#### Peru 2013

### 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 2013.

Link to the document: http://webinei.inei.gob.pe/anda\_inei/index.php/catalog/368

Sample: The survey was conducted between January and December 2013. The ENAHO collects information from 24 states and is nationally representative. The sample considered is restricted to adult individuals aged 19 to 63 with information about outcome and circumstances (52,508 individuals). Section 3 of this document describes the prevalence and pattern of missing data., 77,749 individuals in the total sample and 34,717 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.<sup>1</sup>

#### 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)

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

# 2 Descriptive Statistics

Table 1: Respondant's socio-demographics -  $2013\,$ 

	Analisis sample	Total sample
	(N=34,717)	(N=77,749)
Gender		
0 Female	11,123 (32.0%)	39,929 (51.4%)
1 Male	23,594 (68.0%)	37,820 (48.6%)
Ethnicity		
1 White	1,440 (4.1%)	3,354 (4.3%)
2 Mix-race	19,433 (56.0%)	
3 Indigenous	11,233 (32.4%)	23,979 (30.8%)
4 Afro-descendant	523 (1.5%)	1,136 (1.5%)
5 Other	2,088 (6.0%)	4,502 (5.8%)
Missing	0 (0%)	4,531 (5.8%)
Region of birth		
1 Amazonas-San Martin-Ucayali	2,918 (8.4%)	6,594 (8.5%)
2 Anchash	1,770 (5.1%)	3,772 (4.9%)
3 Apurimac	1,168 (3.4%)	$2,536 \ (3.3\%)$
4 Arequipa	1,305 (3.8%)	$2,935 \ (3.8\%)$
5 Ayacucho	$1,391 \ (4.0\%)$	$3,298 \ (4.2\%)$
6 Cajamarca	$2,497 \ (7.2\%)$	$5,404 \ (7.0\%)$
7 Cusco-Madre de Dios	$756 \ (2.2\%)$	$1,878 \ (2.4\%)$
8 Huancavelica	$1,783 \ (5.1\%)$	$3,882 \ (5.0\%)$
9 Huánuco	$1,314 \ (3.8\%)$	$2,941 \ (3.8\%)$
10 Ica	$1,546 \ (4.5\%)$	3,366 (4.3%)
11 Junin-Pasco	$2,535 \ (7.3\%)$	$5,085 \ (6.5\%)$
12 La Libertad	1,782 (5.1%)	3,599 (4.6%)
13 Lambayeque	$1,453 \ (4.2\%)$	$3,462 \ (4.5\%)$
14 Lima	$1,588 \ (4.6\%)$	$3,471 \ (4.5\%)$
15 Callao	$3,531\ (10.2\%)$	8,625 (11.1%)
16 Loreto	$1,486 \ (4.3\%)$	$3,830 \ (4.9\%)$
17 Moquegua-Tacna	$1,144 \ (3.3\%)$	$2,480 \ (3.2\%)$
18 Piura-Tumbes	$2,756 \ (7.9\%)$	$6,132 \ (7.9\%)$
19 Puno	$1,994 \ (5.7\%)$	$4,326 \ (5.6\%)$
Missing	0 (0%)	133~(0.2%)

Table 2: Parental education - 2013

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample - Mother's edu	34,717	4.789	4.756	3	0	15	0
Analisis sample - Father's edu	34,717	6.308	4.883	6	0	15	0
Total sample - Mother's edu	77,749	4.928	4.827	3	0	15	33,881
Total sample - Father's edu	77,749	6.362	4.891	6	0	15	39,427

Table 3: Respondant's income - 2013

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample	34,717	9,882	9,293	7,698	75.848	184,760	0
Total sample	77,749	9,885	9,200	7,736	1.147	184,760	0

## 3 Missing data analysis

#### 3.1 Missing patterns

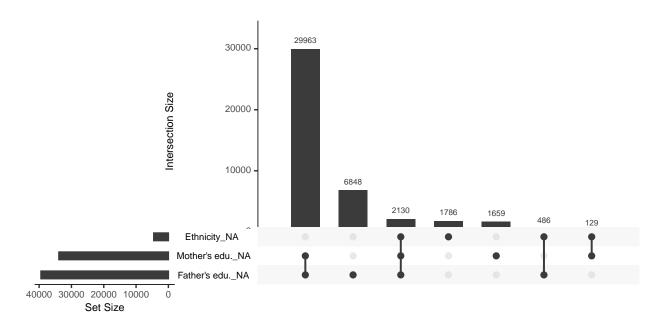


Figure 1: Missing patterns: Left: Marginal distribution of missing observations per variable. Right: Combination of missingness across cases

# 3.2 Differences in expected total equivalized household income between samples

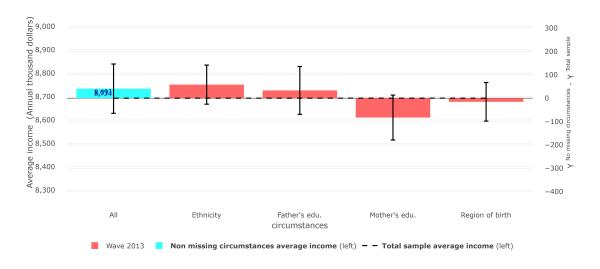


Figure 2: Differences in expected equivalized household income between the sample with non-missing circumstances and the total sample

#### 3.3 Gini coefficient

Table 4: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2013	Analysis sample Total sample	0.420	0.422	0.432	8,734
Wave 2013		0.415	0.422	0.428	8,693

# 3.4 Differences in Gini coefficient between samples

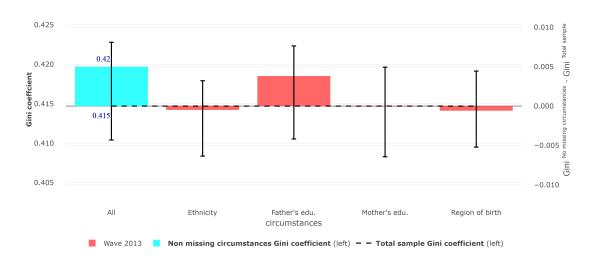


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample  $\alpha$