On the Robustness of Multidimensional Poverty Orderings in the EU

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Paper Abstract: The goal of this paper is to assess the robustness of cross-country and cross-year comparisons in the EU using the official multidimensional poverty measurement framework. The previous research suggests that poverty comparisons are in general sensitive to weights. Different weighting vectors can hence yield different results, and one is not able to claim robustly whether poverty in country A is higher than in country B, or that poverty in a given country has unambiguously declined or increased. We find that approximately 50 per cent of all pair-wise country comparisons are not robust to changes in weights, i.e. it is always possible to find a set of weights for which ranks of countries reverse. Similar results are obtained, when assessing the robustness of poverty comparisons over time. The findings further indicate that rankings of countries are extremely sensitive to change in weights around the official definition of the composite indicator (i.e. weights of all dimensions and threshold equal one third). Our results hence suggest that evaluations of the progress made in alleviating multidimensional poverty in the EU are highly sensitive to the set of weights used to quantify poverty, and that more attention needs to be paid to the checks for sensitivity of poverty comparisons to changes in weights.