

South Africa 2015

1 Survey Description

Survey: The National Income Dynamics Study (NIDS, wave 4), 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 4 of the NIDS is a nationally representative survey carried out between December 2014 and July 2015. It collects information about 37300 households of all ages.. There are 20,093 individuals in the total sample and 5,841 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 (*w4_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)

¹Income variable was equivalized using the square root scale.

2 Descriptive Statistics

Table 1: Respondant's socio-demographics - 2015

| | Analysis sample | Total sample |
|------------------|-----------------|----------------|
| | (N=5,841) | (N=20,093) |
| Gender | | |
| 0 Female | 3,545 (60.7%) | 11,903 (59.2%) |
| 1 Male | 2,296 (39.3%) | 8,190 (40.8%) |
| Ethnicity | | |
| 1 African | 4,831 (82.7%) | 16,215 (80.7%) |
| 2 Asian/Indian | 51 (0.9%) | 193 (1.0%) |
| 3 Coloured | 738 (12.6%) | 2,758 (13.7%) |
| 4 White | 221 (3.8%) | 488 (2.4%) |
| Missing | 0 (0%) | 439 (2.2%) |

Table 2: Parental education - 2015

| | Analisis sample | Total sample |
|------------------------------------|-----------------|---------------|
| | (N=5,841) | (N=20,093) |
| Father's education (levels) | | |
| 0 Zero | 3,445 (59.0%) | 6,241 (31.1%) |
| 1 Grade 1 | 36 (0.6%) | 59 (0.3%) |
| 2 Grade 2 | 73 (1.2%) | 149 (0.7%) |
| 3 Grade 3 | 148 (2.5%) | 235 (1.2%) |
| 4 Grade 4 | 186 (3.2%) | 335 (1.7%) |
| 5 Grade 5 | 158 (2.7%) | 293 (1.5%) |
| 6 Grade 6 | 179 (3.1%) | 331 (1.6%) |
| 7 Grade 7 | 220 (3.8%) | 412 (2.1%) |
| 8 Grade 8 | 422 (7.2%) | 735 (3.7%) |
| 9 Grade 9 | 122 (2.1%) | 227 (1.1%) |
| 10 Grade 10 | 216 (3.7%) | 414 (2.1%) |
| 11 Grade 11 | 113 (1.9%) | 218 (1.1%) |
| 12 Grade 12 | 523 (9.0%) | 1,041 (5.2%) |
| Missing | 0 (0%) | 9,403 (46.8%) |
| Mother's education (levels) | | |
| 0 Zero | 3,282 (56.2%) | 5,703 (28.4%) |
| 1 Grade 1 | 26 (0.4%) | 60 (0.3%) |
| 2 Grade 2 | 102 (1.7%) | 185 (0.9%) |
| 3 Grade 3 | 151 (2.6%) | 289 (1.4%) |
| 4 Grade 4 | 221 (3.8%) | 463 (2.3%) |
| 5 Grade 5 | 185 (3.2%) | 380 (1.9%) |
| 6 Grade 6 | 204 (3.5%) | 466 (2.3%) |
| 7 Grade 7 | 287 (4.9%) | 631 (3.1%) |
| 8 Grade 8 | 420 (7.2%) | 868 (4.3%) |
| 9 Grade 9 | 148 (2.5%) | 333 (1.7%) |
| 10 Grade 10 | 260 (4.5%) | 566 (2.8%) |
| 11 Grade 11 | 119 (2.0%) | 327 (1.6%) |
| 12 Grade 12 | 436 (7.5%) | 862 (4.3%) |
| Missing | 0 (0%) | 8,960 (44.6%) |

Table 4: Respondant's income - 2015

| | N | Mean | SD | Median | Min | Max | Missing |
|-----------------|--------|-------|-------|--------|--------|---------|---------|
| Analisis sample | 5,841 | 897.0 | 1,706 | 444.7 | 0.2162 | 43,090 | 0 |
| Total sample | 20,093 | 761.4 | 2,117 | 397.9 | 0.2162 | 111,544 | 0 |

Table 3: Parental occupation - 2015

| | Analysis sample | Total sample |
|-----------------------------------|-----------------|---------------|
| | (N=5,841) | (N=20,093) |
| Father's occupation (ISCO) | | |
| 0 Armed forces | 0 (0%) | 4 (0.0%) |
| 1 Managers | 23 (0.4%) | 59 (0.3%) |
| 2 Professionals | 236 (4.0%) | 459 (2.3%) |
| 3 Technicians | 57 (1.0%) | 116 (0.6%) |
| 4 Clerical support | 69 (1.2%) | 135 (0.7%) |
| 5 Service/Sales | 267 (4.6%) | 587 (2.9%) |
| 6 Skilled | 10 (0.2%) | 23 (0.1%) |
| 7 Craft | 99 (1.7%) | 211 (1.1%) |
| 8 Operators | 14 (0.2%) | 43 (0.2%) |
| 9 Elementary | 1,634 (28.0%) | 3,699 (18.4%) |
| 10 Others | 3,432 (58.8%) | 6,677 (33.2%) |
| Missing | 0 (0%) | 8,080 (40.2%) |
| Mother's occupation (ISCO) | | |
| 0 Armed forces | 36 (0.6%) | 65 (0.3%) |
| 1 Managers | 99 (1.7%) | 164 (0.8%) |
| 2 Professionals | 198 (3.4%) | 352 (1.8%) |
| 3 Technicians | 92 (1.6%) | 167 (0.8%) |
| 4 Clerical support | 52 (0.9%) | 99 (0.5%) |
| 5 Service/Sales | 391 (6.7%) | 760 (3.8%) |
| 6 Skilled | 51 (0.9%) | 82 (0.4%) |
| 7 Craft | 672 (11.5%) | 1,396 (6.9%) |
| 8 Operators | 846 (14.5%) | 1,720 (8.6%) |
| 9 Elementary | 1,460 (25.0%) | 2,450 (12.2%) |
| 10 Others | 1,944 (33.3%) | 3,385 (16.8%) |
| Missing | 0 (0%) | 9,453 (47.0%) |

3 Missing data analysis

3.1 Missing patterns

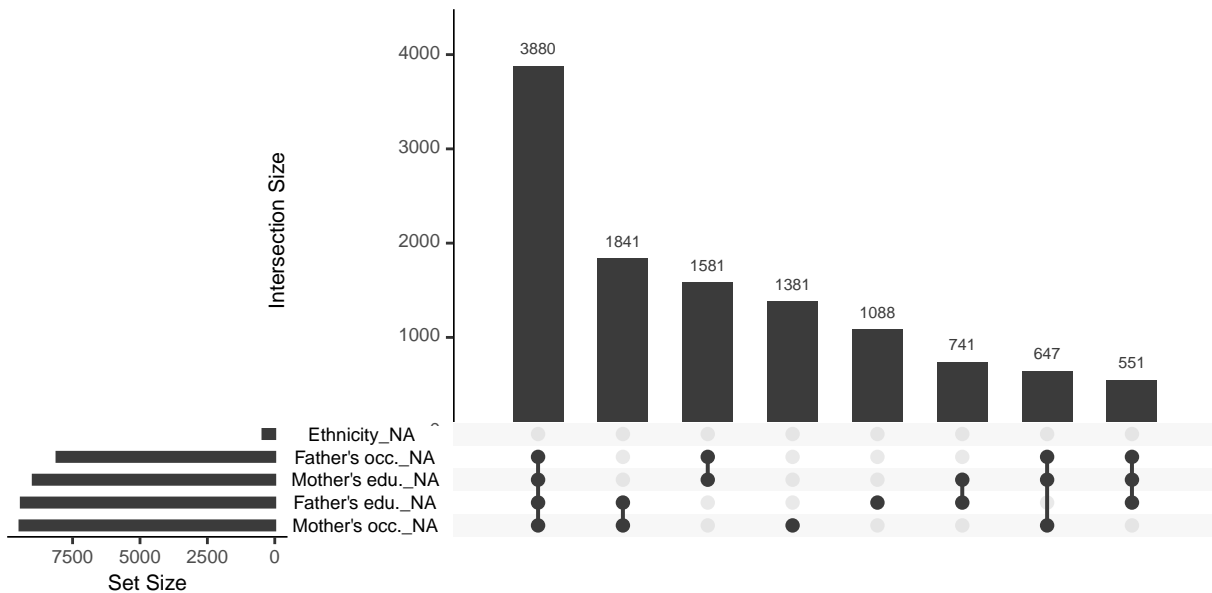


Figure 1: Missing patterns: *Left*: Marginal distribution of missing observations per variable. *Right*: Combination of missingness across cases

3.2 Differences in expected total equivalized household income between samples

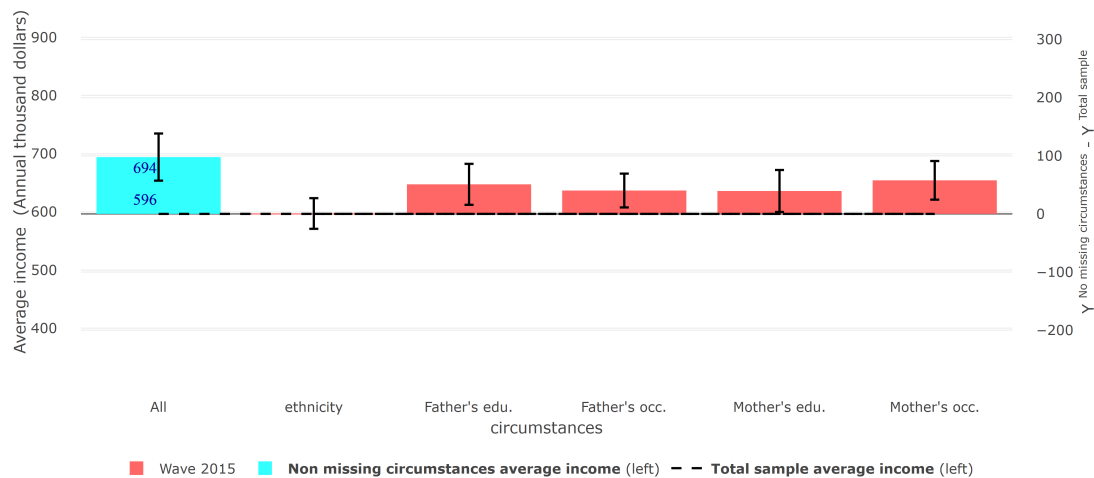


Figure 2: Differences in expected total equivalized household income between the sample with non-missing circumstances and the total sample

3.3 Gini coefficient

Table 5: Gini coefficient in analysis sample and total sample

| Wave | Sample | Gini | Lower bound | Upper bound | Average income |
|-----------|-----------------|-------|-------------|-------------|----------------|
| Wave 2015 | Analysis sample | 0.577 | 0.522 | 0.573 | 694 |
| Wave 2015 | Total sample | 0.565 | 0.501 | 0.536 | 596 |

3.4 Differences in Gini coefficient between samples

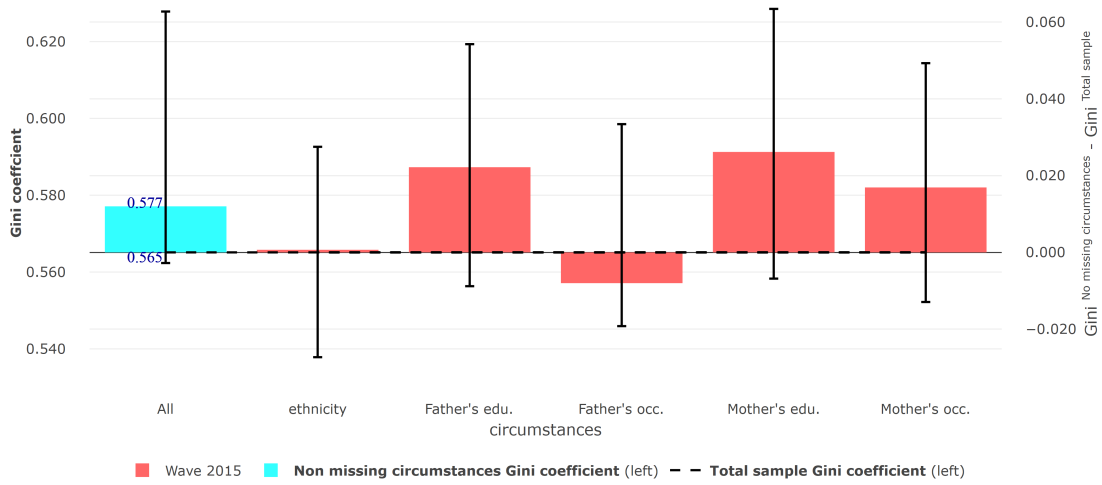


Figure 3: Differences in Gini coefficient between the sample with non-missing circumstances and the total sample