An ordinal approach to the measurement of inequality in asset ownership:

methodology and an application to Mexican data.

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Abstract

Asset indices based on durable goods ownership and housing characteristics are widely used to proxy wealth when income or expenditure data are not available. In this paper, we propose an ordinal approach to using data on assets when estimating the wealth of a household (or individual). Using Correspondence Analysis, we derive a ranking of the correlations between the various assets and the first factor, a latent variable assumed to represent the standard of living. We then use this correlation ranking of the assets to derive indices of ordinal inequality that have been recently proposed in the literature. We also use the information on the proportion of individuals holding each type of assets to derive again ordinal measures of inequality in asset ownership.

Our empirical analysis, based on data covering the various states of Mexico in 2000 and 2010, shows that the correlation between measures of ordinal inequality in asset ownership derived from correspondence analysis and traditional Gini indices of household income is high, and even higher than that between these Gini indices and ordinal inequality indices based on the percentage ownership of the different assets.

Key words: asset index – correspondence analysis - Mexico - ordinal inequality.

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