537	6	0	15	0
Analisis sample - Father's edu	64,756	6.462	4.754	6	0	15	0
Total sample - Mother's edu	145,318	6.408	4.591	6	0	15	57,005
Total sample - Father's edu	145,318	7.156	4.816	6	0	15	61,048

Table 3: Respondant's income - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample	64,756	15,244	22,653	8,857	16.59	1,375,649	0
Total sample	145,318	14,235	20,060	8,816	16.59	1,375,649	1,484

## 3 Missing data analysis

#### 3.1 Missing patterns

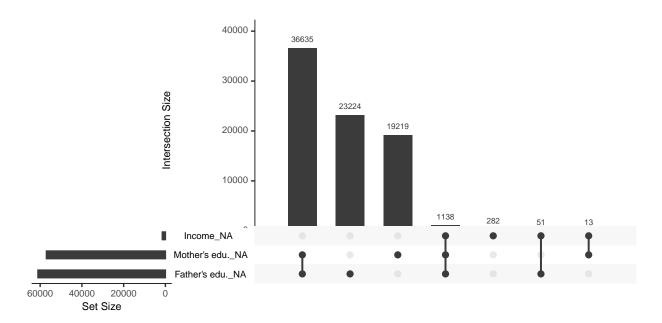


Figure 1: Missing patterns: Left: Marginal distribution of missing observations per variable. Right: Combination of missingness across cases

# 3.2 Differences in expected total equivalized household income between samples

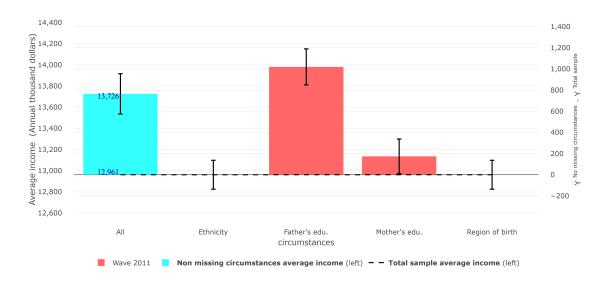


Figure 2: Differences in expected equivalized household income between the sample with non-missing circumstances and the total sample

#### 3.3 Gini coefficient

Table 4: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2011 Wave 2011	Analysis sample Total sample	$0.518 \\ 0.495$	0.49 0.47	0.510 0.484	13,726 12,961

# 3.4 Differences in Gini coefficient between samples

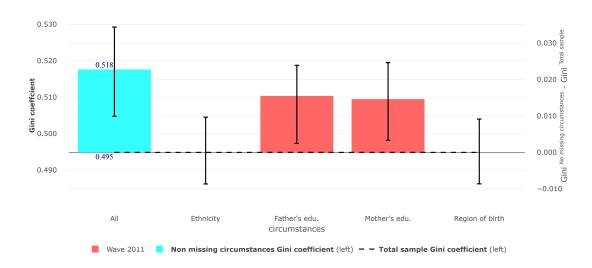


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample  $\alpha$