Local Estimates of Average Household Income in Argentina

Mamadou Diallo*
Westat, Rockville, EEUU – msdiallo@gmail.com

Claudio Comari
INDEC, Buenos Aires, Argentina - ccomari@hotmail.com

Augusto E. Hoszowski
INDEC, Buenos Aires, Argentina - aehoszowski@gmail.com

As for most countries in the world, Argentina does not have socio-economic statistics for many geographical areas. For many administrative divisions, reliable statistics are not available for public policy decision making. Since neither the census nor the current surveys are able to provide direct reliable socio-economic indicators for all the local areas, it is important to investigate the use of model-based estimators for some of Argentina’s major surveys. This paper presents some of the early studies that are being conducted in the Instituto Nacional de Estadística y Censos of Argentina in order to implement a system that provides model-based estimates of average household income and related parameters for geographic areas called departamento. The departamento is the geographical delimitation second lowest from the province level. This first study investigates an area level small area estimation (SAE) model to predict the average household income for departamentos in Buenos Aires and its suburbs. To fit the SAE model, the variable of interest is household income obtained from the Encuesta Permanente de Hogares (EPH) which is the Argentinian Labour Force Survey. The auxiliary variables are obtained from the 2010 Argentinian Census of population. This first study will help assess the appropriateness of area type SAE models for estimating average household income.

Keywords: Fay-Herriot, EBLUP, Income, EPH