#### South Africa 2012

# 1 Survey Description

**Survey:** The National Income Dynamics Study (NIDS, wave 3), carried out by SALDRU (University of Cape Town).

Link to the document: https://www.saldru.uct.ac.za/surveys/national-income-dynamics-survey-nids/

**Sample:** The Wave 3 of the NIDS is a nationally representative survey carried out between April and December 2012. It collects information about 32500 households of all ages.. There are 16,420 individuals in the total sample and 5,392 individuals in the analysis sample. Section 3 of this document describes the prevalence and pattern of missing data.

Weights: A stratified, two-stage cluster sample design was employed. The data collected was then reweighted to take into account the Census 2011 geographic data.

Outcome: The outcome variables are monthly equivalized household disposable total ( $w3\_hhincome$ ) income in dollars PPP 2017.<sup>1</sup>

#### Circumstances:

- Sex (female, male)
- Ethnicity (several ethnic groups, 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)

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

# 2 Descriptive Statistics

Table 1: Respondant's socio-demographics -  $2012\,$ 

Analisis sample	Total sample
(N=5,392)	(N=16,420)
3,386 (62.8%)	9,926~(60.5%)
2,006 (37.2%)	$6,494 \ (39.5\%)$
$4,399 \ (81.6\%)$	$13,081 \ (79.7\%)$
77 (1.4%)	175 (1.1%)
$620 \ (11.5\%)$	$2,268 \ (13.8\%)$
296 (5.5%)	506 (3.1%)
0 (0%)	390 (2.4%)
	(N=5,392) 3,386 (62.8%) 2,006 (37.2%) 4,399 (81.6%) 77 (1.4%) 620 (11.5%)

Table 2: Parental education - 2012

	Analisis sample	Total sample			
	(N=5,392)	(N=16,420)			
Father's education (levels)					
0 Zero	3,524 (65.4%)	5,919 (36.0%)			
1 Grade 1	29 (0.5%)	39 (0.2%)			
2 Grade 2	60 (1.1%)	103(0.6%)			
3 Grade 3	117(2.2%)	195(1.2%)			
4 Grade 4	146 (2.7%)	247 (1.5%)			
5  Grade  5	119(2.2%)	187 (1.1%)			
6 Grade 6	122(2.3%)	209(1.3%)			
7 Grade 7	165 (3.1%)	302 (1.8%)			
8 Grade 8	366 (6.8%)	630 (3.8%)			
9 Grade 9	80 (1.5%)	167(1.0%)			
10  Grade  10	199 (3.7%)	340 (2.1%)			
11 Grade 11	56 (1.0%)	109~(0.7%)			
12  Grade  12	$409 \ (7.6\%)$	$724 \ (4.4\%)$			
Missing	0 (0%)	7,249 (44.1%)			
Mother's educ	cation (levels)				
0  Zero	3,435 (63.7%)	5,731 (34.9%)			
1 Grade 1	29 (0.5%)	52 (0.3%)			
2 Grade 2	67 (1.2%)	130(0.8%)			
3  Grade  3	107(2.0%)	$204\ (1.2\%)$			
4  Grade  4	170 (3.2%)	344 (2.1%)			
5  Grade  5	$136 \ (2.5\%)$	$264 \ (1.6\%)$			
6  Grade  6	168 (3.1%)	$331\ (2.0\%)$			
7 Grade 7	211 (3.9%)	444 (2.7%)			
8 Grade 8	399 (7.4%)	$720 \ (4.4\%)$			
9 Grade 9	$71 \ (1.3\%)$	169 (1.0%)			
10  Grade  10	203 (3.8%)	399 (2.4%)			
11 Grade 11	58 (1.1%)	153~(0.9%)			
12  Grade  12	338~(6.3%)	637 (3.9%)			
Missing	0 (0%)	6,842 (41.7%)			

Table 4: Respondant's income - 2012

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample	5,392	914.5	1,546	373.6	2.187	22,332	0
Total sample	16,420	732.6	1,278	352.7	2.187	22,332	0

Table 3: Parental occupation - 2012

	Analisis sample	Total sample			
	(N=5,392)	(N=16,420)			
Father's occupation (ISCO)					
0 Armed forces	0 (0%)	2(0.0%)			
1 Managers	22 (0.4%)	47(0.3%)			
2 Professionals	196 (3.6%)	365 (2.2%)			
3 Technicians	48 (0.9%)	86~(0.5%)			
4 Clerical support	52 (1.0%)	93~(0.6%)			
5 Service/Sales	128(2.4%)	323(2.0%)			
6 Skilled	5 (0.1%)	12 (0.1%)			
7 Craft	46~(0.9%)	$112 \ (0.7\%)$			
8 Operators	9~(0.2%)	48~(0.3%)			
9 Elementary	$1,303\ (24.2\%)$	$3,034 \ (18.5\%)$			
10 Others	$3,583 \ (66.5\%)$	$6,884 \ (41.9\%)$			
Missing	0 (0%)	$5,414 \ (33.0\%)$			
Mother's occupation	on (ISCO)				
0 Armed forces	46 (0.9%)	72 (0.4%)			
1 Managers	$126 \ (2.3\%)$	$245 \ (1.5\%)$			
2 Professionals	$140 \ (2.6\%)$	267 (1.6%)			
3 Technicians	79 (1.5%)	147~(0.9%)			
4 Clerical support	43~(0.8%)	87~(0.5%)			
5 Service/Sales	291 (5.4%)	576 (3.5%)			
6 Skilled	$63 \ (1.2\%)$	113~(0.7%)			
7 Craft	505 (9.4%)	$1,101 \ (6.7\%)$			
8 Operators	$646 \ (12.0\%)$	$1,370 \ (8.3\%)$			
9 Elementary	$1,155\ (21.4\%)$	$2,041 \ (12.4\%)$			
10 Others	$2,298 \ (42.6\%)$	$4,058 \ (24.7\%)$			
Missing	0 (0%)	6,343 (38.6%)			

## 3 Missing data analysis

#### 3.1 Missing patterns

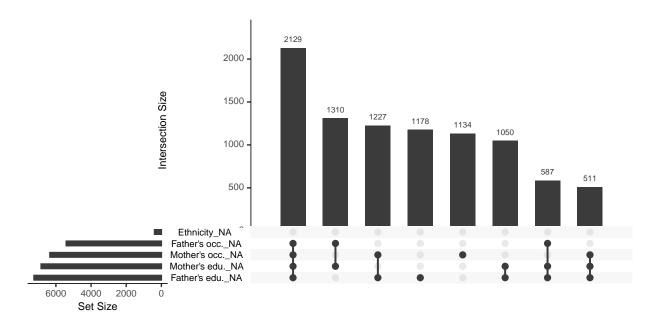


Figure 1: Missing patterns: Left: Marginal distribution of missing observations per variable. Right: Combination of missingness across cases

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

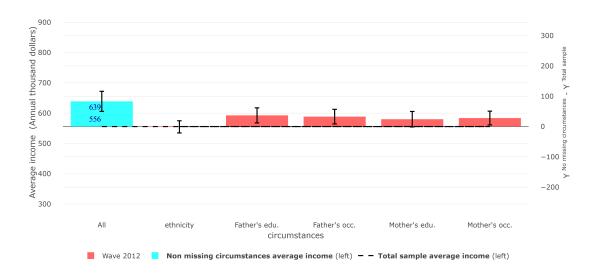


Figure 2: Differences in expected equivalized household income between the sample with non-missing circumstances and the total sample

#### 3.3 Gini coefficient

Table 5: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2012	Analysis sample	0.621	0.560	$0.601 \\ 0.552$	639
Wave 2012	Total sample	0.590	0.528		556

# 3.4 Differences in Gini coefficient between samples

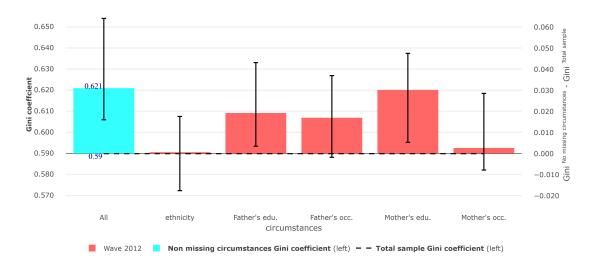


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample  $\frac{1}{2}$