



Statistical coherence of educational attainment in population censuses: IPUMS-International integrated samples compared for 15 African countries

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Abstract

The IPUMS-International project, now in its fifteenth year, currently disseminates 277 integrated census microdata samples representing 82 countries to more than 10,000 researchers around the globe. As these numbers increase each year, there is a growing need to assess quality. This paper analyzes a rarely addressed dimension of quality, statistical coherence. We focus on primary schooling completed for 15 African countries in successive samples using the intra-cohort comparison method. Successive samples are coherent to the degree that the proportions completing primary schooling are similar the range of birth cohorts in samples from, say, the 2010 round of censuses compared with the 2000. Nearly perfect coherence is attained by six sets of samples—those for Burkina Faso, Kenya, Morocco, South Africa, Tanzania and Zambia. These show a mean difference of less than one percentage point, $R^2 \Rightarrow .93$, and, for the regression coefficients, less than +/-0.08 deviations from unity. Overall the results are quite gratifying. The analysis is facilitated by the fact that the microdata are integrated, which is only possible thanks to the generous stewardship of the National Statistical Offices.

Keywords: statistical coherence; population census, integrated samples; Africa; Kenya; IPUMS-International.