

# Multidimensional poverty in Europe. A longitudinal perspective

Nicolai Suppa

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## Keywords

multidimensional poverty, capability approach, Alkire-Foster method, EU-SILC

## Extended Abstract

Measures of multidimensional poverty receive growing interest in academia but are also increasingly adopted as official poverty measures in practice. For instance, some 30 countries already use a multidimensional poverty measure as an official poverty statistic. Most studies and applications of multidimensional poverty, however, focus on countries of the global south. As a consequence empirical evidence on multidimensional poverty in more advanced economies is still rare.

In this paper we propose a multidimensional poverty measure for European. The poverty measure is conceptually integrated into the capability approach (CA), which was developed by Amartya Sen and others (Sen 1985, 1999) and already served successfully as a framework for other prominent measures related to human well-being, like the human development index or the global multidimensional poverty index. Technically, the proposed index relies on the method proposed by Alkire and Foster (2011) and its operationalization is informed by the EU framework for social indicators to monitor of progress towards social protection and social inclusion objectives of the EU. The proposed measure builds on 12 indicators organised in five dimensions health, education, housing, material deprivation, and employment.

For the empirical analysis we use data from the European Union Statistics on Income and Living Conditions (EU-SILC) for the years 2016-2019. The analysis currently covers 19 countries. The EU-SILC is a rotating panel survey which is distributed as a cross-sectional and longitudinal variant. In our analysis we make use of both of these components of the data. Our empirical analyses include disaggregations by several variables including sub-national regions, type of household and sex. Moreover, we also analyze changes over time at the aggregate level. Our results suggest that monetary and multidimensional poverty measures suggest different trends for the lower income countries covered in the EU-SILC.

The paper also offers novel insights on important but so far under-researched questions. First, we contribute to the debate on whether to add a dedicated income dimension to multidimensional poverty measures by providing novel evidence on the overlap of people identified

as poor by income and multidimensionally poverty measures, respectively. More specifically, we explore three alternative hypotheses are able to explain why monetary and multidimensional poverty measures systematically identify different people as poor. Our results suggest that neither accounting for persistent income poverty, nor variations of the poverty cutoffs, nor the different reference periods between income and other indicators can fully explain the observed mismatch in contemporaneous poverty measures. We conclude that more fundamental, conceptual differences suggested by a capability perspective may drive the observed mismatch of both poverty measures.

Second, the present paper also provides evidence on (multidimensional) poverty dynamics at the micro-level. We exploit the panel structure of our data using the approach suggested in Suppa (2018), which is also applicable to short-run panels and helps to rationalize year-to-year changes. Our results suggest that multidimensional poor people are more likely to enter an additional deprivation and less likely to leave already experienced deprivation, than comparable non-poor individuals. This evidence is consistent with the hypothesis that deprivations may accumulate over time.

## References

- Alkire, Sabina, and James Foster. 2011. "Counting and Multidimensional Poverty Measurement". **Journal of Public Economics** 95 (7-8): 476–487.
- Sen, Amartya Kumar. 1985. **Commodities and Capabilities**. 12th ed. New Delhi: North-Holland Publishing. ISBN: 0195650387.
- . 1999. **Development as Freedom**. Oxford: Oxford University Press. ISBN: 978-0-19-289330-7.
- Suppa, Nicolai. 2018. "Transitions in Poverty and its Deprivations. An Analysis of Multidimensional Poverty Dynamics". **Social Choice and Welfare** 51 (2): 235–258. ISSN: 0176-1714.