

## **MEASURING ABSOLUTE POVERTY IN ITALY: METHODS AND CHALLENGES**

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### **1. Introduction**

The production of absolute poverty estimates by the Italian Statistical Institute (Istat) represents a vital public good, serving not only the scientific community engaged in research on distributional and social issues but also the broader national and international community. Understanding the extent and characteristics of poverty is the critical first step in uncovering its root causes and dynamics and designing effective anti-poverty policies. Reliable poverty estimates are a cornerstone for evidence-based decision-making and the formulation of targeted interventions to combat social and economic disparities.

For this reason, Istat deserves commendation for its sustained efforts to produce high-quality poverty estimates and its commitment to continuously refining and enhancing the robustness of the methodologies underlying these measures. Such work not only enriches the body of knowledge but also strengthens the tools available to policymakers and researchers alike.

The contributions to this special issue address various aspects of poverty measurement and analysis. Some papers provide a general theoretical and conceptual framework for defining and measuring poverty, placing Istat's absolute poverty measures within this broader context. Other contributions offer more focused analyses, addressing specific methodological or empirical challenges. Collectively, these papers underscore an essential point: the production of poverty estimates is not a static task but rather a dynamic, iterative process that evolves over time. Improvements are always necessary as new data sources emerge, and novel methodologies are developed.

In this spirit, the present commentary offers critical reflections on potential improvements to Istat's methodology, with the aim of contributing to the refinement of poverty measurement in Italy.

## 2. The Intrinsic Normative Meaning of Poverty Measurement

Measuring poverty, like measuring inequality, involves navigating a complex set of methodological choices and normative judgments which take place in all the different stages, from data collection to the final presentation of summary indices. As Tony Atkinson frequently reminded us, inequality is inherently a normative concept, requiring decisions about what is fair or just in a society – see, for instance, Atkinson (2015). A similar principle applies to poverty: defining and quantifying poverty entails value-laden judgments about what constitutes a minimally acceptable standard of living, in different contexts, and how to aggregate information to obtain meaningful summary measures.

Consequently, the production of poverty and inequality estimates should meet two key criteria: the techniques should be methodologically robust, and the underlying value judgments should be as transparent as possible. Clarity in these areas is essential to foster meaningful dialogue and critique within both the scientific community and the broader political and civil spheres. This transparency is especially important for estimates produced by a national statistical institute, as they play a central role in shaping public debate and informing policy at both the national and international levels.

The conceptual dimension is particularly relevant, both epistemologically (how should “standard of living” be defined?) and in terms of measurement (how can the chosen definition be empirically approximated?). While the issue is addressed in some of the contributions (see, for instance, the review by Freguja and Polidoro), the trade-offs involved in fundamental choices could be further explored. Should univariate or multidimensional indicators be used? What is the most appropriate unit of analysis: the household, the individual, or the adult equivalent? It would be also highly valuable to discuss whether poverty in Italy is better measured using an income-based welfare indicator or consumption-based indicators: is income or consumption expenditure the better metric? Moreover, currently Istat reports relative poverty estimates based on equivalent income and both absolute and relative poverty estimates based on equivalent consumption expenditure, though with different equivalence scales for each measure. The coexistence of multiple poverty measures – rooted in distinct conceptual and analytical frameworks – besides having some historical reasons (Brandolini 2021), allows the analyst to appreciate different facets of poverty; on the other hand, the multiplicity of approaches is likely to hinder public understanding and political discourse, unless a broader and clearer discussion on the different normative choices underlying the different poverty approaches is provided.

### 3. Methodological Clarity and Replicability

A related consideration is that the methodology underpinning the production of poverty estimates should be, in general, fully accessible, transparent, and comprehensible.

Accessibility is related both to data availability and to documentation and background papers. This is an intermittent topic in the dialogue between national statistical institutions and other stakeholders interested in accessing microdata from sample surveys<sup>1</sup>. Unfortunately, as of today, access to the datasets used by Istat is not public, which prevents the replication of results, their validation, and the experimentation with alternative strategies.

Regarding transparency, a significant improvement would be to consolidate the methodology into a single, comprehensive source where all necessary details are clearly explained. There are precedents for this approach, such as Istat (2009), which could be usefully revisited and expanded. At present, the methodology is explained across multiple separate documents, none of which provide the level of detail required to fully implement the method. A decisive step toward greater transparency would be the sharing of code or pseudo-code used to produce official estimates. This would allow for an unambiguous implementation of the principle of transparency, ensuring that both methods and results are fully reproducible and open to scrutiny.

Setting aside documentation, the current methodology estimates a very large number of poverty lines, as the calculation mechanism combines information on household members' age and composition, region, and municipality type. Istat shares the thresholds for the 50 most common household types in Italy, which represents only a small fraction of the total number of estimated poverty lines. While the multiplicity of poverty lines could meet the demand for granularity in the analysis, the existence of thousands of thresholds could have a side effect, the reduction the political intelligibility of the estimates as it could fail to capture other territorial differences that could be considered relevant in the public debate (on this, see the discussion in section 5). Additionally, the current methodology does not make explicit the purchasing power adjustments implicit in the use of multiple poverty lines, nor does it clarify how different weights are assigned to individuals based on where they live, their gender, or their age—in other words, the differing needs of households. In short, both spatial cost-of-living differences and equivalence scales, while embedded in poverty estimates, are not explicitly spelled out and consequently not available to discussion.

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<sup>1</sup> See, among others, Trivellato (2019).

#### 4. Istat methodology and the international practices

A relevant point relates to the positioning of Istat methodology with respect to the international practices and the scientific debate on poverty measurement.

The main methodologies commonly used by national and international organizations such as the World Bank have foundations in mainstream economic theory (Atkinson 2019). Building on the duality framework developed by Deaton and Muellbauer (1980), Deaton and Zaidi (2002) and Mancini and Vecchi (2022) formulated guidelines on the construction of the welfare indicator, the procedures for making comparisons across time and space accounting for differences in price levels faced by households, and the adjustments required for differences in demographic composition and economies of scale. In parallel, Ravallion (1994, 2016) developed the theoretical foundations of poverty thresholds, also based on the dual problem in consumer theory. Recently, Amendola, Mancini and Vecchi (2025) emphasized the need to integrate these two analytical frameworks and demonstrated that a household can be considered poor if its consumption expenditure falls below a minimum level, defined as the product of an absolute poverty threshold (a scalar) and a true cost of living index. The latter accounts for adjustments to nominal household expenditures (or, equivalently, to the national poverty threshold) before making welfare comparisons and measuring poverty and inequality.<sup>2</sup>

This result helps highlighting an inseparable relationship in any poverty measurement exercise – namely, the link between the welfare measure and a deflator, which adjusts for differences in purchasing power and household composition (differences in needs). If transparency and intelligibility are key objectives, it is essential to distinguish and explicitly separate the three core components: household consumption expenditure, the price deflator, and the equivalence scale. By doing so, poverty analysts can bring to light value judgments, and make explicit the normative assumptions that, in the current methodology, remain implicit. This point is discussed in the contribution by Biggeri and Pratesi, whose conclusions highlight the complexity of the issue.<sup>3</sup>

We conclude this section with one last comment, which stems from considering international practice in absolute poverty measurement. The World Bank recommends the use of the Cost of Basic Needs (CBN) method (Ravallion 1994, 1998, 2016), while the US Bureau of Labor Statistics adopts the so-called Orshansky method. These approaches are not fundamentally different; in fact, under certain conditions, they yield identical results. What unites them is their methodological transparency, the ease of reproducing results, and the straightforwardness of their

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<sup>2</sup> See also Amendola *et al.* (2024).

<sup>3</sup> See also the strategy outlined in the recommendations compiled in 2016 by a group of experts on behalf of the World Bank (World Bank 2016).

interpretation. While both methods are not exempt from critiques – see, among others Citro and Michael (1995), or Blank (2008) – they have gained increasing popularity over the past decades. It could be useful to assess the extent to which the current Istat's method deviates, in terms of identification and referencing strategies, but also in terms of results, from these widely adopted approaches. Overall, deviations from international practices can be justified, particularly to account for country-specific contexts; in general, however, it is useful to accompany such departures by an explanation of their rationale.

Poverty estimates, like most social indicators, derive much of their value from their capacity to facilitate comparisons over time and across countries. A systematic discussion of the methodological differences between Istat's approach and other influential international practices, could allow meaningful cross-country comparisons, thereby enhancing the role and utility of Istat's estimates in a global context.

## 5. The role of public goods and services

In its current methodology, Istat's estimates of absolute poverty account for regional differences in the cost of living for private goods but ignore territorial variations in the value of public goods and services. As the consumption of both categories of goods positively affect the individual economic wellbeing, and considering that, in general, the cost of living (particularly for the housing component, but not only for that) is higher in areas where the amount and the quality of public goods and services is higher, including a correction for only one category, while ignoring the other, introduces a potential severe bias in the estimation of poverty (see for instance the discussion in D'Alessio, 2018).

The inclusion of public goods and services in the assessment of poverty involves important methodological questions. How to evaluate the public services available in a given area? Should the (per capita) public expenditure be considered or the quality of services provided, which of course depends also on the efficiency in their provision? And how to impute such value to different individuals? While some solutions have been proposed in the literature (*e.g.*, Aaberge *et al.* 2010, Alari *et al.* 2010, Baldini *et al.* 2014), further investigation is needed, both in terms of methodology and practical implementation in the Italian context. A deeper reflection on this issue could prompt the demand for new statistical data (on public services) or the adoption of different methodological approaches. On the other hand, this extension would represent an important improvement in order to provide unbiased territorial estimates of poverty and guarantee full comparability of individuals and households living in different territorial contexts.

## 6. Conclusions

Istat's efforts to produce absolute poverty estimates are highly commendable: Italy's stands out as a welcome pioneering work within the EU context. In this short comment we have focused on a few opportunities for improvement. Ensuring methodological clarity, enhancing replicability, and aligning more closely with—or clearly explaining departures from—international standards would significantly enhance the value and credibility of Istat's work. The consideration of geographical differences in the provision of public services would allow a full comparability, in poverty terms, of individuals and households living in different territorial contexts.

Another consideration is the potential to expand Istat's analytical framework to include the measurement of economic inequality. While poverty—particularly absolute poverty—and inequality are distinct phenomena, they are also closely connected. The theoretical framework outlined in Bourguignon (2004) and its dynamic extension (Ferreira, 2012) highlight the importance of considering economic growth, inequality, and poverty as interconnected phenomena that should be examined jointly. These three measures are mechanically and algebraically linked, and the dynamics of each influence the others. It would constitute a valuable extension, in perspective, to adopt a conceptual approach aligned with the idea that poverty, growth, and inequality are distinct but inseparable aspects of distributional analysis, and to produce inequality, in addition to poverty, estimates based on comparable data and robust methodologies.

By addressing these issues, Istat could further strengthen its role as a leader in poverty measurement and contribute more effectively to understanding and reducing poverty in Italy and internationally.

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