Peru 2011

1 Survey Description

Survey: Encuesta Nacional de Hogares sobre Condiciones de Vida y Pobreza (ENAHO), carried out by the National Institute of Statistics and Informatics (INEI) of Peru, for the year 2011.

Link to the document: http://webinei.inei.gob.pe/anda_inei/index.php/catalog/369

Sample: The survey was conducted between January and December 2011. The ENAHO collects information from 24 states and is nationally representative. The sample considered is restricted to adult individuals aged 19 to 62 with information about outcome and circumstances (44,558 individuals). Section 3 of this document describes the prevalence and pattern of missing data., 63,958 individuals in the total sample and 28,610 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 2007 Population Census and demographic projections (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' (indigenous, afro-descendant and others, described in Table 1)
- Region of birth 'Birthplace' (25 provinces, 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)

¹Income variable was equivalized using the square root scale.

2 Descriptive Statistics

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

	Analisis sample	Total sample
	(N=28,610)	(N=63,958)
Gender		
0 Female	9,119 (31.9%)	32,730 (51.2%)
1 Male	19,491 (68.1%)	31,228 (48.8%)
Ethnicity		
1 White	888 (3.1%)	1,997 (3.1%)
2 Mix-race	14,518 (50.7%)	29,904 (46.8%)
3 Indigenous	11,779 (41.2%)	22,534 (35.2%)
4 Afro-descendant	572 (2.0%)	993 (1.6%)
5 Other	853 (3.0%)	1,754 (2.7%)
Missing	0 (0%)	6,776 (10.6%)
Region of birth		
1 Amazonas-San Martin-Ucayali	2,584 (9.0%)	5,617 (8.8%)
2 Anchash	1,475 (5.2%)	3,252 (5.1%)
3 Apurimac	995 (3.5%)	2,112 (3.3%)
4 Arequipa	977 (3.4%)	2,261 (3.5%)
5 Ayacucho	$1,296 \ (4.5\%)$	2,829 (4.4%)
6 Cajamarca	$1,982 \ (6.9\%)$	4,507 (7.0%)
7 Cusco-Madre de Dios	679 (2.4%)	$1,642 \ (2.6\%)$
8 Huancavelica	$1,412 \ (4.9\%)$	$3,072 \ (4.8\%)$
9 Huánuco	$1,082 \ (3.8\%)$	2,354 (3.7%)
10 Ica	$1,217 \ (4.3\%)$	$2,818 \ (4.4\%)$
11 Junin-Pasco	2,217 (7.7%)	$4,365 \ (6.8\%)$
12 La Libertad	$1,424 \ (5.0\%)$	$2,880 \ (4.5\%)$
13 Lambayeque	$1,135 \ (4.0\%)$	$2,622 \ (4.1\%)$
14 Lima	$1,210 \ (4.2\%)$	2,610 (4.1%)
15 Callao	$2,378 \ (8.3\%)$	$6,475 \ (10.1\%)$
16 Loreto	$1,263 \ (4.4\%)$	$3,160 \ (4.9\%)$
17 Moquegua-Tacna	$1,136 \ (4.0\%)$	$2,314 \ (3.6\%)$
18 Piura-Tumbes	$2,538 \ (8.9\%)$	$5,352 \ (8.4\%)$
19 Puno	$1,610 \ (5.6\%)$	$3,618 \ (5.7\%)$
Missing	0 (0%)	98~(0.2%)

Table 2: Parental education - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample - Mother's edu	28,610	4.594	4.697	3	0	15	0
Analisis sample - Father's edu	28,610	6.160	4.815	5	0	15	0
Total sample - Mother's edu	63,958	4.859	4.822	3	0	15	28,001
Total sample - Father's edu	63,958	6.377	4.866	6	0	15	32,380

Table 3: Respondant's income - 2011

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample	28,610	9,174	9,360	6,998	64.25	231,601	0
Total sample	$63,\!958$	9,496	9,322	$7,\!327$	63.11	231,601	0

3 Missing data analysis

3.1 Missing patterns

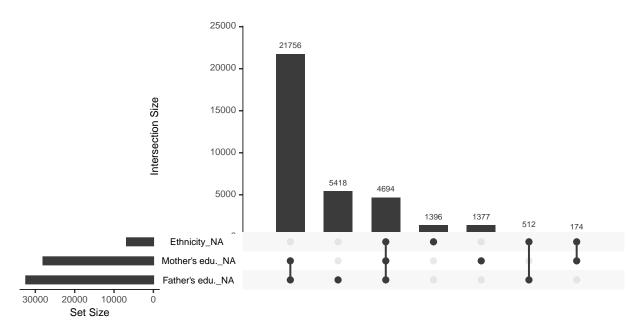


Figure 1: Missing patterns: Left: Marginal distribution of missing observations per variable. Right: Combination of missingness across cases

3.2 Differences in expected total equivalized household income between samples

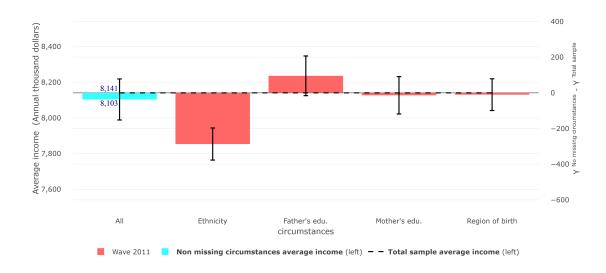


Figure 2: Differences in expected equivalized household income between the sample with non-missing circumstances and the total sample

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 Total sample	0.429	0.42	0.433	8,103
Wave 2011		0.424	0.42	0.429	8,141

3.4 Differences in Gini coefficient between samples

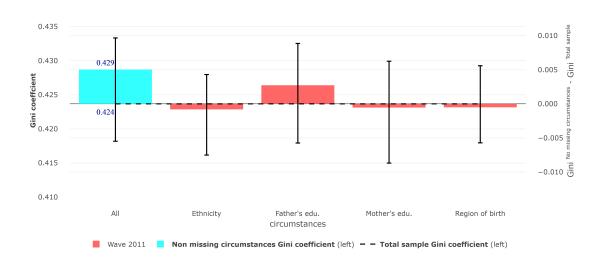


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample α