

Determinants of Poverty of Households in Rwanda: An Application of Quantile Regression

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ABSTRACT Eradication of poverty is the main objective of most societies and policy makers, but developing a perfect or accurate poverty assessment tool to target poor households, in most cases, is a challenge for applied policy research. In this paper, the principal component analysis was first used to create an asset index for each household and thereafter the quantile regression model was used to identify the determinants of poverty of households in Rwanda. The characteristics of households as well as household heads were considered. Data from the Rwanda Demographic and Health Survey (2010) was used as application. The findings showed that education level, gender and age of household head, province, size of the household and place of residence were significant predictors of poverty of households in Rwanda. The quantile regression model allowed the researchers to study the impact of predictors on different desired quantiles of the asset index, and thus to get a complete picture of the relationship between the asset index and predictor variables.