# ABSOLUTE POVERTY, ENERGY POVERTY AND WORK INTENSITY. THE AD-HBS DATASET AS A KEY TOOL TO ASSESS THE OVERLAP OF DIFFERENT POVERTY CONCEPTS

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**Abstract.** Household poverty is a complex phenomenon that may be looked at from multiple perspectives. By using the original dataset AD-HBS – developed by matching microdata from the Household Budget Survey with administrative information from INPS archives – we analyse the overlap between the consumption-based absolute poverty indicator and two other indicators of household disadvantages widely used in Italian research and policymaking, i.e., the energy poverty indicator and the low work intensity index. In other terms, we investigate the joint distribution of the household absolute poverty status and the status defined according to either the energy poverty indicator or the low work intensity indicator. We find a partial – and heterogeneous across the national territory – overlap between absolute and energy poverty, while being in absolute poverty is also positively associated with low work intensity. Overall, datasets jointly recording different determinants of economic well-being, such as the AD-HBS including both income and consumption, may prove to be a crucial tool to study the multidimensional nature of poverty in Italy.

#### 1. Introduction

Poverty is a complex phenomenon that has to do with many economic and social factors. Accordingly, every unidimensional definition might inevitably misrepresent the well-being of some households. For instance, a household with a temporarily low income due to a transitory shock may have high wealth and consumption levels. Similarly, a household with a relatively high consumption expenditure may still be unable to adequately satisfy some basic needs such as heating for specific reasons (weather shocks, poor infrastructure). In other terms, standalone unidimensional indicators provide valuable insights, but jointly considering multiple dimensions or the relationship between more than one unidimensional indicator might greatly enrich the picture. On account of this, when assessing the risk of poverty and social exclusion in EU countries, the European Commission refers, for instance, to the At-Risk Of Poverty or social Exclusion (AROPE) indicator, which is defined jointly

considering monetary poverty, severe material and social deprivation and low work intensity.<sup>1</sup>

On the one hand, looking at household conditions by means of different indicators may enrich the analysis of the different forms of disadvantage in a population. On the other hand, such an approach may also allow to assess whether a specific indicator is able to exhaustively represent the multiple dimensions of household economic disadvantages. Against this background, in the present article we propose two empirical exercises highlighting the importance of this 'pluridimensional' approach to the study of poverty and, more in general, the distribution of well-being.

The poverty measure at the heart of our analysis is the Italian consumption-based absolute poverty indicator. While in most advanced countries, poverty is defined exclusively in relative terms by means of income-based indicators, absolute poverty estimates have been provided in Italy since 2005 drawing on a consumption-based measure of well-being (ISTAT *et al.*, 2009). More in detail, such indicator is based on the reference budgets approach according to which a household is counted as poor if her monthly expenditure is lower than the monetary value of a basket of goods and services that is considered enough to achieve a minimum but socially acceptable standard of living. Compared to income-based measures, indicators based on consumption have the advantage of representing a more stable dimension of wellbeing and have been found to be closely correlated to economic disadvantage (Meyer and Sullivan, 2012; Brewer *et al.*, 2017).

Recently, the concept of energy poverty has also become central in the public debate. The unprecedented surge in energy prices started in the second half of 2021 has indeed greatly weakened the economic situation of many households and increased perceptions of vulnerability. Despite the relevance of the issue, a consensus on how to measure energy poverty is still missing. In Italy, a specific measure adapting the Anglo-Saxon "Low Income-High Costs" approach to the national context has been introduced in 2015 (Faiella and Lavecchia, 2015). Both the absolute poverty measure and the energy poverty indicator considered herein are based on expenditure data from the Italian household budget survey (HBS) carried out by the Italian National Institute of Statistics (ISTAT).

Our first empirical exercise is thus to explore the degree of overlap of the consumption-based absolute poverty indicator and the energy poverty indicator at household level in 2022. The second one is to analyse, in the same year, the work intensity of households in absolute and energy poverty – captured by the periods spent working in a given year by all household members with respect to maximum potential labour supply – as a proxy of their attachment to the labour market, in order

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<sup>&</sup>lt;sup>1</sup> The material deprivation indicator aims at resembling an absolute poverty indicator since it identifies a number of items (e.g., having an internet connection, being able to afford adequate heating in the home, etc...) for which lack of access signals a standard of living below a threshold considered acceptable.

to provide an overview of the association between these two dimensions of poverty and the lack of work. While, in principle, this exercise could be replicated for preceding years (up to 2014, when the HBS has been extensively reformed), we chose to focus on 2022 to fully capture the effects of energy price inflation. However, assessing the evolution over time of the overlap between these poverty concepts could be a very interesting avenue for future research.

To carry out these exercises we make use of the AD-HBS dataset, recently developed by matching microdata from the Household Budget Survey with administrative information from INPS archives. The AD-HBS dataset has the advantage of recording both detailed household consumption expenditure, included in HBS waves, and the working histories of household members, tracked in INPS archives.

What remains of this article is structured as follows. The poverty concepts used in the empirical analyses are presented in Section 2, while the AD-HBS dataset is presented in Section 3. The results of the empirical exercises are discussed in Sections 4 and 5. Section 6 wraps up and concludes.

## 2. The poverty measures under scrutiny

In most advanced countries, poverty is defined in relative terms by means of income-based indicators. This means that individuals are counted as poor if their resources – usually their equivalised disposable income – are lower than what is considered 'acceptable'. To determine what is 'acceptable' and identify the poverty line, the relative approach usually identifies the poverty line referring to mean or median equivalised disposable income as benchmark. For instance, according to the most popular indicator in the EU - the At-Risk-Of Poverty rate (AROP) - an individual is poor if her equivalised disposable income is below 60 per cent of national median equivalised disposable income. Specifically, relative poverty measures mostly capture inequality in the bottom tail of the distribution and not (necessarily) deprivation in material living standards (Darvas, 2017). Indeed, in a sufficiently rich country, an individual may be in relative poverty despite being able to access goods and services to afford a decent standard of living. Conversely, using a very low (subsistence) poverty line only a handful of households would be counted as poor. In other words, within relative poverty approaches, the income or consumption of goods and services to be considered as reference may change over time and space together with the social acceptability of certain economic conditions, shedding doubt on the relevance of such poverty definition when comparing individuals' living standards across time or space.

Embracing the complexity of the issue, and after a long-lasting political and statistical debate summarised by Brandolini (2021), Italy has adopted a unique approach to poverty measurement since 2005. Indeed, alongside the standard relative income-based indicators used at the national and the EU level (based on household expenditure and income, respectively), ISTAT provides on a yearly basis estimates of a consumption-based absolute poverty indicator, based on the reference budgets approach.<sup>2</sup> In the present article, we focus on the consumption-based absolute poverty indicator, which has great relevance in the policy debate and has raised renewed methodological interest on account of related statistical advances.

Differently from absolute poverty indicators used in less developed countries – as the 2.15 PPP dollar-a-day line used by the World Bank – the Italian absolute poverty threshold refers to a definition of decent living standards that goes beyond subsistence levels, which bears witness to the unavoidable relative component of every absolute indicator. More specifically, in the Italian case, a household is counted as poor if her overall monthly consumption expenditure – net of some components not related to utility – falls short of a specific threshold defined as the monetary value of a basket of basic (or essential) needs including food, housing, and a residual component related to participation in society (ISTAT *et al.*, 2009).

Despite the assumption of homogenous basic needs across the national territory, poverty lines are household-type specific varying according to household composition (age and number of components), geographical area (due to territorial price differentials) and size of the municipality of residence. The food component of the poverty lines is equal to the cost of a diet providing a minimal caloric intake for each household member according to age; the housing component refers to rental fees and to the costs of providing heating for a sufficiently large house as well as of using the necessary appliances; the residual component is the monetary value associated to the minimum needs in terms of getting dressed, communicating, getting informed, travelling, attaining education and being in good health.<sup>3</sup>

As all consumption-based poverty indicators, the Italian absolute poverty concept has pros and cons. First of all, while consumption is more stable than income across the life cycle, due to saving, and less affected by underreporting of top/ selfemployment incomes, it is also highly dependent on preferences and potentially more subject to measurement error (Aprea and Raitano, 2023; Foster, 1998; Ravallion, 2016). A second relevant aspect concerning the measurement of consumption-based absolute poverty is the need for periodic updates to incorporate

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<sup>&</sup>lt;sup>2</sup> While in the relative poverty approach the poverty line is defined referring to the distribution of the well-being variable (e.g., income, consumption) across a given population, in the absolute poverty approach the poverty line is defined irrespective of the distribution of the well-being variable (e.g., its value is independent of mean consumption in a given population).

<sup>&</sup>lt;sup>3</sup> On the expenditure side, to ensure comparability across homeownership classes, imputed rents are added to the expenditure of homeowners.

changes in habits, technology and consumption choices of individuals. Indeed, such changes may imply non-negligible variations in the basket of goods and services that, in each point in time, is identifiable as an 'essential' basket to avoid serious forms of social exclusion. In addition, statistical advances in terms of the availability of new databases, more granular data and new measurement and analysis techniques may improve the quality of estimates and, consequently, induce a review of the methodological framework used.

On the grounds of this view, in 2021, an inter-institutional scientific Commission on absolute poverty was set up to review the methodology ISTAT had been using for absolute poverty estimates since 2005 and up to 2021. The main innovations regard the following points: 1) a greater territorial articulation of the estimates (i.e., price differentiation at regional level) which provides a better representation of the phenomenon in different geographical areas; 2) the use of new databases to enhance the monetary value calculation of the absolute poverty basket components the thresholds are made of (e.g., the use of the Real Estate Market Observatory database of *Agenzia delle Entrate* for the housing component); 3) the revision of specific aspects of the different components of the absolute poverty basket; 4) the revision of the savings coefficients used to take account of family size (equivalence scales).<sup>4</sup>

As regards the concept of energy poverty, in advanced countries it refers to a condition where purchasing a basket of essential energy goods and services involves an excessive diversion of family resources. This idea was at the heart of the first Anglo-Saxon-based definitions dating back to the 1990s as well as of the recent general definition adopted by the European Commission with Directive 1791/2023, according to which:

'[E]nergy poverty' means a household's lack of access to essential energy services[...] in the relevant national context, [...] caused by a combination of factors, including at least non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes.'

As Faiella and Lavecchia (2021) point out, there are three main approaches to measure energy poverty. The first relies on expenditure data, the second on self-perceptions, and the third on dwelling-specific energy requirements. The latter approach draws on detailed information on dwelling characteristics, which are often not available, but it has the advantage of being independent of preferences.

In Italy, one of the most widely accepted indicators has been proposed by Faiella and Lavecchia (2015) adapting the Anglo-Saxon Low Income-High Costs approach

<sup>&</sup>lt;sup>4</sup> Further methodological innovations concerned the economic resources indicator ('household expenditure') which is compared with the absolute poverty thresholds to calculate the headcount ratio. Specifically, with the new methodology, the household expenditure indicator, beyond excluding expenditure for extraordinary home maintenance, is calculated net of the municipal waste tax (TARI) and gross of social energy bonuses (for heating and electricity) as well as of rental fees (also imputed) for garages, cellars and parking spaces (which did not previously appear among the expenditure items surveyed).

to the Italian context.<sup>5</sup> More specifically, according to this indicator, households are in energy poverty if at least one of the following conditions is met: i) the share of equivalent expenditure on energy goods and services is at least two times the equivalent national average share and overall expenditure, net of energy goods and services, is below the consumption-based relative poverty line or ii) their expenditure on heating is zero and their equivalised total expenditure is lower than the national median.

The Italian energy poverty definition is thus made of two components: one related to excessively high energy expenditures and one to what Faiella and Lavecchia call 'hidden' energy poverty – i.e., lack of access to heating combined with low overall expenditure. This definition has been used in the energy poverty reports published by the *Osservatorio Italiano Povertà Energetica* (OIPE) since 2019.<sup>6</sup> According to the estimates included in the third report on energy poverty in Italy (OIPE, 2023), 8.5 per cent of Italian households where energy poor in 2021 while according to the latest update (OIPE, 2024), this share declined to 7.7% in 2022.

Finally, in the EU framework, the dimension related to a lack of work in the household is captured by the 'work intensity' intensity indicator (one of the three indicators included in the AROPE definition), that is defined as the ratio between the effective and the theoretical number of months worked by all working age household members in a year. The Low Work Intensity (LWI) indicator is a binary transformation of such concept: LWI individuals are people aged 0-64 years living in households where working age members (those aged 18-64) worked a working time equal or less than 20 percent of their total work-time potential during the previous 12 months. Households of only children and students aged less than 25 are excluded from the calculation. In this article we slightly extend the EU indicator considering as a worker also those who are not retired and are aged no more than 67.

## 3. The AD-HBS dataset

The AD-HBS is an administrative-survey linked dataset for Italy which has been assembled within a joint research project of the Treasury Department of the Italian Ministry of Economy and Finance (MEF) and the Economics and Law Department of 'Sapienza' University of Rome to *jointly* measure household income and consumption expenditures. Income and consumption are indeed two key dimensions of household economic well-being, and their joint consideration may greatly

<sup>&</sup>lt;sup>5</sup> This indicator was mentioned in the 2019 Integrated National Energy and Climate Plan (INECP), in the 2017 National Energy Strategy (*Strategia Energeitca Nazionale*, SEN), and in the National Plan for Ecological Transition (*Piano Nazionale di Transizionen Ecologica*, PTE).

<sup>&</sup>lt;sup>6</sup> For details see the website: https://oipeosservatorio.it

enhance the understanding of the economic well-being distribution and the interrelations of material conditions (Stiglitz *et al.*, 2009, Fisher *et al.*, 2022).

More specifically, the Italian Household Budget Survey (HBS), an annual survey carried out by ISTAT on a representative sample of the population residing in Italy to provide detailed information on household consumption expenditure, has been matched with several administrative archives managed by the Italian National Social Security Institute (INPS) including high-quality information on working histories and various income sources of the interviewed individuals. The match of the data sources is performed deterministically by means of an anonymous matching key corresponding to the individual fiscal code.

The name of the dataset – AD-HBS – underlines its key structural feature. Indeed, the set of information contained in HBS is expanded by adding the administrative individual-level data on each interviewed individual as it results from the archives managed by INPS. The income sources covered by the INPS archives are labour earnings (from employment and self-employment, with several details on working spells experienced by an individual since her entry in the labour market); pensions (also including social and disability benefits); unemployment and family benefits; minimum income (MI) transfers. Wealth information is also available for households filing a specific declaration (*Indicatore della Situazione Economica Equivalente*, ISEE) required to access most means-tested social transfers in Italy. Administrative information is available from 2017 to 2022. Additional information on the characteristics of the AD-HBS dataset is provided by Aprea *et al.* (2023).<sup>7</sup>

To the best of our knowledge, the only other dataset providing similar information is the Survey on Household Income and Wealth (SHIW). The SHIW is carried out every two years by the Bank of Italy and differs from the AD-HBS for two main reasons: first, information on consumption expenditure is much more aggregate in the former; second, income information arises from administrative sources in the latter. In the present article, we use the (latest) 2022 wave of the AD-HBS to carry out our empirical exercise and the administrative information arising from the employment contracts (*estratti conto contributivi*) archive.

For the scopes of the present article, the AD-HBS dataset has some key strengths. First, both the absolute and the energy poverty indicators are based on HBS expenditure data;<sup>8</sup> second, detailed information on labour earnings and working weeks allow us to assess the economic situation of households in absolute poverty

<sup>&</sup>lt;sup>7</sup> For the 2017 wave, two additional data sources are available: the 2018 personal income tax files (IRPEF) provided by the Finance Department of MEF, which record detailed information on all income sources subject to the personal income tax plus some capital incomes with preferential fiscal treatment in 2017, and the cadastral archives, also provided by the Finance Department of MEF, which record data on real estate holdings and associated (estimated) patrimonial wealth.

 $<sup>\</sup>hat{s}$  Crucially, the AD-HBS also record the household-specific poverty lines by sub-components (food, residence, residual). This allows to perfectly reproduce the official ISTAT estimates in our data.

from multiple perspectives. Finally, knowledge of households' municipality of residence allows us to further expand the information set by using municipal codes to merge a rich set of municipal-level variables (climatic zone, altitude, average fiscal income). This type of information is particularly important to study the heterogeneous distribution of poverty indicators explored in this article.

The AD-HBS dataset also has some weaknesses. First, since the HBS survey has no panel component, consumption expenditure may be observed only once for each household. This specific feature makes it impossible to study consumption dynamics (including absolute poverty persistence). However, administrative income information is longitudinal, thus allowing to track individuals' working histories in detail. At the same time, overall household income is underestimated since some income sources (e.g., business and capital incomes) are not included in INPS administrative archives.

#### 4. Absolute poverty and energy poverty: do the concepts overlap?

In this section we explore the degree of overlap of absolute poverty and energy poverty, which are both based on HBS expenditure data. Applying the Faiella and Lavecchia (2015) methodology to AD-HBS data, energy poverty in 2022 would be 7.6 per cent, 0.9 percentage points lower than in 2021 (according to the abovementioned estimates of OIPE, 2023). The explanation of such a decrease is not straightforward. Indeed, considering the 2022 energy prices surge, a prediction on energy expenditure variations and, in turn, on energy poverty, drawing on Faiella and Lavecchia (2015) methodology, should take account of a number of elements. On the one hand, if energy goods and services satisfy basic needs, we may expect an increase in energy prices to bring about a greater increase in the energy expenditure shares for households in the bottom deciles of the expenditure distribution due to liquidity constraints. On the other hand, households with higher constraints may be induced to reduce the amount of energy goods and services purchased if price elasticity of demand is high enough. Furthermore, other factors may intervene influencing behaviours and energy expenditures, such as climatic conditions and targeted policy interventions to support vulnerable households. The latter, comprising both energy bonuses and tax cuts, are indeed mentioned as a key factor in energy poverty reduction by OIPE (2024). Comparing expenditure data for 2021 and 2022 using AD-HBS data, we observe a rather balanced increase in the share of electricity expenditures across equivalent expenditure deciles, and the highest increase in heating expenditures is recorded for households in the fifth decile while the lowest for those in the first decile.

To deepen the analysis, we carried out an empirical exercise to explore the relationship between energy poverty and absolute poverty. Before presenting the main results, it is worth speculating on the theoretical overlap of the two concepts. Indeed, while both indicators are based on household expenditure, some key differences should be highlighted. First, differently from the absolute poverty measure, energy poverty is a relative indicator. Second, while the former uniquely draws on the comparison of household expenditures and poverty lines, the latter depends on more than one condition. Finally, high energy expenditures may push some households with no budget constraints out of absolute poverty by increasing total expenditure but also be associated with energy poverty. Indeed, less than 7% of the households with an above-median equivalised energy expenditure are in absolute poverty. Some discrepancies between the two concepts are thus to be expected.

Table 1 shows the cross-tabulation between the absolute and energy poverty condition and confirms the expectation of non-negligible discrepancies between the two concepts: only 37.4 per cent of absolute poor households are also in energy poverty, while only 40.7 per cent of energy poor households are also in absolute poverty.

	Percentage of the	total population	
Absolute poverty -	Energy p	T-4-1	
	Not poor	Poor	- 10tai
Not poor	87.2	4.5	91.7
Poor	5.2	3.1	8. <i>3</i>
Total	92.4	7.6	100
	Row percentages (w	rt absolute poverty)	
Not poor	95.1	4.9	100
Poor	62.6	37.4	100
	Column percentages	(wrt energy poverty)	
Not poor	94.4	59.3	91.7
Poor	5.6	40.7	8.3

**Table 1** – Absolute poverty and energy poverty in 2022, households.

Figure 1 and Table 2 provide further details on the degree of overlap of absolute and energy poverty. Figure 1 shows the distribution of each poverty concept across Italian geographical macro-areas (North-West, North-East, Centre, South, islands) together with the share of households which are also poor according to the other indicator. Table 2 replicates the same exercise combining climatic zone and municipality type.<sup>9</sup>

These elaborations point out some interesting results. First, the incidence of both absolute and energy poverty is much higher in the warmest regions of the country (South and, closely behind, islands), intermediate – but below national average – in the North-East, and lowest in the Centre and in the North-West. Second, the share of households in energy poverty among those in absolute poverty closely follows the distribution of the absolute poverty indicator: the higher the incidence of absolute poverty the higher the share of absolute-poor households also in energy poverty. Also, this share is much higher for small towns across all climatic zones (Table 2). On the other hand, the share of households in absolute poverty among those in energy poverty has an opposite geographical pattern: it is highest in the cold Northern regions and in the islands. Considering municipality type and climatic zone (Table 2), the share follows an inverted U-shape for all municipality types: it increases as average temperature decreases (from climatic zone B to E) and then decreases for the coolest climatic zone F (no data is available for large cities in climatic zone F).

Overall, these results suggest that households in energy poverty living in the North of the country – where, on average, temperatures tend to be lower – have an above-average tendency to be also in absolute poverty (bottom right panel of Figure 1). On the other hand, households in absolute poverty in the South, also have an above-average tendency to also be in energy poverty (top right panel of Figure 1). In the first case, the mechanism driving the overlap seems to be the high energy needs coupled with a fragile economic condition. In the second case, the mechanism seems to be a jointly low energy and total expenditure. Indeed, the share of households in 'hidden' energy poverty (those with zero heating expenditure and below-median total expenditure) is much higher in Southern and warmer regions.

<sup>&</sup>lt;sup>9</sup> Climatic zone is expressed as a letter from A to F and relates to the municipal average daily temperature such that zone F is the coolest and A is the warmest. Technically it is based on the concept of degree heating days, see DPR 914/93 for details. No town in climatic zone A is present in our data. Municipality types are classified according to the resident population: i) Large: inner urban areas; ii) Medium: peripheral urban areas and cities with more than 50,000 inhabitants); iii) Small: cities with less than 50,000 inhabitants.



Figure 1 – Households (HH) in absolute and energy poverty: overlap by geographical area.

Source: elaborations of the authors on AD-HBS 2022 data

**Table 2** – Households (HH) in absolute and energy poverty: overlap by municipality type and climatic zone.

Geographical cell —	HH in absolute poverty		HH in energy poverty	
	Incidence	Of which in EP	Incidence	Of which in AP
B-Large	9.3%	38.1%	10.3%	34.4%
<b>B-Medium</b>	15.9%	46.1%	19.7%	37.1%
<b>B-Small</b>	12.7%	44.0%	16.6%	33.7%
C-Large	9.8%	20.8%	5.5%	36.9%
C-Medium	10.2%	37.9%	9.5%	40.7%
C-Small	10.4%	40.5%	11.2%	37.3%
D-Large	7.2%	27.1%	4.1%	47.4%
D-Medium	5.7%	35.8%	4.5%	45.9%
D-Small	9.5%	42.3%	10.6%	38.0%
E-Large	7.0%	30.3%	4.0%	53.9%
E-Medium	6.6%	35.7%	5.5%	42.4%
E-Small	7.9%	37.2%	6.7%	44.0%
F-Medium	4.0%	25.2%	4.6%	21.7%
F-Small	5.1%	45.4%	6.5%	35.6%
Total	8.3%	37.4%	7.6%	40.7%

Source: elaborations of the authors on AD-HBS 2022 data

#### 5. Absolute poverty and work intensity: what role for the labour market?

In this section we investigate the work intensity of households in absolute poverty. For consistency with Section 4, we also provide the information on work intensity for households in energy poverty. Consistently with the EU framework, we define households with LWI as those where the weeks worked in 2022 by all 'active' members (i.e., those aged 18-67 and not studying or pensioners or disabled) are less than 20% of the potential working weeks (calculated multiplying by 52 the number of 'active' household members). Households with no 'active' members are thus excluded from the analysis. Notice that, differently from the EU definition, we use weeks instead of months, exploiting the more granular information on working spells tracked in INPS archives, and a higher retirement age (67) consistently with the Italian legislation. The distribution of low work intensity class for households in absolute poverty and in energy poverty is presented in Table 2.

	Row percentages	s (wrt LWI)	
I I internetter (I WII)	Absolute	— Total	
Low work intensity $(L w I)$ —	Not poor Poor		
Not LWI	92.4	7.6	100
LWI	84.2	15.8	100
Co	lumn percentages (wi	t absolute poverty)	
Not LWI	80.0	63.6	78.5
LWI	20.0	36.4	21.5
	Row percentages	s (wrt LWI)	
I I inter iter (I WII)	Energy poverty		TT + 1
Low work intensity (Lw1) —	Not poor	Not poor	Total
Not LWI	93.6	6.4	100
LWI	87.5	12.5	100
Co	olumn percentages (w	rt energy poverty)	
Not LWI	79.6	65.1	78.5
LWI	20.4	34.9	21.5

**Table 2** – Low work intensity in absolute and energy poor households.

Source: elaborations of the authors on AD-HBS 2022 data.

The key result is that LWI is much more frequent among households in absolute poverty (36.4%) than in the total population (21.5%). However, most households in absolute poverty (63.6%) have some attachment to the labour market highlighting that, while quasi-joblessness surely plays a role in favouring absolute poverty, low pay and in-work-poverty should also be considered. From the perspective of households with LWI, 15.8% are in absolute poverty – almost double than the share

in the total population. Most households in LWI are nonetheless able to buffer – at least temporarily – the impact of LWI on consumption expenditure and are thus not in absolute poverty. In this context, we should also consider that informal work may also play a crucial role. However, we are not able to observe such aspect in our dataset where working weeks are based on administrative records. Similar results about the link between poverty and LWI emerge when considering the overlap between energy poverty and LWI.

# 6. Conclusions

In this article we provided some examples of how the AD-HBS dataset may be a key tool for poverty analysis in Italy. More specifically, we argued that the joint analysis of multiple dimensions of well-being allows to assess poverty from a pluridimensional perspective. From a policy perspective, the multidimensional nature of poverty should be disentangled by means of different indicators in order to design appropriate policy interventions. In this regard, in this paper we showed that households may be poor according to one or more than one definition and that often poverty measures do not overlap.

Specifically, we examined two specific poverty indicators – consumption-based absolute poverty and energy poverty – and proposed two empirical exercises. First, we explored their overlap and the way it changes across geographical characteristics. Second, we analysed low work intensity in households identified as poor by either of the two concepts.

We found that the overlap between the two poverty concepts is rather low and mediated by geographical and socio-economic characteristics. In addition, poor households – according to both concepts – tend to have a lower level of work intensity. However, a non-negligible share of poor households has high levels of work intensity.

On a final note, the AD-HBS may be used in a variety of additional ways to shed light on other policy-relevant issues. The present article focused on two specific poverty concepts and on labour earnings information, but the AD-HBS dataset may be exploited to investigate several other topics.

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