South Africa 2017

1 Survey Description

Survey: The National Income Dynamics Study (NIDS, wave 5), 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 5 of the NIDS is a nationally representative survey carried out in 2017. It collects information about 39400 households of all ages. Data collection for this wave included a sample "top-up" to increase the number of white, Indian and high income respondents.. There are 21,995 individuals in the total sample and 7,460 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. Weights were also corrected to include the oversample of rich households.

Outcome: The outcome variables are monthly equivalized household disposable total ($w5_hhincome$) income in dollars PPP 2017.¹

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)

 $^{^{1}}$ Income variable was equivalized using the square root scale.

2 Descriptive Statistics

Table 1: Respondant's socio-demographics - $2017\,$

	Analisis sample	Total sample		
	(N=7,460)	(N=21,995)		
Gender				
0 Female	$4,730 \ (63.4\%)$	$13,032\ (59.2\%)$		
1 Male	$2,730 \ (36.6\%)$	$8,963 \ (40.8\%)$		
Ethnicity				
1 African	$5,852 \ (78.4\%)$	$16,575 \ (75.4\%)$		
2 Asian/Indian	$138 \ (1.8\%)$	$350 \ (1.6\%)$		
3 Coloured	$856 \ (11.5\%)$	$2,832\ (12.9\%)$		
4 White	$614 \ (8.2\%)$	$1,140 \ (5.2\%)$		
Missing	0 (0%)	$1,098 \ (5.0\%)$		

Table 2: Parental education - 2017

	Analisis sample	Total sample		
	(N=7,460)	(N=21,995)		
Father's education (levels)				
0 Zero	4,379 (58.7%)	6,426 (29.2%)		
1 Grade 1	49 (0.7%)	75~(0.3%)		
2 Grade 2	$112 \ (1.5\%)$	202 (0.9%)		
3 Grade 3	168 (2.3%)	267 (1.2%)		
4 Grade 4	182 (2.4%)	$341 \ (1.6\%)$		
5 Grade 5	$170 \ (2.3\%)$	$311 \ (1.4\%)$		
6 Grade 6	194 (2.6%)	$341 \ (1.6\%)$		
7 Grade 7	240 (3.2%)	471 (2.1%)		
8 Grade 8	540 (7.2%)	880 (4.0%)		
9 Grade 9	$132\ (1.8\%)$	$264 \ (1.2\%)$		
10 Grade 10	$323 \ (4.3\%)$	$570 \ (2.6\%)$		
11 Grade 11	$115 \ (1.5\%)$	$250 \ (1.1\%)$		
12 Grade 12	$856 \ (11.5\%)$	$1,562 \ (7.1\%)$		
Missing	0 (0%)	$10,035\ (45.6\%)$		
Mother's educ	cation (levels)			
0 Zero	$4,198 \ (56.3\%)$	$5,771\ (26.2\%)$		
1 Grade 1	43~(0.6%)	62~(0.3%)		
2 Grade 2	107 (1.4%)	167~(0.8%)		
3 Grade 3	174 (2.3%)	297 (1.4%)		
4 Grade 4	248 (3.3%)	$418 \ (1.9\%)$		
5 Grade 5	$198 \ (2.7\%)$	$358 \ (1.6\%)$		
6 Grade 6	223 (3.0%)	$415 \ (1.9\%)$		
7 Grade 7	312 (4.2%)	595~(2.7%)		
8 Grade 8	$571 \ (7.7\%)$	$1,015 \ (4.6\%)$		
9 Grade 9	$137 \ (1.8\%)$	$302 \ (1.4\%)$		
10 Grade 10	$345 \ (4.6\%)$	659 (3.0%)		
11 Grade 11	$136 \ (1.8\%)$	$379 \ (1.7\%)$		
12 Grade 12	$768 \ (10.3\%)$	$1,371 \ (6.2\%)$		
Missing	0 (0%)	10,186 (46.3%)		

Table 4: Respondant's income - 2017

	N	Mean	SD	Median	Min	Max	Missing
Analisis sample	7,460	1,119	2,560	480.7	6.926	208,380	0
Total sample	21,995	961	$2,\!265$	441.1	6.926	$208,\!380$	0

Table 3: Parental occupation - 2017

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	Analisis sample	Total sample
	(N=7,460)	(N=21,995)
Father's occupation	n (ISCO)	
0 Armed forces	1(0.0%)	4(0.0%)
1 Managers	41~(0.5%)	77 (0.4%)
2 Professionals	418 (5.6%)	684 (3.1%)
3 Technicians	103 (1.4%)	173~(0.8%)
4 Clerical support	$124 \ (1.7\%)$	191~(0.9%)
5 Service/Sales	219 (2.9%)	502 (2.3%)
6 Skilled	16 (0.2%)	29 (0.1%)
7 Craft	96 (1.3%)	203 (0.9%)
8 Operators	19 (0.3%)	55~(0.3%)
9 Elementary	$1,771 \ (23.7\%)$	$3,770 \ (17.1\%)$
10 Others	$4,652 \ (62.4\%)$	8,037 (36.5%)
Missing	0 (0%)	8,270 (37.6%)
Mother's occupation	on (ISCO)	
0 Armed forces	45 (0.6%)	88 (0.4%)
1 Managers	189(2.5%)	294~(1.3%)
2 Professionals	299 (4.0%)	469 (2.1%)
3 Technicians	154 (2.1%)	267(1.2%)
4 Clerical support	65 (0.9%)	113~(0.5%)
5 Service/Sales	461 (6.2%)	869 (4.0%)
6 Skilled	67 (0.9%)	126~(0.6%)
7 Craft	779 (10.4%)	1,503 (6.8%)
8 Operators	887 (11.9%)	1,867 (8.5%)
9 Elementary	1,555 (20.8%)	2,660 (12.1%)
10 Others	2,959 (39.7%)	$5,120\ (23.3\%)$
Missing	0 (0%)	8,619 (39.2%)

3 Missing data analysis

3.1 Missing patterns

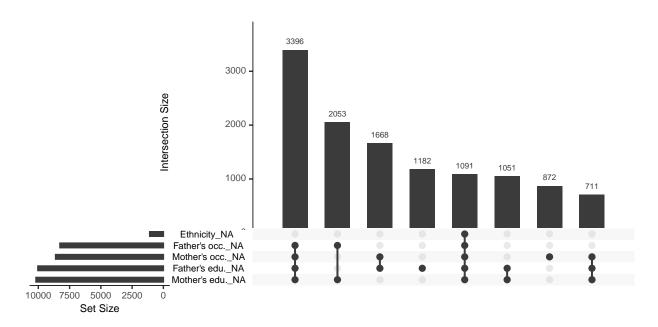


Figure 1: Missing patterns: Left: Marginal distribution of missing observations per variable. Right: Combination of missingness across cases

3.2 Differences in expected total equivalized household income between samples

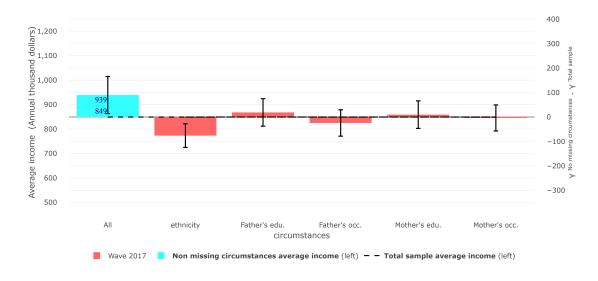


Figure 2: Differences in expected equivalized household income between the sample with non-missing circumstances and the total sample

3.3 Gini coefficient

Table 5: Gini coefficient in analysis sample and total sample

Wave	Sample	Gini	Lower bound	Upper bound	Average income
Wave 2017	Analysis sample Total sample	0.611	0.595	0.669	939
Wave 2017		0.598	0.585	0.624	849

3.4 Differences in Gini coefficient between samples

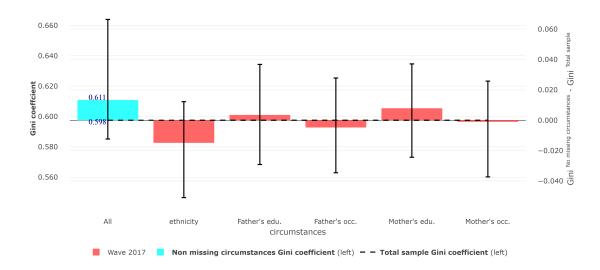


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample $\frac{1}{2}$