

# South Africa - OHS-LFS Consistent Series Weights 1994-2007

**Branson, Nicola - University of Cape Town**

Report generated on: March 10, 2014

Visit our data catalog at: <http://www.datafirst.uct.ac.za/dataportal/index.php>

# Overview

## Identification

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### ID NUMBER

zaf-datafirst-olcs-1994-2007-v0411

## Version

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### VERSION DESCRIPTION

Version 0411: Edited, anonymised dataset for public distribution

Version 0410 was provided to DataFirst by Nicola Branson in 2010.

Version 0411 is this dataset, with cross-entropy weights for OHS 1996 included. These were not in the original set of weights created by Nicola Branson, but have been created subsequently by DataFirst.

### PRODUCTION DATE

2010

### NOTES

Version 0410 was provided to DataFirst by Nicola Branson in 2010.

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## Overview

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### ABSTRACT

One focus of post apartheid research in South Africa is change. Questions include the progress of South Africa in the economic, social and political arena. National datasets such as the October Household Surveys (OHS) and Labour Force Surveys (LFS) provide a rich source of information on both economic and social variables in a cross sectional framework. These datasets are repeated annually or biannually and therefore have the potential to highlight

changes over time. Yet to treat the cross sectional national data as a time series requires that, when stacked side by side, the data produce realistic trends. Since these data were not designed to be used as a time series, there are changes in sample design, the interview process and shifts in the sampling frame which can cause unrealistic changes in aggregates over a short period of time. This raises concerns about the validity of using these datasets as a time

series to examine change.

The aggregate trends calculated from the OHS and LFS show the data to be both temporally and internally inconsistent. Examining the weights given in the datasets, in addition to the public documentation, it is clear that the Statistics South Africa (StatsSA) household and person weights are not simple design weights i.e. inverse inclusion probability weights. StatsSA poststratifies the person design weight to external population totals. Since the data are cross sectional the intention of the post-stratification adjustment is to produce best estimates of the population given the information available at the time and temporal consistency is not considered. This creates problems when the data is used as a time series.

A project was thus undertaken by Nicola Branson at the University of Cape Town, with a scholarship from DataFirst as part of DataFirst's Data Quality Project, funded by the Mellon Foundation. to design a new set of person and household weights for the OHS 1994-1999 and the LFS 2000-2007. These weights are generated using an entropy estimation technique. The new weights result in consistent demographic and geographic trends and greater consistency between person and household level analysis.

This dataset consists of the cross-entropy weights and the research resources used to construct them, including the syntax files, as well as background documentation on the project, and other research output. These should be used with the OHS and LFS data available from the data portal

**KIND OF DATA**

Sample survey data [ssd]

## Coverage

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**GEOGRAPHIC COVERAGE**

The OHS and LFS had national coverage

## Producers and Sponsors

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**PRIMARY INVESTIGATOR(S)**

Name	Affiliation
Branson, Nicola	University of Cape Town

**FUNDING**

Name	Abbreviation	Role
Mellon Foundation		

## Metadata Production

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**METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
DataFirst		University of Cape Town	Metadata producer

**DATE OF METADATA PRODUCTION**

2013-06-12

**DDI DOCUMENT VERSION**

version 1.1

**DDI DOCUMENT ID**

ddi-zaf-datafirst-olcs-1994-2007-v1.1

## Sampling

No content available

## Questionnaires

No content available

## Data Collection

### Data Collection Dates

Start	End	Cycle
1994	2007	N/A

### Time Periods

Start	End	Cycle
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### Data Collection Mode

Face-to-face [f2f]

## Data Processing

No content available

# Data Appraisal

## Other forms of Data Appraisal

The purpose of survey weights is to inflate the sample to represent the entire population. These weights therefore play an important role in creating consistent aggregates over time. Statistics South Africa's (StatsSA) household and person weights are not simple design weights i.e. inverse inclusion probability weights. The weights presented in the StatsSA National Household surveys are the design weight post-stratified to external population totals. Since the data are cross sectional the intention of the post-stratification adjustment is to produce best estimates of the population given the information available at the time and temporal consistency is not considered. These cross entropy weights have been provided to render the OHS and LFS series consistent over time.

The original cross entropy weights created by Nicola Branson did not include weights for OHS 1996. These have now been created by DataFirst, using a later version of the OHS 1996 data provided by Statistics South Africa.





# Documentation

## Technical documents

### Calibrating StatsSA's National Household Survey weights to a consistent

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Title Calibrating StatsSA's National Household Survey weights to a consistent  
 Author(s) Branson, Nicola  
 Date 2008-01-01  
 Country South Africa  
 Language English  
 Description This paper describes the project to design cross-entropy weights for the OHS and LFS  
 Filename Calibrating StatsSA's Survey Weights-v2.pdf

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### Re-weighting South African National Household Survey Data to create a consistent series over time

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Title Re-weighting South African National Household Survey Data to create a consistent series over time  
 Author(s) Branson, Nicola  
 Country South Africa  
 Language English  
 Description This is a paper detailing the project undertaken by Nicola Branson to design weight to make the OHS and LFS a more consistent series  
 Filename 2008-princeton-paper-81360.pdf

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## Other materials

### [Provincial Output\_051129]

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Title [Provincial Output\_051129]  
 Date 2005-01-01  
 Country South Africa  
 Language English  
 Description This is a zipped excel file of provincial tables used in the project  
 Filename ProvOutput\_051129.zip

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### Cross Entropy Weights-do files-v1.1

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Title Cross Entropy Weights-do files-v1.1  
 Author(s) Branson, Nicola  
 Date 2010-01-01  
 Country South Africa  
 Language English  
 Description This is a zipped folder containing the syntax files for the cross-entropy weights  
 Filename Cross Entropy Weights-do files-v1.1.zip

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