

On the overlap of multidimensional and income poverty

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The multidimensionality of poverty is now widely acknowledged. From a theoretical point of view, the contribution of multidimensional approaches of poverty such as Townsend's relative deprivation or Sen's capability approach seems to be clear. However, from an empirical perspective, these approaches face some difficulties that question their practical use compared to the more common income approach. Hence, as far as the information necessary to operationalise multidimensional approaches is costly in terms of time, resources and data, one has to determine if the results of these two approaches are substantially different or not. If the results are the same, then the practical interest of multidimensional approaches is low and the use of income poverty as a proxy of multidimensional poverty is justified. If there is a mismatch, the two approaches can be said to be complementary in the explanation of the concept of poverty.

Among the different way to study this question, one consists in assessing the degree of overlap of the income and multidimensional approaches of poverty. The way to proceed is usually to determine a poverty line for the income measure and the multidimensional one and then to determine if the persons identified as poor by both approaches are the same. By so doing, *the result is conditional to the threshold chosen for each measure*. In this paper, I propose to overcome this constraint by using an innovative methodology called *Receiver Operating Characteristics (ROC)* which allows to assess the overlap of multidimensional and income poverty, *independently of the threshold used to define multidimensional poverty*. After having computed several indexes of multidimensional poverty, I apply the ROC methodology to 12 countries of the second wave of the ECHP. The results are in line with the literature by showing that the link between the two approaches exist but is not strong enough to determine that one can be used as a proxy to the other.

After having reviewed the literature studying the overlap of income and multidimensional poverty (section 1), I will present the methodology as well as the data used (section 2) and present the results (section 3).