# Absolute poverty and the cost of living: an experimental analysis for italian households

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# An Experimental Analysis for Italian Households

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### *Abstract*

Our paper contains an investigation on poverty based on the absolute approach. Actually, absolute poverty has not been totally eliminated, also in developed countries and particularly in Italy. Moreover, this method has poverty levels not depending on income distribution: on the contrary, specific situations of real need are identified.

In doing so, different price levels are taken into account, emphasising the possible effects of different costs of living in various geographical areas; for Italy, this issue seems crucial, owing to dramatic economic gaps between Northern and Southern areas. Yet, there are few data available on this, so that only a pioneering study may be carried out.

Therefore, we estimate absolute poverty thresholds both for regions and macro areas. General results show a partial narrowing in the geographical gap in favour of the South, with respect to traditional approaches. The analysis is performed using several indicators (i.e. head-count, poverty gap and Sen index). Moreover, income inequalities between regions could turn out to be less obvious by considering different cost of living indices than it is the case if the same level of prices is used.

The analysis is based on static micro simulation models that make use of both consumption and income data from ISTAT and Bank of Italy surveys. Thus, several data sources are used: in fact, it is known that income, even though it seems more appropriate in evaluating resources to purchase goods and services, can be sensitive to unexpected and temporary shocks, whereas consumption represents a proxy of the so-called "permanent income".

Finally, some light is also shed on the measurement of the efforts of public policies aimed at poverty alleviation. To this end, it is possible to examine the impact of public taxes and transfers on wellbeing, with particular attention to the effects of a "minimum income" scheme allowing for the different price levels.

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# Introduction[3]

Although poverty reduction is an almost universal target, there is no commonly shared principle to identify the poor. Poverty definition and estimation have been gradually enlarged and deepened: starting from a merely monetary approach – whereby poverty is computed by means of either consumption or resources (income) – a more complex method was built, highlighting its various facets by taking into account other aspects generally connected to the living conditions, such as longevity, education and health and - more recently - risk and vulnerability, the lack of power and "voice", and the incapability to actively taking part in society[4]. Obviously, a wider definition also enlarges the number and types of policies needed in order to a reduce poverty rates.

Nevertheless, multidimensional analyses may raise many problems: not only practical obstacles, as the difficulty of integrating data coming from different sources and of aggregating such heterogeneous information into synthetic indicators, but also the fact that some groups might be labelled as "poor" according to some indicators and "not poor" according to others. Thus, economists generally prefer a notion of poverty reflecting the household's "economic position" or "economic well-being" On the basis of that approach, the identification of poor households (or individuals) mainly consists of two phases: the definition of a threshold (the so-called "poverty line"), and the choice of the variable representing household's resources whereby poor are those who are below that threshold.

In the present work, the absolute poverty approach is adopted, so as to better outline some aspects that traditional analyses - based on the relative poverty approach - cannot highlight. The methodology used for threshold construction is the "budget standard approach"[5]: it is based on the definition of a basket of essential needs and on their monetary evaluation. The method follows the path suggested by the Italian Commission on Poverty and Social Exclusion (CPSE what follows)[6], but we introduce some innovative aspects that seem particularly significant. A different scale of equivalence is set up and its implications in terms of different evaluation of households' economies of scale are analysed, as is the economic weight of the house of residence and the services for homeowners.

Moreover, the most relevant aspect stressed in the present paper is the crucial role of differentials in the cost of living in Italy, which are (at least partially) explained by the high heterogeneity of the country's economic and productive structure. Our data draw a picture of poverty in Italy going beyond the traditional North-South dualism, where the use of thresholds taking account of the different price levels substantially narrows the gaps in poverty rates between different geographical areas.

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[3] The assessments of this paper solely reflect author's opinion, and do not bind in any way the institutions to which they belong. Although the present work is the result of a joint effort, section 2.1, 2.3, 3.1, 4 and 5.1 can be attributed to Carlo Declich whereas section 2.2, 3.2, 3.3, 5.2 and 6 to Veronica Polin.

[4] Multi-dimensional analysis of social exclusion was developed by many economists. See, for example, Townsend (1962, 1979), Sen (1976, 1999), Atkinson and Bourguignon (1982, 1987), Maasoumi (1986), Nolan and Whelan (1996). These aspects were also dealt with in the UNDP Reports, where suitable development and poverty indices are built (UNDP, 1999 and 2000), and in some ISAE Reports (2000a, 2000b and 2001).

[5] For a thorough description of this approach, see Rowntree (1901), Orshansky (1965), Ruggles (1990), Bradshaw (1993), Saunders (1998), Bradbury and Jäntti (1999), Parker (1999, 2000), Bernstein *et al.* (2000), Saunders *et al.* (2000).

The paper is organised as follows: Section 2 describes and justifies some assumptions here adopted. In Section 3, the innovations introduced to the work carried on by CPSE are discussed, particularly those considered to be fundamental for a proper application of the absolute poverty analysis to Italy. Section 4 describes the estimation procedure of the absolute poverty threshold and the methodology used to differentiate the threshold across Italian regions and – to a higher level of aggregation – between five large geographical areas (North West, North East, Centre, South, Islands). In the following Section the results are presented, providing poverty statistics on the basis of the macro-area of residence, of the household (householder) characteristics and of some socio-demographic profiles. For a clearer international comparison, a different equivalence scale (the so-called "OECD-modified") is used as well; moreover, some sensitivity analyses when relaxing specific assumptions are performed. Finally, in Section 6 an application of the method to social policies is put forward, assuming a safety net measure that varies according to the area and the wealth of the family.

## 2. Some methodological issues

### 2.1 Threshold definition

Traditional poverty analyses in Italy are mainly based on the relative threshold, defined as a function of the mean or the median income or expenditure distribution[7]. However, that definition does not seem suitable to identify a condition of severe poverty, whereby individuals are not able to reach even a minimum level of well-being. Moreover, relative poverty measures comparison in time and space may lead to wrong conclusions: a change in the incidence rate might be caused by a variation in the degree of inequality in income distribution among households, irrespective of the number of people living at the minimum subsistence level. For instance, one might observe a rise in the relative poverty just because the number of rich households has grown. Finally, by adopting the relative poverty method, not only poverty will never be defeated, but it shall also increase even when poor households' income considerably grows: indeed, all that is required is a stronger income growth for rich than for poor households.

For these reasons, in the present paper a different approach is followed: poverty is examined from an absolute point of view, and that method is applied to Italy, making reference to the few related works [8]. Our target is making suggestions to contribute to a more thorough analysis of this phenomenon, introducing new elements in the debate.

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[6] In particular, we follow Livi Bacci, Cialfa and Masselli (1997), a working group created by ISTAT (National Statistical Insitute) upon proposal of the Commission on Poverty.

[7] The most commonly utilized is the *International Standard Poverty Line* (ISPL), defining poor a two-person household whose income (consumption) is smaller than the *per capita* average national income (consumption).

[8] International contributions are, for instance, Bradshaw *et al.* (2001), and Cotton, Bishop and Michaud (2002), who apply the absolute methodology to United Kingdom and Canada, respectively. For Italy, to the work carried out by ISTAT (see, again, Livi Bacci, Cialfa, Masselli, 1997), the CPSE Reports followed: these include - beside traditional analyses - evaluations on absolute poverty (Commissione d'Indagine sulla Povertà e sull'Emarginazione, 1996, 1997, and 1998, and Commissione d'Indagine sull'Esclusione Sociale, 2000c and 2001); official statistics are published on ISTAT (1999, 2000, 2001b, 2002). Finally, for some comments on the absolute as opposed to the relative method, refer (among others), Förster (1994), Foster (1998), and Lanjouw (1999).

The definition of absolute poverty threshold implies the identification of a minimum level of goods and services satisfying "basic needs": the poor are those having resources below the threshold. It is worth noticing that the identification of the minimum basket inevitably implies personal judgements on which goods are suitable for an acceptable living standard. Those evaluations are in some way relative, depending on the place (i.e. climate, habits, living standard) and on time. Hence, a geographic comparison of absolute poverty must take into account the different economic conditions and life styles, while for time comparisons a periodical revision is necessary, owing to possible changes in the consumption habits so as to avoid that the threshold looses its significance and becomes obsolete[9].

The literature usually identifies "basic needs" as minimum requirements necessary to physical survival, which means including in the basket: food products guaranteeing the right quantity of daily calories, a house warranting the basic hygiene and safety standards, and a minimum level of health care and clothing. The food component is usually directly estimated; the threshold is fixed irrespective of products, on the basis of nutritional requirements (for instance, calories, proteins computed on the basis of the individual height, weight, age, gender, health status and activity), and afterwards the bundle of goods enabling to reach the threshold is considered, by taking into account individual preferences and the cost of products. More precisely, the basket consists of available cheap foodstuff usually included in the diet of the reference population.

As regards other minimum basket components, often an aggregate budget is indirectly computed by using appropriate multipliers. A most frequently used method follows Orshansky (1963, 1965)[10]: the ratio between non-food expenditure and food expenditure in the poverty line closely mirrors the actual proportion of food and non-food expenditure for specific groups; this ratio is applied to the food component of the threshold, which is the only element independently estimated. The indirect procedure is mainly adopted for practical reasons, but it also reflects the difficulties in reaching an agreement on the definition of the essential needs and their level of satisfaction.

*2.2 Choosing a "good" variable*

The poverty line may be applied either to income or to consumption expenditure. Both theoretical and empirical reasons are brought in favour of either option[11]. With regard to the theoretical aspect, the relevant variable is represented by *potential* households' consumption that is by the household's capacity to buy goods and services: in this case, disposable income is preferable. For instance, a family that can only afford an expenditure level beyond poverty line through debts should be considered poor, because one cannot foresee whether it can maintain its standard of living in the future. On the other hand, a household carrying out a simple life with low consumption levels not due to a lack of income, but because of its habits and, more

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[9] Citro and Michael (1995), Lanjouw (1999), Short *et al*. (1999), and Short (2001) analyse the problem of both space and time comparison in poverty measurements; Cebula (1983) highlights – by using geographical indices of the cost of living – a high index variability in the United States, while Atkinson (1983) describes a geographically variable poverty line according to the different home cost.
[10] This methodology was used in the definition of the official poverty line in United States; other criteria are discussed by Lanjouw (1999).

generally, because of personal and social circumstances[12], is considered poor: this is the case of households with elderly components. In this case too, expenditure does not faithfully mirror the household's well being.

Conversely, other theoretical considerations uphold the expenditure-based approach: indeed, it is deemed as a better proxy of permanent income and, therefore, a more suitable variable for poverty analysis in the medium-long run, as it reduces the impact of temporary fluctuations in the current income and avoids to classify households with a temporarily low income as permanently poor[13].

Besides, from an empirical point of view, expenditures are better estimated in household surveys, as surveys on income are often subject to non-sampling errors[14]. On the other hand, one should admit that similar difficulties often arise using consumption data. Finally, one should recall that the choice of income (consumption) is somehow connected to the approach adopted. For instance, in the absolute poverty approach, consumption expenditure seems more suitable than income. However, many other factors might affect the right choice, concerning individual characteristics (time horizon, consumption choices, socio-economic status, etc.) and the overall economic situation (for instance access to credit).

It is then clear that the topic is still controversial, and far from being solved in favour of one or the other variable. For that reason, the analysis shall be carried out both with reference to the data on consumption, by using data coming from the 1999 ISTAT Survey on households' consumption (hereafter BF), and on income, from 1998 Bank of Italy's Survey on Household Income and Wealth (hereafter BI)[15].

*2.3. Poverty measures*

A vast array of different indicators enables a better comprehension of poverty and indeed facilitates a more thorough analysis of its changes through time and of the existing differences between countries, regions, and family groups with different socio-demographic characteristics. For a more detailed analysis, see the existing wide literature on poverty measures[16].

The simplest and most common index is the head count ratio. It is simply the number of poor individuals (households) as a percentage of the total. Its advantage lies in its simplicity: for instance, it allows a direct evaluation of the policies aimed at fighting poverty. However, for some goals - including the analyses of the impact of specific economic policies within households or poor individuals - this indicator shows serious limitations. Indeed, it is unable to emphasize a change in poverty "depth", as it does not grasp the gap between the poor and the poverty threshold.

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[11] See D'Alessio (1994), Ravallion (1994, 1996), and Saunders (1998).

[12] This is what Sen (1996) calls "secondary poverty".

[13] See Slesnick (1993).

[14] See Cannari *et al.* (1990), Cannari and D'Alessio (1992, 1993), Marenzi (1996), Brandolini (1999).

[15] See ISTAT (2001a) and Banca d'Italia (2000). Please note that, even though the two databases are referred to 1999 and 1998 respectively, they are both updated to 2002 so as to take account of the households' expenditure dynamics (for the BF survey) and of fiscal provisions introduced over the past years (for the BI survey). For a description of the characteristics of the two surveys, see Brandolini (1999).

[16] See, for example, Foster (1984), Atkinson (1987), Förster (1994), Jäntti and Danziger (2000), World Bank (2000), and also Barr (1993), and Toso (2000).

The point can be solved by using the poverty gap ratio, defined as the average gap, in percentage of the threshold value, between the consumption (income) of poor households and the poverty line: the wider the gap between the poor and the poverty threshold, the higher the value reached by this value. The drawback in this case is that the poverty gap is indifferent to variations of income distribution within the poor, since all individuals below the poverty threshold are equally weighted.

For this reason, other measures were thought of, more sensitive to changes in income distribution among the poor, in such a way that a transfer from a poor individual close to the poverty threshold to a person very far from that line may be registered as a poverty reduction. Some authors[17] consider this aspect, by introducing an inequality aversion parameter. Conversely, the indicator proposed by Sen[18] adopts the Gini coefficient to evaluate inequality within the group of poor.

It is beyond our purpose to provide a methodological evaluation of those indicators. It seems much better to report the results in a relatively simple way and discuss – if necessary – the significant implications of the assumptions here adopted.

## 3. Three fundamental choices

### 3.1 The cost of living

As we said before, the starting point of present paper is the CPSE work on both the construction of the minimum basket and the estimation of poverty rates in Italy. However, it seems necessary to enrich our analysis with new elements, particularly significant for Italy.

In our view, a thorough evaluation of economic and social differences between non-homogeneous geographical areas is fundamental in our country, as indeed remarked by many economists[19]. In particular, one cannot underrate the strong evidence of different price levels and, consequently, the gaps in purchasing power faced by consumers residing in different places. In this case, one single poverty threshold is misleading, because the resources of a Northern and of a Southern household, with similar socio-demographic characteristics, would be evaluated in the same way, while the latter is likely to satisfy its own fundamental needs with a given amount, whereas the former cannot.

The inclusion of those elements in the analysis causes both practical and theoretical problems. It is widely believed that economic differences between different regions and macro-areas in the country may also give rise to different consumption models, habits and life styles, so that the comparison of absolute poverty thresholds taking account of only price and not quantity differentials might be misleading[20].

Admittedly, the severe condition stressed by the absolute approach refers to bare necessities, such that the assumption of scarce variations (in the limit, no variations) in the quantity seems reasonable. Therefore, the

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[17] See Foster, Greer and Thorbecke (1984).
[18] Sen (1976, 1981).
[19] For instance, Beckermann (1980), Caruso, Sabbatini and Sestito (1993), Cannari (1994), Donatiello and Roberti (1998), and particularly Campiglio (1996), which provides a wide-ranging and thorough analysis on the price level differentials in Italy. Conversely, Sarpellon (1982) analyses this issue in the optic of relative poverty, as well as, more recently, Bottiroli Civardi and Chiappero Martinetti (2002), and Coccia, Colombini and Masi (2002).

deep geographical differences in the cost of living make price differentials crucial to better evaluate in Italy the North-South gap. This implies that, to devise the absolute poverty thresholds, the most relevant component of regional differentials is given by price differentials, though within the (strict) limits of available data.

The only exception regards the computation of residual and home bills, where a variation in the quantities consumed is implicitly allowed. This is due, firstly, to practical reasons, since an objective evaluation of the items and the expenditure levels to be considered "basic" might be questionable and, secondly, because remarkable variations in quantities consumed between areas, owing to both geographical (i.e. heating expenses) and social reasons (especially in the residual), are observed right for the goods and services here considered.

Finally, it should be noted that space comparison of consumption prices may result tricky on account of heterogeneous qualitative characteristics of products and of commercial distribution: for example, a lower price for a given product in the South might be the symptom of lower quality and/or wider diffusion in the area.

The results here presented must therefore be interpreted very carefully. Indeed, future improvements might focus on those aspects here neglected, so as to include further elements of geographical differentiation, in addition to price variability.

### 3.2. Equivalence scale

Another fundamental issue regards the choice of a "right" equivalence scale, which allows the comparison between households with non-homogeneous composition and dimension. Resorting to equivalence scales is, for instance, necessary whenever the resources of an household consisting of two adults and an elderly person must be compared to a single-parent household with two children: in this case, household's income might be inadequate, as the level of well-being the household may obtain depends on completely different consumption needs. Thus, the scale parameter is used, in order to modify households' resources, making them comparable, or demographically equivalent. Again, the equivalence scale is required when evaluating economies of scale faced by households consisting of more than two people compared to one-person households, all else equal: the closer scale coefficients are to the number of family components – i.e., the closer to one elasticity is[21] –, the more similar equivalent incomes are to *per capita* incomes, and the less relevant economies of scale are [22].

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[20]See Campiglio (1996).

[21] Indeed, defining the scale elasticity as $\sigma = \ln S / \ln N$, where $N$ is the number of components and $S$ is the parameter value, $S = N^{\sigma}$, thus parameters $S$ vary between $N$, when $\sigma = 1$ (no economies of scale), and 1, when $\sigma = 0$ (maximum economies of scale).

[22] For a thorough analysis on this issue, see Buhmann *et al.* (1988), Atkinson (1992), Förster (1994), and, for Italy, Commissione d'Indagine sulla Povertà e sull'Emarginazione (1996), Cannari and Franco (1997), Atella, Caiumi and Perali (1999). It is worth underlining that the usefulness of equivalence scales is doubted by many authors (for instance Lanjouw, 1999), both for the implicit arbitrariness in the choice of the scale and for the results sensitivity. On the other hand, equivalence scales supporters state that – though incidence rates may vary according to the scale used – the poverty characteristics, namely profiles, do not vary (see, for example, Bottiroli Civardi and Chiappero Martinetti, 1999).

Actually, CPSE uses no equivalence scale with regard to absolute poverty, but sets a different threshold level for each household dimension (and, for some basket components, also for some additional characteristics, such as components' gender and age). Hence, it is possible to derive an "implicit" equivalence scale, different from those commonly used in poverty analyses, which we will call CPSE scale, from the basket computation. A comparison (see Table 1 below) between that scale (CPSE column) and the scale used for the calculus of the Indicator of the Equivalent Economic Condition (ISEE)[23] - the so-called "riccometro" - highlights the fact that the latter attributes more importance than the former to economies of scale for households with more than two persons. Conversely, the more widely used scale proposed by Carbonaro[24] features higher parameters compared to both the ISEE scale and to the CPSE scale for households up to 4 members. Finally, the so-called "OECD modified" scale, widely used in international comparisons, varies its parameters as a function of the age of additional components, and it turns out to be the lowest for households up to 4 members, while, starting from that household size, the ISEE scale is comprised within its range of variation.

| TABLE 1   EQUIVALENCE SCALES | | | | |
|:---:|:---:|:---:|:---:|:---:|
| **N.Comp.** | **Coefficients** | | | |
| | *Carbonaro* | *ISEE\** | *CPSE* | *OECD mod.\*\** |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 1,67 | 1,57 | 1,49 | 1,30-1,50 |
| 3 | 2,23 | 2,04 | 2,13 | 1,60-2,00 |
| 4 | 2,72 | 2,46 | 2,69 | 1,90-2,50 |
| 5 | 3,18 | 2,85 | 3,4 | 2,20-3,00 |
| 6 | 3,59 | 3,2 | 3,92 | 2,50-3,50 |
| 7 or more | 4,01 | 3,55 | 4,42 | 2,80-4,00 |

*In ISEE scale the following corrections are considered: +0,2 if both partners work and there is at least one minor child; +0,5 for each seriously disabled member; +0,2 if the parent is single and there is at least one minor child.

**Minimum and maximum values are indicated, since the parameter can change according to the age of the additional member: +0,5 for every adult, +0,3 for every minor.

In the present study, the ISEE scale was adopted. Indeed, on the one side, it is reasonable to assume that, in absolute poverty analyses, scale economies do not have a relevant weight in households' budgets (which means CPSE scale is advisable); on the other side, resources evaluation for Welfare programmes is obtained through the ISEE scale. The choice scale is thus justified by policy considerations. Besides, the assumption of larger economies of scale, compared to the Commission's analyses, seems (at least partially) acceptable in the light of some methodological choices: for instance, the calculus of the minimum basket referred to an adult as a mean of the minimum needs relative to the various age brackets, without considering children's consumption.

Finally, one should not forget the relevance of the ISEE scale in being the only scale out of four to highlight not only economies of scale, but also the smaller resources available – *ceteris paribus* – to households with some socio-economic characteristics implying a relative disadvantage. Think, for instance, of households with disabled components, or single parent, or households with children below 18 with both working parents.

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[23] Decree Law n. 109/98: ISEE is a new instrument adopted for the evaluation of economic condition of individuals who require social benefits. For a description of the main social security provisions utilising the ISEE scale in Italy, see Commissione di Indagine sull'Esclusione Sociale (2000b, 2001).

[24] See Carbonaro (1985); the scale is adopted in official analyses on relative poverty.

## 3.3. Evaluation of services for homeowners

A further difference with CPSE concerns the evaluation of the housing component. On the one side, the amount to be included in the threshold – representing the minimum needed for a "standard" house (this is the modal value of a suburban house in good conditions) - was more carefully computed; on the other side, the costs of this service for households owners were more thoroughly evaluated.

This last point seems to be delicate and much debated. Indeed, while for tenants it is intuitive to consider housing rent, for owners there is not a clear solution. This is particularly true when considering the overestimation of imputed rents (surveyed by ISTAT), as shown by Table 2: indeed, a clear consequence of their arbitrariness. In conclusion, should imputed rent being considered, one would eventually overestimate the resources, and underestimate poverty levels, of households owning their houses[25].

| TABLE 2   EFFECTIVE AND IMPUTED RENTS | | | | |
|---|---|---|---|---|
| number of rooms | effective rents (for renters) | | imputed rents (for owners) | |
| | mean | st.dev. | mean | st.dev. |
| 1 | 189,28 | 118,77 | 295,40 | 190,71 |
| 2 | 218,73 | 126,60 | 324,80 | 193,29 |
| 3 | 255,56 | 150,76 | 364,90 | 188,62 |
| 4 | 283,98 | 151,19 | 409,12 | 207,21 |
| 5 | 308,73 | 157,21 | 461,66 | 235,51 |
| 6 | 357,62 | 273,68 | 483,34 | 245,93 |
| 7 | 362,27 | 180,50 | 546,38 | 299,20 |
| 8 | 274,39 | 150,36 | 569,30 | 321,38 |
| 9 or more | 483,61 | 232,50 | 703,91 | 401,80 |
| **TOT** | **271,78** | **158,04** | **433,57** | **237,34** |
| Mean values are in euros | | | | |
| Source: IVAMOD microsimulation model on ISTAT Survey on Households' Expenditure 1999 data | | | | |

After all, it is nothing more than a methodological matter, concerning the correct evaluation of non-monetary incomes and the homogeneity of the amounts considered in the poverty threshold and the corresponding values defined as households' resources[26]. The CPSE solution (including imputed rents) seems hardly convincing, as distortions might emerge due to the way the question is formulated in the ISTAT questionnaire, as well as to the respondent's evaluation of the value of his/her own house, which often does not reflect the actual market value.

Our solution consists in attributing to owners the same value of the "housing" service included in the threshold (disaggregated by region), so as to outline the minimum advantage - that is the smaller expenditure - households bear compared to those who spend part of their monthly resources for rents.

## 4.  One threshold, many thresholds

As already observed, the threshold estimation - both in the definition of the so-called "minimum bundle" and in its monetary evaluation - implies arbitrary and subjective choices which are sometimes questionable. For this reason we shall try to adopt as many "objective" and reasonable criteria as possible.

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[25] For this issue refer, for example, to Betson (1995). It is worth noticing that housing association members and households paying a mortgage were here considered as "owners" (in the last case, this is due to the impossibility to distinguish mortgages by amount and expiry date). With regard to Table 2, we must admit that it has no claim to provide a reliable estimate of imputed rents' distortion; rather, our aim is just to pinpoint the problem. Indeed, an ISTAT report strengthen our hint (see Di Leo, 1997): in it, about 40 cluster of houses were defined, and a standard rent is computed for each house on the basis of the mean value of the cluster.

[26] On this point, see also Barr (1993), Citro and Micheal (1995), Short *et al.* (1999), and Short (2001).

The fundamental basket components are: food, housing, home bills and durables ("other expenditures"), residual. Obviously, health care and education belong to bare necessities, as well: the assumption is that for poor households those expenses are fully born by Welfare system, and therefore are not considered.

As regards food and drink, tables of the National Institute of Nutrition, identifying the amount of food necessary to reach the Recommended Dietary Allowances (RDA) for each age bracket and for both gender, are adopted. On this basis, a daily menu for a representative householder is fixed, by calculating an average bundle[27]. For the monetary evaluation, we overcome the lack of available data on consumer prices disaggregated by geographical area by extending the prices surveyed in every main regional city to the whole region. We should admit that this method is questionable, too, as it conceals differences due to the demographic size of the town. Hence, results must simply be considered as trend indicators.

The December 1999 consumer prices are considered for all Italian administrative regions (with the exception of *Valle d'Aosta* and *Molise*), with few corrections: indeed, as for some regions no updated data were available, information from a previous data base are derived[28], by inflating prices with the Italian consumer price index for workers and employees (FOI), split by province and by expenditure sector. Whenever a single price was not available for a specific region, its value was inferred from the average of the corresponding price for the three regions having minimum Euclidean distance from the region with the missing data[29]. The grid of homogenous prices is raised to 2002 – through the FOI index and with the ISAE forecast on consumer price index for the whole country (NIC) – and then the final values are applied to the minimum basket quantities, thus obtaining the food component for all Italian regions. Please note that, in order to reduce troubles deriving from the heterogeneity of the surveyed goods, whenever quality differences were considerable (for example fruits and vegetables or dairy products), only the prices of some representative goods, distributed throughout the whole country, were used, thus disregarding typical products. Moreover, as already stressed, we implicitly assume no variations in behaviours or spending choices - hence in quantities - between different geographical areas.

Lastly, the food component values are cut down, as food prices are mean values, while the absolute threshold must be more reliably calculated on minimum prices[30] (as this is the Poverty Commission's suggestion). Indeed, this by no means should be taken for granted or trivial, as it is the practical implication of a mainly theoretical problem concerning the extent to which the poor have access to the necessary goods at their minimum price.

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[27] The average is computed on a national basis, by using Census data, with weights equalling the percentage household composition by householder's gender and age.
[28] See Campiglio (1996).
[29] The reasonable assumption here adopted is that the missing price will be as close as possible to the mean value of the three cities having a price structure "similar" to the one of the city where the price is not available. Please note that, to avoid any possible distortion deriving from price updating, the cities included in the old database were not included in this procedure.
[30] In the case of housing, reference is made to the modal value in a peripheral area with medium population density; in this case, no adjustment is needed.

The consideration devoted to housing is far from being a pedantic matter, since it contains the maximum variability, geographically speaking[31] (actually, a much higher variability than food); moreover, food and housing alone account for 80% of the threshold value (as we shall see later). Hence, the evaluation of the minimum cost for dwellings underscores dramatic gaps in Italy both between the North and the Centre and the South, and between bigger and smaller towns, accounting for the different living density. To this purpose, a specific survey on Italian real estate markets is adopted[32], showing the rents and rented squared meters for all Italian provinces, on the basis of a sample equalling about 10% of the whole universe. The value considered is the modal rent per square meter for a "standard" dwelling[33]. This enables us to compute the average square meter rent by region, to be applied[34] to a width of about 45 square meters: indeed, this is the hypothesis of the minimum dimension for one-member household dwelling adopted by CPSE. This figure represents the threshold-housing component, i.e. the monetary evaluation of the housing service.

"Other expenditures" cover domestic utilities (condo, water, natural gas, telephone, electricity) and some essential durables. With respect to electricity and telephone, as well as for durables, data already available in CPSE Report with reference to the minimum basket for 1997[35], for lack of better data, are inflated. Conversely, for other items, an indirect procedure is followed[36]: namely, we calculate the distribution of the quotas of those expenditures on the overall foodstuff expenditure, then we consider the average share for households with a value below the average (that is for households belonging to the first five deciles) and, finally, we multiply the resulting figure by the value referring to the food and drink component. The same applies to all Italian regions: therefore, in this case regional variability is implicitly assumed as the consequence of not only price but also quantity fluctuations.

The items included in the residual component are too heterogeneous to survey them specifically: they include clothing and shoes, culture and leisure, furniture and other domestic expenditures, and transports and communications; rather, luxury goods are excluded. As suggested by ISTAT, the same indirect procedure, as above, is applied, but we consider the first decile (and not the first five deciles) of the regional distribution of the residual share. The underlying hypothesis is that residual expenses, unlike home bills, may be either reduced or increased to a certain extent according to needs; thus, what is considered a minimum threshold is lower than in the previous case. On this point, Table 3 provides some interesting information, by showing how the residual share is smaller in poorer areas: indeed, in the "Mezzogiorno" of Italy (South and Islands) it is always lower than in Northern regions.

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[31] See Cannari (1994).

[32] See CENSIS and Scenari Immobiliari (1999).

[33] This means a suburban flat on an intermediate floor of a medium-density block of flats in good conditions.

[34] Actually, the survey provides the square meter rent for a 60-square-meter flat: that value is corrected considering that the cost of a smaller house is proportionally higher.

[35] In particular, for electricity CPSE uses the results of a survey carried out by ENEL (National Electricity Company) on a 10,000 households sample, while for telephone the figure adopted stemmed from the special flat rate – 8,57 € for two months - granted by Italian Telecom to low-traffic subscribers (that is for a two-month expenditure up to 6,56 €). As regards durables, the raised value corresponds to the monthly depreciation rate, computed by applying a coefficient to the average price of the goods considered. The durables here considered are identified as basic needs thanks to preliminary analyses: TV set, refrigerator, and washing machine; instead, car is not considered a basic need.

[36] The cited Orshansky method was applied (see Orshansky 1963, 1965).

| TABLE 3 | RESIDUAL SHARE | |
|---|---|---|
| Area | (A) | (B) |
| North West | 0,4056 | 0,2488 |
| North East | 0,405 | 0,2433 |
| Centre | 0,3364 | 0,2094 |
| South | 0,3152 | 0,2036 |
| Islands | 0,251 | 0,1353 |
| (A): first decile value; (B): mean value for households belonging to first decile. | | |
| Source: IVAMOD microsimulation model on ISTAT Survey on Households' Expenditure 1999 data | | |

Regional threshold estimation provides the expected results (see Table 4): the national absolute poverty line with reference to a one-person household for year 2002 equals almost 400 € per month, which is consistent with official data[37]. However, significant gaps emerge not only at regional level, but also among macro-areas: indeed, from a minimum of about 284 € for the South to the North West maximum, where the threshold is about 103 € higher. Hence, our intuition - namely, the different implicit purchasing power in various geographical partitions of a single national poverty threshold - is confirmed. Consequently, official analyses, generally speaking, might overestimate absolute poverty in the South while underestimating in Northern Italy.

| TABLE 4 ABSOLUTE POVERTY THRESHOLDS | | | | | |
|---|---|---|---|---|---|
| minimum montly expenditure (euros) for a one-member household - year 2002 | | | | | |
| | food | housing | other expenditures* | residual | TOTAL |
| Abruzzo and Molise | 132,56 | 133,94 | 35,01 | 19,79 | **321,30** |
| Basilicata | 124,17 | 144,61 | 31,66 | 13,34 | **313,78** |
| Calabria | 136,33 | 103,84 | 29,39 | 32,46 | **302,01** |
| Campania | 125,77 | 131,02 | 31,36 | 28,07 | **316,22** |
| Emilia Romagna | 150,76 | 190,89 | 43,35 | 34,73 | **419,73** |
| Friuli-Venezia Giulia | 147,40 | 159,22 | 36,55 | 27,58 | **370,74** |
| Lazio | 133,93 | 214,36 | 35,57 | 25,53 | **409,39** |
| Liguria | 141,17 | 182,59 | 35,65 | 17,62 | **377,02** |
| Lombardia | 158,34 | 249,11 | 41,79 | 44,08 | **493,32** |
| Marche | 144,22 | 143,45 | 38,38 | 40,19 | **366,24** |
| Piemonte and Valle d'Aosta | 139,11 | 158,77 | 39,74 | 39,53 | **377,15** |
| Puglia | 117,52 | 139,98 | 30,40 | 25,08 | **312,98** |
| Sardegna | 122,32 | 145,04 | 32,00 | 22,38 | **321,75** |
| Sicilia | 131,77 | 122,36 | 28,56 | 16,30 | **298,99** |
| Toscana | 135,63 | 165,36 | 38,91 | 29,57 | **369,46** |
| Trentino-Alto Adige | 129,39 | 191,71 | 34,55 | 36,81 | **392,46** |
| Umbria | 132,71 | 147,45 | 35,37 | 28,87 | **344,40** |
| Veneto | 146,94 | 201,60 | 36,67 | 40,04 | **425,25** |
| | | | | | |
| North West | 151,08 | 204,91 | 40,35 | 37,59 | **433,92** |
| North East | 146,95 | 190,84 | 38,81 | 35,75 | **412,36** |
| Centre | 135,71 | 190,25 | 36,84 | 28,42 | **391,22** |
| South | 125,70 | 131,60 | 31,10 | 25,59 | **313,99** |
| Islands | 129,29 | 125,84 | 28,68 | 17,49 | **301,31** |
| *ITALY* | **140,09** | **181,77** | **36,04** | **31,41** | **389,31** |
| * They include: durables, electricity, telephone, water, heating, condo | | | | | |

More deeply, it is noteworthy that largest gaps are not created by the food component – as it does not exceed ±15% of national average - but rather by housing[38], whose regional values diverge from the national of about ±40% (i.e., more than 140 € per month). Indeed, this is due not only to the economic levels, but also to the different housing density, namely to the smaller diffusion of large cities in the South. Regional thresholds show that, in the North, the maximum value is reached by Lombardia, while Liguria and Friuli are in line with the national average, and Piemonte is even lower. In the Centre, the only region with high values (even higher than that of some Northern regions) is Lazio, while in the South and in the Islands the threshold is about 20% below national value for almost all regions.

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[37] For the latest data, see Commissione d'Indagine sull'Esclusione Sociale (2001).
[38] This is the reason why, lacking data on good prices, some authors (for instance Cannari, 1994) consider the price of houses as a proxy of the cost of living. The advantage of that approach lies in the need for a smaller amount of data, whereas its limit stems from the hardly precise estimate, which, in turn, depends on the degree of price variability in the different areas of the country and on the extent to which transport costs do offset price differentials between areas.

## 5. Absolute poverty: where do the poor live?

### 5.1. *Consumption poverty: the results*

Admittedly, the introduction of diversified thresholds by area brings out higher consumption poverty levels in North West and North East as against what happens with one single national threshold; rather, in the South and the Islands the incidence rates seem definitely lower, though they remain high compared to the rest of Italy[39]. National value - equal to 2.8% – proves higher than the corresponding rate computed through diversified thresholds (2.3%) because, in this last case, the decrease in the number of poor households in the South and Island is greater than the increase in the North. Also, poverty gap is a little lower, as compared with gap resulting from the national threshold, with a considerable decrease in North West and, less, in North East and Islands, whilst slightly increasing in the Centre and the South. As regards the Sen index, it falls for Italy as a whole when diversified thresholds are used, as a result of a sizeable decrease in the "Mezzogiorno", of a smaller decrease in the Centre, and of a slight increase in the North.

| TABLE 5    ABSOLUTE CONSUMPTION POVERTY IN ITALY, 2002 | | | | | | |
|---|---|---|---|---|---|---|
| **National threshold** | | | | | | |
| | NORTH WEST | NORTH EAST | CENTRE | SOUTH | ISLANDS | **ITALY** |
| Poor households | 79.011 | 57.290 | 92.156 | 228.352 | 153.782 | 610.591 |
| Italian households | 6.251.715 | 4.132.649 | 4.220.255 | 4.774.749 | 2.391.297 | 21.770.665 |
| *Poverty incidence (%)* | *1,3* | *1,4* | *2,2* | *4,8* | *6,4* | *2,8* |
| *Poverty intensity (%)* | *23,8* | *16,0* | *13,3* | *21,6* | *17,5* | *19,1* |
| *Percentage distribution* | | | | | | |
| Poor households | *12,9* | *9,4* | *15,1* | *37,4* | *25,2* | *100,0* |
| Italian households | *28,7* | *19,0* | *19,4* | *21,9* | *11,0* | *100,0* |
| *Gini coefficient (poor hous.)* | *0,1941* | *0,1247* | *0,0968* | *0,1457* | *0,1029* | *0,1209* |
| *Sen index (%)* | *0,50* | *0,37* | *0,48* | *1,59* | *1,66* | *0,81* |
| **Macro-area threshold** | | | | | | |
| | NORTH WEST | NORTH EAST | CENTRE | SOUTH | ISLANDS | **ITALY** |
| Poor households | 135.054 | 73.566 | 80.476 | 132.396 | 86.966 | 508.458 |
| Italian households | 6.251.715 | 4.132.648 | 4.220.255 | 4.774.748 | 2.391.297 | 21.770.663 |
| *Poverty incidence (%)* | *2,2* | *1,8* | *1,9* | *2,8* | *3,6* | *2,3* |
| *Poverty intensity (%)* | *18,3* | *15,6* | *14,2* | *22,8* | *16,5* | *18,1* |
| *Percentage distribution* | | | | | | |
| Poor households | *26,6* | *14,5* | *15,8* | *26,0* | *17,1* | *100,0* |
| Italian households | *28,7* | *19,0* | *19,4* | *21,9* | *11,0* | *100,0* |
| *Gini coefficient (poor hous.)* | *0,1466* | *0,1173* | *0,1039* | *0,1775* | *0,1179* | *0,1661* |
| *Sen index (%)* | *0,67* | *0,46* | *0,44* | *1,02* | *0,95* | *0,73* |
| **Differences: macroarea - national threshold** | | | | | | |
| | NORTH WEST | NORTH EAST | CENTRE | SOUTH | ISLANDS | **ITALY** |
| *Poverty incidence* | *0,9* | *0,4* | *-0,3* | *-2,0* | *-2,8* | *-0,5* |
| *Poverty intensity* | *-5,5* | *-0,4* | *0,9* | *1,2* | *-1,0* | *-1,0* |
| *Percentage distribution (p.h.)* | *13,7* | *5,1* | *0,7* | *-11,4* | *-8,1* | *0,0* |
| *Sen index* | *0,2* | *0,1* | *0,0* | *-0,6* | *-0,7* | *-0,1* |
| | | | | | | |
| Source: IVAMOD microsimulation model on ISTAT Survey on Households' Expenditure 1999 data | | | | | | |

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[39] However, it is worth recalling that these estimates generally underrate poverty: homeless, illegal immigrants, every person living on society's border, all these people do not entry in official statistics (except for occasional surveys); though, they form the "hard core" of hardships and isolation in our societies.

| TABLE 6    ABSOLUTE INCOME POVERTY IN ITALY, 2002 | | | | | | |
|---|---|---|---|---|---|---|
| **National threshold** | | | | | | |
| | *NORTH WEST* | *NORTH EAST* | *CENTRE* | *SOUTH* | *ISLANDS* | *ITALY* |
| Poor households | 88.758 | 19.360 | 39.151 | 356.567 | 254.540 | 758.376 |
| Italian households | 6.040.370 | 3.853.275 | 3.929.575 | 4.468.600 | 2.305.834 | 20.597.654 |
| *Poverty incidence (%)* | *1,5* | *0,5* | *1,0* | *8,0* | *11,0* | *3,7* |
| *Poverty intensity (%)* | *44,1* | *32,2* | *71,6* | *39,4* | *46,0* | *43,7* |
| *Percentage distribution* | | | | | | |
| Poor households | *11,7* | *2,6* | *5,2* | *47,0* | *33,6* | *100,0* |
| Italian households | *29,3* | *18,7* | *19,1* | *21,7* | *11,2* | *100,0* |
| *Gini coefficient (poor hous.)* | *0,3837* | *0,1758* | *0,5894* | *0,2876* | *0,3104* | *0,3182* |
| *Sen index (%)* | *0,98* | *0,22* | *0,88* | *4,55* | *6,90* | *2,28* |
| **Macro-area threshold** | | | | | | |
| | *NORTH WEST* | *NORTH EAST* | *CENTRE* | *SOUTH* | *ISLANDS* | *ITALY* |
| Poor households | 137.088 | 26.638 | 39.151 | 279.025 | 201.026 | 682.928 |
| Italian households | 6.040.370 | 3.853.275 | 3.929.575 | 4.468.600 | 2.305.834 | 20.597.654 |
| *Poverty incidence (%)* | *2,3* | *0,7* | *1,0* | *6,2* | *8,7* | *3,3* |
| *Poverty intensity (%)* | *33,1* | *26,9* | *71,6* | *40,9* | *45,1* | *41,8* |
| *Percentage distribution* | | | | | | |
| Poor households | *20,1* | *3,9* | *5,7* | *40,9* | *29,4* | *100,0* |
| Italian households | *29,3* | *18,7* | *19,1* | *21,7* | *11,2* | *100,0* |
| *Gini coefficient (poor hous.)* | *0,3399* | *0,1872* | *0,5899* | *0,3190* | *0,3120* | *0,3549* |
| *Sen index (%)* | *1,28* | *0,28* | *0,88* | *3,71* | *5,41* | *2,06* |
| **Absolute Differences** | | | | | | |
| | *NORTH WEST* | *NORTH EAST* | *CENTRE* | *SOUTH* | *ISLANDS* | *ITALY* |
| *Poverty incidence* | *0,8* | *0,2* | *0,0* | *-1,8* | *-2,3* | *-0,4* |
| *Poverty intensity* | *-11,0* | *-5,3* | *0,0* | *1,5* | *-0,9* | *-1,9* |
| *Percentage distribution (p.h.)* | *8,4* | *1,3* | *0,5* | *-6,1* | *-4,2* | *0,0* |
| *Sen index (%)* | *0,30* | *0,06* | *0,00* | *-0,84* | *-1,49* | *-0,22* |

Source: ITAXMOD microsimulation model on Bank of Italy's Survey on Household Income and Wealth 1998 data.

If we consider some particular socio-economic households' characteristics (see Tab. 7), poverty profiles are quite similar in North and South - actually, they are much more similar than when the national threshold is used - just for households with highest incidence rates: namely, this is true for female householders, for persons with low education level, for unemployed, singles, and so on; conversely, this is not the case when the household head is young - as we shall see.

As regards number of individuals, head counts are U-shaped as family size increases, with a peak for one-component households (4.3% for Italy as a whole) and a lower one for more numerous households (2.9%). The major risk of poverty is among elders (for Italy the rate is equal to 4.5%). When the households' head is young (i.e., aged less than 30), area splitting highlights dramatically different rates: for Southern households the risk is particularly high (4%), while in the Centre and the North poverty values reach their least. This fact might provide some sociological explanation about different moments and reasons which lead a young man to get married in the South, being this decision usually harder because, generally speaking, young families are less well off, compared to Centre and North.

# TABLE 7 HEAD COUNT BY GEOGRAPHICAL AREAS AND HOUSEHOLD CHARACTERISTICS, 2002
## Absolute Consumption Poverty

| | MACRO-AREA THRESHOLDS | | | | NATIONAL THRESHOLD | | | |
|---|---|---|---|---|---|---|---|---|
| | NORTH | CENTRE | SOUTH | ITALY | NORTH | CENTRE | SOUTH | ITALY |
| *Sex of the household head* | | | | | | | | |
| male | 1,4 | 1,5 | 2,4 | 1,8 | 0,9 | 1,8 | 4,4 | 2,3 |
| female | 3,6 | 3,1 | 5,4 | 4,0 | 2,3 | 3,5 | 8,7 | 4,4 |
| *Age of the household head* | | | | | | | | |
| up to 30 years | 0,7 | 0,0 | 4,0 | 1,7 | 0,7 | 0,5 | 7,0 | 2,6 |
| 31 to 40 | 0,8 | 0,8 | 2,1 | 1,3 | 0,4 | 1,0 | 4,1 | 1,8 |
| 41 to 50 | 0,6 | 0,5 | 1,8 | 1,0 | 0,5 | 0,7 | 3,6 | 1,6 |
| 51 to 65 | 1,1 | 1,5 | 2,1 | 1,5 | 0,9 | 1,6 | 3,8 | 2,0 |
| over 65 | 4,4 | 3,6 | 5,1 | 4,5 | 2,7 | 4,1 | 8,2 | 4,8 |
| *Educational level of the household head* | | | | | | | | |
| none/elementary school | 4,0 | 3,6 | 5,6 | 4,5 | 2,6 | 4,2 | 9,0 | 5,2 |
| middle school | 1,2 | 1,7 | 1,6 | 1,4 | 0,8 | 1,8 | 4,1 | 2,1 |
| high school | 0,3 | 0,4 | 0,8 | 0,4 | 0,2 | 0,4 | 1,2 | 0,5 |
| university degree or higher | 0,9 | 0,0 | 0,0 | 0,4 | 0,7 | 0,0 | 0,0 | 0,3 |
| *Marital status* | | | | | | | | |
| married | 1,2 | 1,5 | 2,1 | 1,6 | 0,7 | 1,8 | 4,0 | 2,1 |
| single | 3,2 | 2,5 | 3,2 | 3,1 | 2,3 | 2,9 | 5,6 | 3,3 |
| separeted/divorced | 0,9 | 1,4 | 2,9 | 1,4 | 0,6 | 1,4 | 5,1 | 1,6 |
| widower/widow | 4,4 | 3,2 | 6,9 | 5,0 | 3,0 | 3,6 | 10,8 | 5,6 |
| *Occupational status of the household head* | | | | | | | | |
| Employee | 0,8 | 0,7 | 1,0 | 0,8 | 0,6 | 0,9 | 2,5 | 1,3 |
| Self-employed | 0,3 | 0,5 | 1,7 | 0,8 | 0,3 | 0,5 | 2,9 | 1,1 |
| Not employed | 3,3 | 3,1 | 4,9 | 3,8 | 2,1 | 3,5 | 8,0 | 4,3 |
| *unemployed* | 5,5 | 4,3 | 8,1 | 6,8 | 4,4 | 4,3 | 13,1 | 9,5 |
| *retired* | 3,2 | 3,1 | 3,7 | 3,3 | 2,0 | 3,3 | 6,4 | 3,5 |
| *job pensioner* | 3,1 | 2,8 | 3,5 | 3,2 | 1,9 | 3,0 | 6,1 | 3,3 |
| *non-job pensioner* | * | * | * | 14,3 | * | * | * | 16,1 |
| *Sector (if employed)* | | | | | | | | |
| agricolture | 0,8 | * | 2,7 | 1,9 | 0,6 | * | 6,7 | 4,4 |
| industry | 1,1 | 0,8 | 2,5 | 1,5 | 0,9 | 1,1 | 4,8 | 2,0 |
| public administration | 0,8 | 0,4 | 0,8 | 0,7 | 0,5 | 0,5 | 1,8 | 1,1 |
| other sector | 0,5 | 1,2 | 1,8 | 1,0 | 0,4 | 1,3 | 3,1 | 1,4 |
| *Households size* | | | | | | | | |
| 1 member | 4,2 | 3,2 | 5,4 | 4,3 | 2,9 | 3,2 | 8,0 | 4,4 |
| 2 members | 1,7 | 2,1 | 3,3 | 2,2 | 0,9 | 2,6 | 5,9 | 2,6 |
| 3 members | 0,9 | 0,8 | 2,3 | 1,3 | 0,5 | 1,2 | 3,8 | 1,6 |
| 4 members | 0,9 | 0,9 | 1,6 | 1,2 | 0,7 | 1,0 | 3,8 | 2,1 |
| 5 members or more | 2,0 | 3,2 | 3,2 | 2,9 | 1,9 | 3,4 | 6,0 | 4,5 |
| *Tenure of residence house* | | | | | | | | |
| owned | 1,1 | 1,5 | 1,9 | 1,5 | 0,7 | 1,8 | 3,1 | 1,7 |
| rented or sublet | 4,8 | 3,8 | 6,8 | 5,2 | 3,0 | 3,8 | 13,7 | 6,6 |
| occupied free of charge | 1,9 | 0,5 | 2,4 | 1,9 | 1,1 | 1,1 | 3,7 | 2,2 |
| *Number of household members employed* | | | | | | | | |
| none | 4,3 | 3,6 | 5,6 | 4,6 | 2,8 | 3,9 | 9,0 | 5,2 |
| 1 employed | 0,8 | 1,3 | 1,6 | 1,2 | 0,5 | 1,6 | 3,4 | 1,8 |
| 2 or more employed | 0,6 | 0,5 | 0,8 | 0,6 | 0,5 | 0,7 | 1,7 | 0,8 |
| *Number of children* | | | | | | | | |
| none | 2,9 | 2,8 | 4,2 | 3,2 | 1,9 | 3,1 | 6,7 | 3,5 |
| 1 child | 0,9 | 1,0 | 2,7 | 1,5 | 0,5 | 1,3 | 4,5 | 1,8 |
| 2 children | 0,9 | 0,5 | 1,5 | 1,1 | 0,7 | 0,8 | 3,6 | 1,9 |
| 3 children or more | 2,7 | 5,2 | 3,5 | 3,5 | 2,5 | 5,2 | 6,5 | 5,4 |
| at least one child | 1,0 | 1,1 | 2,3 | 1,5 | 0,7 | 1,4 | 4,4 | 2,2 |
| *Number of minor children aged under 18* | | | | | | | | |
| none | 2,3 | 2,2 | 3,5 | 2,6 | 1,5 | 2,5 | 5,7 | 3,0 |
| 1 child | 0,8 | 1,0 | 1,6 | 1,1 | 0,4 | 1,4 | 3,7 | 1,8 |
| 2 children | 1,0 | 0,7 | 2,3 | 1,6 | 0,6 | 0,9 | 4,6 | 2,5 |
| 3 children or more | * | * | 5,0 | 4,4 | * | * | 9,3 | 6,9 |
| at least one minor child | 1,0 | 1,0 | 2,3 | 1,5 | 0,6 | 1,2 | 4,6 | 2,4 |
| *Number of invalid persons* | | | | | | | | |
| none | 2,0 | 1,9 | 3,0 | 2,3 | 1,2 | 1,9 | 5,1 | 2,6 |
| at least one invalid person | 11,5 | 13,1 | 11,3 | 11,8 | 8,5 | 13,1 | 18,3 | 13,0 |
| *Number of persons aged over 65* | | | | | | | | |
| none | 0,8 | 0,9 | 2,1 | 1,3 | 0,6 | 1,1 | 3,9 | 1,8 |
| at least one old person | 4,2 | 3,5 | 4,9 | 4,3 | 2,5 | 4,0 | 8,0 | 4,6 |
| *Number of unemployed* | | | | | | | | |
| none | 2,0 | 1,8 | 2,8 | 2,2 | 1,3 | 2,0 | 4,8 | 2,5 |
| at least one unemployed | 2,7 | 3,1 | 3,8 | 3,4 | 1,9 | 3,5 | 7,1 | 5,3 |
| *Household typology* | | | | | | | | |
| Single | 4,2 | 3,2 | 5,4 | 4,3 | 2,9 | 3,2 | 8,0 | 4,4 |
| *single member aged 18-59* | 1,0 | 0,1 | 2,3 | 1,2 | 0,9 | 0,1 | 2,9 | 1,3 |
| *single member aged over 59* | 6,0 | 4,8 | 6,7 | 6,0 | 4,1 | 4,8 | 10,1 | 6,0 |
| Lone parent with children | 1,5 | 1,7 | 5,6 | 2,8 | 0,9 | 2,0 | 9,3 | 3,7 |
| *lone parent with children age under 18* | 0,7 | 2,2 | 7,7 | 3,2 | 0,6 | 2,2 | 11,8 | 4,5 |
| Couple without children | 1,6 | 2,3 | 2,6 | 2,0 | 0,8 | 2,7 | 4,6 | 2,2 |
| *couple without children aged 18-59* | 0,5 | 0,5 | 2,1 | 0,9 | 0,5 | 0,5 | 2,9 | 1,1 |
| *couple without children aged over 59* | 2,5 | 3,5 | 2,9 | 2,8 | 1,1 | 4,2 | 5,6 | 3,1 |
| Couple with children | 0,9 | 1,0 | 1,9 | 1,3 | 0,6 | 1,2 | 3,7 | 1,9 |
| *couple with one child* | 0,8 | 1,0 | 2,1 | 1,2 | 0,4 | 1,3 | 3,4 | 1,5 |
| *couple with 2 children* | 0,8 | 0,6 | 1,3 | 1,0 | 0,6 | 0,7 | 3,4 | 1,8 |
| *couple with 3 or more children* | 3,0 | 3,5 | 2,9 | 3,0 | 2,7 | 3,5 | 5,3 | 4,5 |
| Couple with children aged under 18 | 1,0 | 0,8 | 1,9 | 1,4 | 0,7 | 1,1 | 4,1 | 2,2 |
| *couple with one minor child* | 0,8 | 0,9 | 1,1 | 1,1 | 0,4 | 1,4 | 3,4 | 1,7 |
| *couple with 2 minor children* | 1,1 | 0,4 | 1,9 | 1,4 | 0,7 | 0,5 | 4,1 | 2,3 |
| *couple with 3 or more minor children* | * | * | 3,6 | 3,6 | * | * | 7,7 | 6,0 |
| Couple with children | | | | | | | | |
| both parents employed | 0,4 | 0,3 | 0,4 | 0,4 | 0,4 | 0,5 | 0,7 | 0,5 |
| only one parent employed | 0,9 | 0,6 | 1,1 | 0,9 | 0,6 | 0,8 | 2,8 | 1,5 |
| none parents employed | 0,9 | 2,3 | 4,4 | 2,5 | 0,7 | 2,8 | 6,9 | 3,4 |
| **TOTAL** | **2,0** | **1,9** | **3,1** | **2,3** | **1,3** | **2,2** | **5,3** | **2,8** |

* the results are not reported because the sample is too small.

Source: IVAMOD microsimulation model on ISTAT Survey on Households' Expenditure 1999 data.

Furthermore, a high education level cuts down the probability of being poor: indeed, this is very high for illiterate individuals (for Italy 4.5%, with slight differences among areas), and is almost zero for graduated. With regard to occupational status, it is clear that having a job is the most efficient protection against poverty, even in the "Mezzogiorno". Indeed, poverty rates are very high for unemployed (3.8% Italy, varying from 3.1% in the Centre to 5% in the South; note that these rates include first-job seekers, also) and even higher for disabled people[40]. Job pensioners' rates are lower, though higher than the average, compared to other non-occupied individuals.

In conclusion, some typical households, facing particularly high risk of poverty, emerge: the elders who live alone, the households with either more than three components or at least one unemployed, the one-parent households with children. In particular, young couples with three or more children perform remarkable poverty rates (3%, and 3.6% if all children are less than 18); even higher is the index for households where all individuals are more than 60 years old (national value is equal to 6% for lonely elders, and to 2.8% for couples). However, on this point it should be recalled that expenditure might overestimate poverty indices regarding households adopting low consumption levels not because of a lack in resources - i.e. for an effectively hard condition - but as a consequence of habits and life styles. Hence, it seems reasonable to assume that indexes for elderly people, though relevant, should be smaller. As we shall see later on, this is confirmed by income poverty results, where young (aged less than 30) and elderly households' poverty rates exchange each other.

Finally, some sensitivity analyses of our results, with respect to three fundamental assumptions discussed in Section 3, are carried on (Tab. 8). If we remove the "equivalence scale" hypothesis - that is, if we adopt the implicit CPSE scale - poverty indices do not substantially vary, at least for Italy as a whole: head count ratio does not vary, while gap slightly rises. No need to say, large households are disadvantaged in this case, as well as families with at least one child, involving CPSE scale smaller scale economies, while households with at least one elderly person show smaller poverty rates.

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[40] For disabled it is not possible to provide area splitting because the sample for those individuals is too small.

| TABLE 8   SENSITIVITY ANALYSIS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Absolute Consumption Poverty* | | | | | | | | | | | | |
| | HEAD COUNT RATIO | | | | | | POVERTY GAP | | | | | |
| | *base-scenario* | | | | | | *base-scenario* | | | | | |
| | North West | North East | Centre | South | Islands | ITALY | North West | North East | Centre | South | Islands | ITALY |
| **TOTAL** | **2,2** | **1,8** | **1,9** | **2,8** | **3,6** | **2,3** | **18,3** | **15,6** | **14,2** | **22,8** | **16,5** | **18,1** |
| 1 member | 4,3 | 4,1 | 3,2 | 4,8 | 6,5 | 4,3 | 17,8 | 19,4 | 11,3 | 22,1 | 21,3 | 18,5 |
| *households size* 2 members | 1,7 | 1,7 | 2,1 | 3,3 | 3,3 | 2,2 | 16,3 | 10,0 | 12,1 | 18,5 | 14,8 | 14,9 |
| 3 members or more | 1,2 | 0,8 | 1,2 | 1,9 | 2,7 | 1,5 | 21,5 | 15,2 | 20,4 | 26,3 | 13,1 | 20,5 |
| *number of children* none | 3,0 | 2,9 | 2,8 | 3,8 | 4,8 | 3,2 | 18,3 | 15,2 | 11,6 | 19,3 | 19,9 | 17,1 |
| at least one child | 1,2 | 0,8 | 1,1 | 2,1 | 2,8 | 1,5 | 18,4 | 17,1 | 20,3 | 26,8 | 12,3 | 20,1 |
| *number of old members* none | 0,8 | 0,8 | 0,9 | 1,9 | 2,4 | 1,3 | 25,8 | 19,0 | 20,5 | 28,5 | 13,8 | 22,6 |
| at least one old person | 4,8 | 3,4 | 3,5 | 4,4 | 6,0 | 4,3 | 15,8 | 14,2 | 11,7 | 18,0 | 18,5 | 15,7 |
| | *scenario 1* | | | | | | *scenario 1* | | | | | |
| | North West | North East | Centre | South | Islands | ITALY | North West | North East | Centre | South | Islands | ITALY |
| **TOTAL** | **2,0** | **1,6** | **1,9** | **2,8** | **4,1** | **2,3** | **19,4** | **16,1** | **14,3** | **23,8** | **15,6** | **18,6** |
| 1 member | 4,1 | 4,0 | 3,0 | 4,4 | 6,5 | 4,2 | 17,7 | 19,4 | 10,8 | 23,1 | 21,3 | 18,6 |
| *households size* 2 members | 1,1 | 1,2 | 1,4 | 2,0 | 3,0 | 1,5 | 20,4 | 8,3 | 11,3 | 22,4 | 11,3 | 15,6 |
| 3 members or more | 1,3 | 0,9 | 1,7 | 2,6 | 3,7 | 1,9 | 22,1 | 16,4 | 18,8 | 24,6 | 13,5 | 19,9 |
| *number of children* none | 2,7 | 2,6 | 2,3 | 3,2 | 4,9 | 2,9 | 18,9 | 15,6 | 11,2 | 20,6 | 18,5 | 17,4 |
| at least one child | 1,2 | 0,8 | 1,6 | 2,5 | 3,6 | 1,8 | 20,8 | 18,0 | 18,5 | 26,4 | 12,8 | 20,3 |
| *number of old members* none | 0,8 | 1,0 | 1,1 | 2,2 | 3,1 | 1,4 | 28,0 | 17,0 | 21,4 | 27,9 | 13,3 | 22,2 |
| at least one old person | 4,2 | 2,8 | 3,3 | 4,0 | 6,1 | 3,9 | 16,2 | 15,7 | 10,7 | 19,5 | 17,9 | 16,1 |
| *tenure of residence house* owned | 1,2 | 0,8 | 1,6 | 1,3 | 3,2 | 1,4 | 11,6 | 14,8 | 7,1 | 12,9 | 16,1 | 12,3 |
| rented or sublet | 4,2 | 4,6 | 3,6 | 7,1 | 9,1 | 5,2 | 14,9 | 18,7 | 24,9 | 19,2 | 13,2 | 17,8 |
| | *scenario 2* | | | | | | *scenario 2* | | | | | |
| | North West | North East | Centre | South | Islands | ITALY | North West | North East | Centre | South | Islands | ITALY |
| **TOTAL** | **1,8** | **1,8** | **2,2** | **3,9** | **4,2** | **2,6** | **18,0** | **18,5** | **18,0** | **17,3** | **18,5** | **17,9** |
| 1 member | 3,1 | 3,2 | 1,7 | 4,4 | 3,0 | 3,1 | 20,9 | 23,9 | 19,6 | 16,5 | 21,4 | 20,3 |
| **households size** 2 members | 0,7 | 1,3 | 1,7 | 2,7 | 2,7 | 1,6 | 10,3 | 12,8 | 15,2 | 15,0 | 13,4 | 13,7 |
| 3 members or more | 1,8 | 1,5 | 2,7 | 4,2 | 5,2 | 2,9 | 17,3 | 16,5 | 18,5 | 18,2 | 19,0 | 18,1 |
| **tenure of residence house** owned | 1,1 | 1,2 | 1,7 | 2,8 | 3,1 | 1,8 | 21,6 | 17,7 | 14,5 | 15,5 | 20,2 | 17,5 |
| rented or sublet | 4,2 | 4,6 | 3,6 | 7,1 | 9,1 | 5,2 | 14,9 | 18,7 | 24,9 | 19,2 | 13,2 | 17,8 |
| | *scenario 3* | | | | | | *scenario 3* | | | | | |
| | North West | North East | Centre | South | Islands | ITALY | North West | North East | Centre | South | Islands | ITALY |
| **TOTAL** | **1,1** | **1,3** | **2,1** | **9,2** | **11,1** | **4,2** | **18,8** | **19,8** | **18,2** | **19,1** | **19,9** | **19,3** |
| 1 member | 1,9 | 2,6 | 1,7 | 8,3 | 11,1 | 4,1 | 22,2 | 25,1 | 19,2 | 21,4 | 15,2 | 20,1 |
| *households size* 2 members | 0,2 | 0,9 | 1,7 | 7,0 | 8,6 | 2,7 | 10,6 | 11,8 | 14,8 | 18,2 | 16,7 | 16,7 |
| 3 members or more | 1,2 | 1,0 | 2,5 | 10,4 | 12,1 | 5,1 | 16,4 | 18,4 | 19,2 | 18,7 | 22,5 | 19,7 |

*Base-scenario: the assumptions used in the paper are used; scenario 1: adoption of the implicit CPSE eq. scale; scenario 2: sc. 1 and removing housing correction; scenario 3: sc. 2 and only one national threshold.
Source: IVAMOD microsimulation model on ISTAT Survey on Households' Expenditure 1999 data

In the second scenario the correction for homeowners is eliminated, and we attribute them imputed rents: head count ratio surprisingly rises, both for Italy (from 2.3 to 2.6%) and for all areas, with the exception of North West. This result was not expected, since imputed rents are usually very high, irrespective of actual market values and, in any case, larger than the amount included in the threshold: head count ratio should reasonably decrease[41]. Nevertheless, a possible explanation stands on the erratic nature of the imputed rents (see Table 2). Anyway, in this scenario house owners definitely experiment a lower poverty risk than renters, being head count ratio one-third in all areas for the first ones as compared to the seconds.

The most valuable result of our analysis comes over by considering the third scenario, where geographically diversified thresholds are removed; this cannot but confirm how relevant the differences in the cost of living in Italy are, and how much these differences do affect poverty statistics[42]. Head count ratios are almost doubled with respect to base-scenario, halving in the North, being more or less stable in the Centre and trebling in the South and Islands. Moreover, rates are higher for numerous families (i.e. at least 3-member), being in this case the spread between North and South very large.

*5.2 Income poverty: the results*

As mentioned above, we computed poverty incidence in Italy using ITAXMOD micro-simulation model as well. We compared the poverty lines estimated in this paper with disposable equivalent household income[43] for the year 2002 gathered from the Bank of Italy's Survey on Household Income and Wealth

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[41] The average imputed rent for one-person owner households is equal to 360 €, while the housing threshold component is equal to 180 € (national average). However, it should be noted that imputed rents, unlike the threshold component, do not raise very much for numerous families, and this involves large scale economies; hence, housing component is higher than average imputed rent for households with 4 or more individuals.

[42] Note that poverty rates in Tab. 8 are different from rates with one national threshold in Tab. 5, since in that case equivalence scale and housing correction hypotheses were retained.

[43] The definition of income used in this work has the aim, as far as possible, to represent in the more comprehensive way households resources. Household is considered as the fundamental economic unit to define the welfare level, the hypothesis of equal sharing of resources among family members is adopted. Household disposable income is computed for each household according to the current year fiscal legislation, including therefore the increase to 516 Euros for the minimum pensions and the increase to 516 Euros of tax credits for dependent children for tax payer below fixed income levels. It includes net labour income for employees and self-employed (for self-employed there is a routine that adjusts for fiscal evasion), pensions income and other public transfers (family

(2000). Absolute poverty rate in this case counts 3.3% households on the national territory (see Table 6), which corresponds to 683,000 households. This percentage is higher compared to the one computed using consumption expenditure: therefore poverty results to be more accentuated when considering income as a proxy of potential consumption. This discrepancy in Italy emerges in the official statistics as well[44]. It emphasises the importance of using both variables (income and consumption) in this kind of analysis. Differences in results can arise from several reasons: the non-homogeneity between used dataset[45]; non-sampling errors in surveying the selected variables (for example, if we refer to income, entries from non-registered work are not normally declared by interviewed). An economic interpretation can be found in the use of integrative income sources, such as asset consumption, borrowings, usury and non-registered works[46], to reach at least minimum consumption level.

Using poverty lines differentiated by geographical area instead than a unique national poverty line leads to results which are, from a quantitative point of view, aligned with those obtained analysing consumption: the national incidence decreases (from 3.7 to 3.3%), the reduction is stronger in the South of Italy (from 8.0 to 6.2%) and in the Islands (from 11.0 to 8.7%). Instead, poverty incidence slightly increases in the North East (from 0.5 to 0.7%) and, more sharply, in the North West (from 1.5 to 2.3), while in the Centre the distinction does not appear remarkable. A further interesting issue, comparing the two methods, is the direction of changes of incidence and intensity indices in the South and in the North. As mentioned above, in the South of Italy poverty incidence decreases, but the intensity remains substantially unchanged (South: from 39.4 to 40.9; Islands: from 46.0 to 45.1); in the North of Italy, instead, the incidence increases, while the gravity diminishes (North East from 32.2 to 26.9; North West from 44.1 to 33.1).

Although the Southern of Italy remains the area with the highest absolute poverty even using differentiated thresholds (the incidence is double with respect to the national average), the distance with the other areas in the country considerably softens (though less than when analysing consumption).

The aggregated data hide important peculiarities of specific social groups: Table 9 shows the percentages of poor households in groups defined according to family or reference person characteristics and to some household typologies.

On average, householder gender slightly affects the probability to be poor. Data about household head professional status show that the probability to become poor is significant for all families with unemployed or seeking for first employment householder (35.2% at a national level, 46.1% in the South), in a minor extent when the householder is a non-job pensioner (4.8%). At a national level, poverty among households

allowances for employees and former-employees pensioners, maternity allowances for non-working mothers, allowance for families with at least three dependent children, etc.), capital income (excluding the one referred to the owned house, for which we preferred, as mentioned, using the value computed for the house component in the basket), rent received for owned dwellings rented out, income form financial assets (these incomes are corrected for under-reporting and non-reporting with the methodology proposed by the Bank of Italy).

[44] See Commissione d'Indagine sull'Esclusione Sociale (2000c).

[45] For a methodological comparison between the two dataset, which are not easily comparable, see Brandolini (1999) and Coli and Tartamella (2000).

[46] The two last hypotheses appears to be more likely, since poor people in absolute terms should not detain assets and could be in trouble in borrowing from the credit market.

whose reference person is an employee results to be limited (1.5%), while in the South of Italy even this category shows a high risk of absolute poverty (3.9%). For self-employed, instead, percentages are everywhere more contained. These data show as occupational status allows limiting, but not eliminating, the poverty risk. The presence of working poor (or with low remuneration) is very likely due to labour market changes that took place in the last few years. The minimum poverty incidence is instead observed among families whose householder is retired: 0.9% for Italy, 1.1% in the Northern regions and 0.9% in the South.

Poverty is highly related not only to householder occupational status, but also to the one of the other family components. The incidence is 1.4% if no household member is looking for a job, it decreases to 0.3% if there are at least two workers, while it gets 13.7% if there is at least an unemployed. The presence of at least one worker allows to significantly reducing the risk of experiencing poverty, especially in the South (from 12.4% to 4.5%).

The incidence of poverty by family size is small for households with one or two components, while it is relevant for all other families (around 4.0%), especially those with five or more members. The likelihood to become poor for a two-components household is 2.2%, while it is more than double compared to the national average (6.7%) for households with five or more components and it is four times the average for households living in the South (11.8%).

Poverty among families with householder aged up to 30 years is 9.4% at a national level and 24.7% in the South. This may be due to high unemployment among young people, temporary and non-protected employment, and lack both of economic support for children and of a last resort security. In the age group between 31 and 65 the percentage is between 3.0% and 5.0% on a national scale, whereas it is above the average for all these age groups in the South, even if it is decreasing as age increases. It is instead below the national level in the North, where it slightly increases with age. Families with householders aged more than 65 count instead a 1.3% poverty incidence. Therefore, elders result to be under-represented among poor people. This confirms the effectiveness of policy devoted to them. Poverty diffusion in this group can benefit from the rise to 516 € of the minimum pensions for some categories of elderly introduced in Italy in 2002.

| TABLE 9 HEAD COUNT BY GEOGRAPHICAL AREAS AND HOUSEHOLD CHARACTERISTICS, 2002 | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Absolute Income Poverty** | | | | | | | |
| | MACRO-AREA THRESHOLDS | | | | NATIONAL THRESHOLD | | | |
| | NORTH | CENTRE | SOUTH | ITALY | NORTH | CENTRE | SOUTH | ITALY |
| *Sex of the household head* | | | | | | | | |
| male | 1,2 | 0,8 | 7,3 | 3,1 | 0,5 | 0,8 | 8,6 | 3,2 |
| female | 2,7 | 1,5 | 6,6 | 3,8 | 2,6 | 1,5 | 10,0 | 4,9 |
| *Age of the household head* | | | | | | | | |
| up to 30 years | 4,6 | 2,5 | 24,7 | 9,4 | 4,6 | 2,5 | 28,1 | 10,3 |
| 31 to 40 | 0,4 | 1,8 | 12,7 | 4,6 | 0,2 | 1,8 | 15,1 | 5,2 |
| 41 to 50 | 1,9 | 0,5 | 8,9 | 3,9 | 1,3 | 0,5 | 10,0 | 4,1 |
| 51 to 65 | 2,5 | 1,0 | 5,2 | 3,1 | 1,4 | 1,0 | 7,3 | 3,2 |
| over 65 | 0,9 | 0,5 | 2,2 | 1,3 | 0,6 | 0,5 | 3,9 | 1,7 |
| *Educational level of the household head* | | | | | | | | |
| none/elementary school | 2,2 | 1,2 | 7,2 | 4,1 | 1,8 | 1,2 | 9,7 | 4,9 |
| middle school | 2,2 | 1,7 | 11,6 | 5,0 | 0,7 | 1,7 | 13,7 | 4,9 |
| high school | 0,7 | 0,2 | 3,6 | 1,4 | 0,7 | 0,2 | 4,7 | 1,6 |
| university degree or higher | 0,5 | 1,2 | 0,8 | 0,8 | 0,5 | 1,2 | 0,8 | 0,8 |
| *Marital status* | | | | | | | | |
| married | 1,3 | 0,7 | 7,7 | 3,3 | 0,6 | 0,7 | 9,2 | 3,5 |
| single | 1,8 | 1,4 | 7,2 | 3,2 | 1,7 | 1,4 | 8,6 | 3,6 |
| separeted/divorced | 5,6 | 4,8 | 8,6 | 6,1 | 5,2 | 4,8 | 12,6 | 6,8 |
| widower/widow | 1,8 | 0,4 | 4,4 | 2,5 | 1,3 | 0,4 | 7,9 | 3,5 |
| *Occupational status of the household head* | | | | | | | | |
| Employee | 0,5 | * | 3,9 | 1,5 | 0,4 | * | 5,1 | 1,8 |
| Self-employed | 1,0 | * | 1,7 | 1,0 | 0,3 | * | 4,3 | 1,2 |
| Not employed | 2,7 | 2,2 | 10,0 | 5,3 | 1,8 | 2,2 | 12,3 | 5,7 |
| *unemployed* | *18,3* | * | *46,1* | *35,2* | *18,3* | * | *51,3* | *38,4* |
| *retired* | *1,5* | *0,6* | *2,8* | *1,8* | *0,5* | *0,6* | *4,7* | *1,9* |
| *job pensioner* | *1,1* | *0,2* | *0,9* | *0,9* | *0,1* | *0,2* | *1,3* | *0,5* |
| *non-job pensioner* | *3,4* | *2,4* | *6,6* | *4,8* | *2,0* | *2,4* | *11,7* | *6,5* |
| *Households size* | | | | | | | | |
| 1 member | 2,3 | 1,3 | 3,7 | 2,5 | 1,8 | 1,3 | 6,0 | 2,8 |
| 2 members | 2,0 | 1,3 | 3,1 | 2,2 | 1,0 | 1,3 | 5,3 | 2,3 |
| 3 members | 1,3 | 1,3 | 10,0 | 3,7 | 1,1 | 1,3 | 11,6 | 4,0 |
| 4 members | 1,0 | 0,4 | 7,9 | 3,7 | 0,8 | 0,4 | 9,9 | 4,4 |
| 5 members or more | * | * | 11,8 | 6,7 | * | * | 13,0 | 7,1 |
| *Tenure of residence house* | | | | | | | | |
| owned | 0,2 | 0,1 | 2,3 | 0,9 | 0,2 | 0,1 | 2,6 | 1,0 |
| rented or sublet | 5,7 | 3,3 | 18,1 | 8,8 | 3,5 | 3,3 | 25,6 | 9,9 |
| occupied free of charge | 3,0 | 1,3 | 22,6 | 9,5 | 2,6 | 1,3 | 25,7 | 10,4 |
| *Number of household members employed* | | | | | | | | |
| none | 3,5 | 2,9 | 12,4 | 6,7 | 2,3 | 2,9 | 15,0 | 7,1 |
| 1 employed | 1,1 | 0,3 | 4,5 | 2,2 | 0,7 | 0,3 | 6,5 | 2,8 |
| 2 or more employed | 0,2 | * | 0,7 | 0,3 | 0,1 | * | 1,3 | 0,3 |
| *Number of income recipients* | | | | | | | | |
| 1 member | 3,6 | 2,0 | 11,6 | 6,3 | 2,4 | 2,0 | 14,6 | 6,8 |
| 2 or more members | 0,3 | 0,2 | 2,7 | 1,0 | 0,2 | 0,2 | 3,6 | 1,2 |
| *Number of children* | | | | | | | | |
| none | 2,0 | 0,8 | 3,2 | 2,1 | 1,1 | 0,8 | 4,8 | 2,1 |
| 1 child | 0,8 | 2,0 | 8,9 | 3,2 | 0,6 | 2,0 | 11,0 | 3,7 |
| 2 children | 1,8 | 0,4 | 8,7 | 4,3 | 1,6 | 0,4 | 11,1 | 5,2 |
| 3 children or more | * | * | 11,5 | 7,4 | * | * | 13,0 | 8,0 |
| at least one child | 1,3 | 1,1 | 9,3 | 4,2 | 1,0 | 1,1 | 11,5 | 4,9 |
| *Number of minor children aged under 18* | | | | | | | | |
| none | 1,6 | 0,8 | 3,8 | 2,1 | 1,0 | 0,8 | 5,6 | 2,4 |
| 1 child | 1,9 | 2,4 | 10,9 | 4,4 | 1,3 | 2,4 | 12,9 | 4,7 |
| 2 children | 2,0 | 0,3 | 11,6 | 5,9 | 1,6 | 0,3 | 14,2 | 6,8 |
| 3 children or more | * | * | 19,5 | 11,2 | * | * | 21,0 | 12,1 |
| at least one minor child | 1,8 | 1,4 | 12,6 | 5,7 | 1,3 | 1,4 | 14,8 | 6,3 |
| *Number of invalid persons* | | | | | | | | |
| none | 1,6 | 1,0 | 7,3 | 3,3 | 1,1 | 1,0 | 9,0 | 3,6 |
| at least one invalid person | 1,9 | 1,2 | 4,9 | 3,1 | 0,5 | 1,2 | 9,2 | 4,4 |
| *Number of persons aged over 65* | | | | | | | | |
| none | 2,1 | 1,3 | 10,0 | 4,4 | 1,4 | 1,3 | 12,2 | 4,8 |
| at least one old person | 0,8 | 0,4 | 2,5 | 1,3 | 0,4 | 0,4 | 3,9 | 1,7 |
| *Number of unemployed* | | | | | | | | |
| none | 1,2 | 0,4 | 2,4 | 1,4 | 0,7 | 0,4 | 3,5 | 1,4 |
| at least one unemployed | 6,9 | 4,4 | 19,3 | 13,7 | 6,3 | 4,4 | 23,4 | 16,0 |
| *Household typology* | | | | | | | | |
| Single | 2,3 | 1,3 | 3,7 | 2,5 | 1,8 | 1,3 | 6,0 | 2,8 |
| *single member aged 18-59* | *3,7* | *1,7* | *10,4* | *4,5* | *3,7* | *1,7* | *12,3* | *4,9* |
| *single member aged over 59* | *1,6* | *1,0* | *1,8* | *1,6* | *0,8* | *1,0* | *4,3* | *1,9* |
| Lone parent with children | 5,9 | 3,2 | 7,7 | 6,0 | 5,9 | 3,2 | 13,5 | 8,0 |
| *lone parent with children age under 18* | *11,1* | * | * | *10,7* | *11,1* | * | * | *12,5* |
| Couple without children | 2,0 | 0,5 | 1,7 | 1,7 | 0,7 | 0,5 | 2,7 | 1,2 |
| *couple without children aged 18-59* | *1,4* | * | *5,1* | *1,9* | *1,4* | * | *8,7* | *2,7* |
| *couple without children aged over 59* | *2,4* | *0,8* | *0,4* | *1,5* | *0,3* | *0,8* | *0,4* | *0,4* |
| Couple with children | 0,7 | 0,9 | 9,8 | 4,1 | 0,3 | 0,9 | 11,6 | 4,6 |
| *couple with one child* | *0,5* | *1,6* | *9,7* | *3,1* | *0,2* | *1,6* | *10,9* | *3,2* |
| *couple with 2 children* | *0,8* | *0,4* | *8,6* | *3,9* | *0,5* | *0,4* | *10,8* | *4,7* |
| *couple with 3 or more children* | * | * | *10,6* | *6,0* | * | * | *12,3* | *6,7* |
| Couple with children aged under 18 | 1,0 | 1,1 | 13,2 | 5,6 | 0,4 | 1,1 | 15,3 | 6,2 |
| *couple with one minor child* | *1,3* | *1,8* | *11,9* | *4,3* | *0,6* | *1,8* | *14,2* | *4,6* |
| *couple with 2 minor children* | *0,6* | *0,4* | *12,1* | *5,7* | *0,2* | *0,4* | *14,2* | *6,5* |
| *couple with 3 or more minor children* | * | * | *18,8* | *9,7* | * | * | *20,3* | *10,5* |
| Couple with children | | | | | | | | |
| *both parents employed* | *0,3* | * | * | *0,2* | *0,1* | * | * | *0,1* |
| *only one parent employed* | *1,0* | *0,2* | *5,3* | *2,7* | *0,4* | *0,2* | *7,1* | *3,2* |
| *none parents employed* | * | * | *25,7* | *13,0* | * | * | *28,8* | *14,3* |
| **TOTAL** | **1,7** | **1,0** | **7,1** | **3,3** | **1,1** | **1,0** | **9,0** | **3,7** |

* the results are not reported because the sample is too small

Source: ITAXMOD microsimulation model on Bank of Italy's Survey on Household Income and Wealth 1998 data.

| TABLE 10   POVERTY GAP WITH MACRO-AREA THRESHOLDS, 2002 | | | | | |
|---|---|---|---|---|---|
| by Geographical Areas and Household Characteristics | | | | | |
| | INCOME POVERTY | | | CONSUMPTION POVERTY | | |
| | NORTH | SOUTH | ITALY | NORTH | SOUTH | ITALY |
| *Sex of the household head* | | | | | | |
| male | 18,6 | 44,0 | 40,6 | 18,8 | 21,3 | 19,1 |
| female | 48,0 | 39,0 | 44,4 | 15,8 | 18,7 | 16,8 |
| *Age of the household head* | | | | | | |
| up to 30 years | * | 63,6 | 68,1 | * | 26,0 | 25,0 |
| 31 to 40 | * | 42,5 | 45,1 | 20,6 | 24,6 | 24,0 |
| 41 to 50 | * | 42,4 | 43,7 | 16,2 | 23,2 | 20,9 |
| 51 to 65 | 20,0 | 38,8 | 32,9 | 25,0 | 20,2 | 21,4 |
| over 65 | * | 21,2 | 18,3 | 15,2 | 18,3 | 15,6 |
| *Educational level of the household head* | | | | | | |
| none/elementary school | 29,8 | 32,0 | 31,9 | 15,7 | 21,2 | 18,2 |
| middle school | 17,6 | 49,2 | 44,9 | 22,3 | 20,3 | 19,0 |
| high school | * | 64,3 | 69,7 | * | 7,2 | 12,9 |
| university degree or higher | * | * | * | * | * | * |
| *Marital status* | | | | | | |
| married | 28,8 | 43,9 | 42,0 | 17,4 | 17,3 | 16,8 |
| single | * | 53,0 | 50,0 | 17,6 | 27,9 | 19,9 |
| separeted/divorced | * | * | 62,2 | * | * | 33,2 |
| widower/widow | * | 21,2 | 20,0 | 17,1 | 21,1 | 18,1 |
| *Occupational status of the household head* | | | | | | |
| Employee | * | 32,9 | 31,1 | 22,2 | 26,4 | 24,6 |
| Self-employed | * | * | * | * | 35,4 | 39,8 |
| Not employed | 35,5 | 45,8 | 45,2 | 15,3 | 18,2 | 16,0 |
| *unemployed* | * | *51,1* | *53,4* | * | *20,0* | *19,9* |
| *retired* | *8,0* | *20,7* | *15,1* | *15,1* | *16,2* | *14,8* |
| job pensioner | * | * | *9,0* | *15,0* | *16,1* | *14,6* |
| non-job pensioner | * | *21,3* | *18,3* | * | * | *17,5* |
| *Sector (if employed)* | | | | | | |
| agricolture | | | | * | 24,5 | 24,5 |
| industry | | | | 16,2 | 29,1 | 23,8 |
| public administration | | | | * | 24,5 | 30,7 |
| other sectors | | | | 28,6 | 24,2 | 25,6 |
| *Households size* | | | | | | |
| 1 member | 23,7 | * | 44,2 | 18,4 | 21,7 | 18,5 |
| 2 members | 24,5 | 32,5 | 31,5 | 13,8 | 17,2 | 14,9 |
| 3 members | * | 38,5 | 45,5 | 11,9 | 17,7 | 14,1 |
| 4 members | * | 50,9 | 49,0 | 31,4 | 19,0 | 22,6 |
| 5 members or more | * | 35,5 | 34,3 | * | 27,7 | 27,7 |
| *Tenure of residence house* | | | | | | |
| owned | * | 24,2 | 23,7 | 12,6 | 14,7 | 12,7 |
| rented or sublet | 32,2 | 48,3 | 45,1 | 15,0 | 16,9 | 16,5 |
| occupied free of charge | * | 48,6 | 48,5 | 10,3 | 16,6 | 13,2 |
| *Number of household members employed* | | | | | | |
| none | 35,7 | 47,1 | 46,2 | 15,6 | 17,6 | 16,1 |
| 1 employed | * | 30,7 | 28,7 | 22,9 | 28,8 | 24,2 |
| 2 or more employed | * | * | * | 14,0 | 23,4 | 24,5 |
| *Number of income recipients* | | | | | | |
| 1 member | 31,6 | 46,4 | 44,5 | | | |
| 2 or more members | * | 21,2 | 28,1 | | | |
| *Number of children* | | | | | | |
| none | 21,3 | 49,0 | 36,6 | 17,2 | 19,6 | 17,1 |
| 1 child | * | 35,5 | 40,1 | 10,9 | 18,7 | 14,8 |
| 2 children | * | 50,2 | 52,1 | 29,9 | 19,9 | 22,9 |
| 3 children or more | * | 34,5 | 34,6 | * | 26,7 | 27,2 |
| at least one child | 47,3 | 41,4 | 43,8 | 18,0 | 21,1 | 20,1 |
| *Number of minor children aged under 18* | | | | | | |
| none | 27,1 | 37,8 | 34,9 | 17,3 | 18,3 | 19,7 |
| 1 child | * | 40,7 | 43,3 | 12,8 | 23,9 | 19,8 |
| 2 children | * | 55,0 | 57,0 | * | 20,8 | 24,3 |
| 3 children or more | * | 34,2 | 34,2 | * | 39,9 | 35,4 |
| at least one minor child | 42,3 | 45,1 | 46,9 | 17,6 | 26,1 | 24,6 |
| *Number of invalid persons* | | | | | | |
| none | 33,9 | 43,5 | 43,0 | 17,5 | 20,7 | 18,4 |
| at least one invalid person | * | * | 24,5 | 15,5 | 15,2 | 15,0 |
| *Number of persons aged over 65* | | | | | | |
| none | 36,1 | 45,7 | 45,4 | 25,1 | 22,8 | 22,6 |
| at least one old person | * | 23,3 | 20,3 | 15,3 | 18,2 | 15,7 |
| *Number of unemployed* | | | | | | |
| none | 27,0 | 36,7 | 33,7 | 16,8 | 21,5 | 17,8 |
| at least one unemployed | 43,3 | 44,6 | 46,2 | 23,3 | 18,1 | 20,0 |
| *Household typology* | | | | | | |
| Single | 23,7 | * | 44,2 | 18,4 | 21,7 | 18,5 |
| *single member aged 18-59* | * | * | *59,5* | *17,4* | *34,4* | *25,5* |
| *single member aged over 59* | * | * | *24,7* | *18,5* | *20,0* | *17,8* |
| Lone parent with children | * | * | 52,4 | 12,5 | 25,2 | 21,6 |
| *lone parent with children age under 18* | * | * | *65,2* | * | *35,9* | *33,0* |
| Couple without children | * | * | 27,3 | 15,0 | 11,9 | 13,1 |
| *couple without children aged 18-59* | * | * | *54,9* | * | * | *31,3* |
| *couple without children aged over 59* | * | * | *9,4* | *7,7* | *11,1* | *9,8* |
| Couple with children | * | 43,3 | 42,5 | 19,9 | 19,3 | 19,5 |
| *couple with one child* | * | *40,4* | *42,2* | *10,8* | *17,6* | *13,6* |
| *couple with 2 children* | * | *51,1* | *48,8* | *32,7* | *18,9* | *23,3* |
| *couple with 3 or more children* | * | *38,7* | *37,1* | * | *22,3* | *24,4* |
| Couple with children aged under 18 | * | 44,4 | 44,0 | 17,8 | 23,5 | 22,8 |
| *couple with one minor child* | * | *39,3* | *39,6* | *12,6* | *20,0* | *18,1* |
| *couple with 2 minor children* | * | *54,1* | *53,3* | * | *22,6* | *25,0* |
| *couple with 3 or more minor children* | * | *35,9* | *35,9* | * | * | *29,6* |
| Couple with children | | | | | | |
| both parents employed | * | * | 11,8 | * | * | 14,4 |
| only one parent employed | * | 32,1 | 29,0 | 19,3 | 25,2 | 23,1 |
| none parents employed | * | 47,8 | 48,9 | * | 14,6 | 15,3 |
| TOTAL | 32,1 | 42,7 | 41,8 | 17,4 | 20,3 | 18,1 |

* the results are not reported because the sample is too small.

Sources: IVAMOD microsimulation model on ISTAT Survey on Households' Expenditure 1999 data and ITAXMOD microsimulation model on Bank of Italy's Survey on Household Income and Wealth 1998 data.

The absolute poverty results to be correlated to the lack of education: the higher the education level of the household head, the lower the poverty incidence. It is 1.4% in families where the householder holds a diploma, against 4.1% when the householder has no education and 5% when he/she just attended primary schools. This phenomenon appears to be mainly related to the Southern regions.

If we analyse the marital status of the household head, the highest quota of poor families is among divorced/separated (the national average is 6.1%: 8.6% in the South and 5.6% in the North). Percentages are lower for married or widowers (respectively 3.3 and 2.5 at a national level) and for singles (3.2%).

Tenure of the residence house appears to be relevant, both in the South and in the North: the risk of being poor is for owners equal to 0.9%, while for non-owners it considerably increases, rising to 8.8% (renters) and to 9.5 (free of charge).

Conversely, the disability condition does not seem to be among the factors raising the poverty risk (at the national level the percentage is equal to 3.1). Indeed, in the South it even represents a form of protection, since the percentage is 4.9 if there is a disabled in the family, 7.3 if there is not any[47].

Finally, the presence of children, especially their number and age, is a key feature (together with the labour market participation) in determining the poverty status. With no children or with one child the national average is, respectively, 2.1% and 3.1% (4.4% if minors), it gets to 4.3% with two children (5.9 if minors) and to 7.4% with three children (11.2% if minors). These national values hide very differentiated regional situations. The sole child is not a danger in the North, whilst in the South even the presence of only one child contributes to worsen the condition.

The aspects here emerged for specific demographic profiles are also confirmed by the analysis performed for some family typology. Households formed by persons aged more than 59 and couples with age between 18 and 59 years show an incidence below general percentages. Instead, singles between 18 and 59 years display higher values, being the national average equal to 4.5%, 3.7% in the North, and 10.4% in the South. The data about couples aged over 59 are remarkable as well, especially with regard to its territorial disaggregation (for Italy the index is equal to 1.5%): whereas in the South poverty among this typology is virtually null (0.4%), in the North the percentage goes up to 2.4.

A situation of severe deprivation is observed among couples with three or more children: 6% is poor in absolute terms, at a national level. This percentage amounts to 9.7% if children are minor. Our estimates show as poverty among couples with children is much more spread in the South, where the incidence is 10.6% (18.8% if children are minors). Table 9 shows that for families with children in which both parents work the percentage is negligible, if only one works it rises to 2.7% (5.3% in the South). Children are therefore a considerable burden for families, mainly when at least a labour income is missing. Families which are more vulnerable are those formed by only one parent and one or more children: poverty incidence

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[47] This can be due to the fact that there are Government transfers to disabled.

reaches very high figures (6.0%, 10.7% if minor), with respect to both the average and the couples with one or more children.

These new estimates confirm therefore some distinctive features of poverty internal composition, already arisen in the analysis that considered a unique absolute poverty threshold: the incidence is higher among large families (mainly those with three or more minor children), those with no labour income, living in the Southern regions, with low education levels and living in a non owned house[48].

It is important to notice that, when comparing Tables 7 and 9, we do not observe a perfect correspondence among groups subject to poverty risk: the chosen analysis variable (consumption or income) is crucial not only for the computation at a national level, but also for the incidence in the various group. The main discrepancies in terms of risk concern householder's age, the presence of either children or elderly persons in the family, the marital status, the number of household members, or children, or disabled, the presence of unemployed. These are significant differences: the diffusion indices for the above mentioned features move in opposite direction, producing poverty risk profiles quite differentiated. Some of these differences are intuitively explicable. For example, it is plausible to assume that elders have, on average, expenditure levels lower than young people even if they show relatively higher incomes. Therefore, it is reasonable to expect that poverty analysis based on income mainly penalises, *ceteris paribus*, aged and small families rather than young single, young couples or families with children. In any case, these results suggest a deeper analysis. For this purpose it would be useful to have a unique dataset surveying analytically both variables (income and consumption)[49].

To complete the analysis, Table 11 displays (only for income) the results obtained with a different equivalence scale, named "OECD modified"[50]. We thought appropriate to apply an equivalence scale widely used for international comparisons to allow comparisons with analogous works conducted in other countries[51]. For example, another paper following, more or less, our approach is *Cotton et al.* (2002). Their objective is the creation of an absolute poverty line for Canada that includes both the different purchasing power and the different life styles in the different geographical areas of the country.

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[48] Comparing poverty rates with those resulting from the use a unique national line (Tab. 9), some differences arise; these mainly concern risk related to gender and to the presence of disabled.
[49] There is a pilot integration project between the two dataset in ISTAT with the purpose of creating a database functional to build a Social Accounting Matrix. For first results, see Cimino and Coli (1999), and Coli and Tartamella (2000).
[50] First adult weight is 1, it adds 0.5 for each adult more and 0.3 for each child.
[51] As Table 11 shows, results are affected by the choice of the scale: in this case poverty incidence at a national level decreases (from 3.3 to 2.8%). Despite this incidence reduction, profiles do not substantially change.

| TABLE 11   POVERTY INDICES BY GEOGRAPHICAL AREAS AND HOUSEHOLD CHARACTERISTICS, 2002 | | | | | | | |
|---|---|---|---|---|---|---|---|
| OECD Mod. Equivalence Scale | | | | | | | |
| | HEAD COUNT RATIO | | | | POVERTY GAP | | |
| | NORTH | CENTRE | SOUTH | ITALY | NORTH | SOUTH | ITALY |
| *Sex of the household head* | | | | | | | |
| male | 0,5 | 1,0 | 6,2 | 2,5 | 37,5 | 45,1 | 45,4 |
| female | 2,7 | 1,4 | 5,9 | 3,6 | 44,3 | 38,2 | 42,8 |
| *Age of the household head* | | | | | | | |
| up to 30 years | 4,6 | 2,5 | 23,6 | 9,1 | * | 63,2 | 67,7 |
| 31 to 40 | 0,2 | 1,7 | 9,7 | 3,5 | * | 45,6 | 49,5 |
| 41 to 50 | 1,6 | 0,5 | 7,6 | 3,3 | * | 43,0 | 46,0 |
| 51 to 65 | 1,2 | 1,4 | 5,0 | 2,5 | 28,4 | 36,4 | 35,1 |
| over 65 | 0,7 | 0,5 | 2,0 | 1,1 | * | 21,7 | 18,7 |
| *Educational level of the household head* | | | | | | | |
| none/elementary school | 1,8 | 1,2 | 6,2 | 3,5 | 29,6 | 30,2 | 30,3 |
| middle school | 0,8 | 1,7 | 9,9 | 3,8 | 40,7 | 51,8 | 53,8 |
| high school | 0,7 | 0,4 | 3,5 | 1,4 | * | 64,1 | 67,5 |
| university degree or higher | 0,5 | 1,2 | 0,3 | 0,6 | * | * | * |
| *Occupational status of households head* | | | | | | | |
| employee | 0,4 | * | 3,3 | 1,3 | * | 28,3 | 27,6 |
| self-employed | 0,3 | * | 0,5 | 0,3 | * | * | * |
| not employed | 1,9 | 2,5 | 8,9 | 4,5 | 45,7 | 46,8 | 48,0 |
| *Households size* | | | | | | | |
| 1 member | 1,8 | 1,3 | 3,7 | 2,2 | 28,3 | * | 48,5 |
| 2 members | 0,9 | 1,3 | 3,0 | 1,6 | 38,9 | 29,4 | 35,6 |
| 3 members | 1,0 | 1,3 | 8,3 | 3,0 | * | 40,3 | 49,6 |
| 4 members | 0,8 | 0,4 | 7,1 | 3,3 | * | 49,0 | 48,2 |
| 5 members or more | * | * | 9,0 | 5,4 | * | 38,1 | 35,1 |
| *Number of household members employed* | | | | | | | |
| none | 2,4 | 2,9 | 10,9 | 5,6 | 46,9 | 48,8 | 50,3 |
| 1 employed | 0,8 | 0,5 | 3,9 | 1,9 | * | 27,2 | 26,3 |
| 2 or more employed | 0,0 | * | 0,6 | 0,1 | * | * | * |
| *Number of children aged under 18* | | | | | | | |
| none | 1,0 | 0,9 | 3,7 | 1,8 | 39,9 | 36,6 | 37,9 |
| 1 child | 1,4 | 2,3 | 8,7 | 3,6 | * | 42,7 | 45,7 |
| 2 children | 1,6 | 0,3 | 9,9 | 5,0 | * | 56,8 | 59,8 |
| 3 children or more | * | * | 14,7 | 8,4 | * | 35,1 | 35,1 |
| at least one minor child | 1,4 | 1,4 | 10,3 | 4,7 | 45,7 | 47,2 | 49,6 |
| *Number of persons aged over 65* | | | | | | | |
| none | 1,5 | 1,4 | 8,5 | 3,7 | 47,8 | 46,7 | 48,7 |
| at least one old person | 0,5 | 0,4 | 2,4 | 1,1 | 14,1 | 23,2 | 20,5 |
| *Number of unemployed* | | | | | | | |
| none | 0,7 | 0,4 | 2,0 | 1,0 | 45,7 | 36,1 | 41,4 |
| at least one unemployed | 6,9 | 5,1 | 17,0 | 12,5 | 37,8 | 45,3 | 45,8 |
| *Household typology* | | | | | | | |
| Single | 1,8 | 1,3 | 3,7 | 2,2 | 28,3 | * | 48,5 |
| Lone parent with children | 5,9 | 2,9 | 7,2 | 5,8 | * | * | 47,7 |
| *lone parent with children age under 18* | *11,1* | * | * | *9,9* | * | * | *60,7* |
| Couple without children | 0,6 | 0,5 | 1,7 | 0,9 | * | * | 45,3 |
| Couple with children aged under 18 | 0,5 | 1,1 | 10,7 | 4,5 | * | 46,8 | 47,6 |
| *couple with one minor child* | *0,8* | *1,8* | *9,4* | *3,4* | * | *42,6* | *44,8* |
| *couple with 2 minor children* | *0,2* | *0,4* | *10,4* | *4,7* | * | *55,7* | *56,3* |
| *couple with 3 or more minor children* | * | * | *12,6* | *6,5* | * | *44,6* | *44,6* |
| **TOTAL** | **1,1** | **1,1** | **6,1** | **2,8** | **42,1** | **43,2** | **44,5** |

\* the results are not reported because the sample is too small

Source: ITAXMOD microsimulation model on Bank of Italy's Survey on Household Income and Wealth 1998 data.

## 6.  Minimum Income: an alternative proposal

Italian Welfare system is characterised by a scarce degree of protection and by an inadequate level of welfare services for families in danger of poverty. Results presented in Section 5.2 show that large families (particularly those with minor children) and those at the edge of labour market are especially exposed to the risk of absolute poverty. These families are normally excluded from the direct or indirect measures of income integration of the Italian Welfare system[52]. They cannot benefit from family allowances since those are directed only to employees or pensioners, nor they can benefit from unemployment benefits, that can be directed only to those who are already registered-workers. Moreover they cannot even benefit from tax credits, since their income is not high enough, being below the taxable threshold.

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[52] They only have access to two forms of income support that are not subject to categorical constraints: housing allowances and allowances from families with at least three minor children.

An ultimate social protection tool, which goes in the direction of opposing poverty risk is the Minimum Income[53] (Reddito Minimo di Inserimento, henceforth RMI). The introduction of RMI[54] is now just an experiment, but it will take place as a generalised measure by the article 23 of the Law n. 328/2000 for the realisation of an integrated system of social measures and services. It aims to introduce also in Italy a general measure of income support for who suffers for severe economic deprivation. It contains not only a monetary support, but also a project for social and working insertion designed to stimulate and involve the recipients in a process of need reduction and way out from deprivation[55].

The Commission studying the implementation of RMI highlighted the need to account for the different costs of living in the threshold computation, to equalize – from an economic point of view – the situation of owners and not owners of the residence house[56], and to allow for possessing small financial wealth. Taking into accounts these remarks we simulated some polices using amounts differentiated by geographical area in the definition of the income that is necessary to guarantee an acceptable life standard. Namely, with this exercise, we showed that the introduction of a differentiated minimum income to all absolutely poor households would improve the distributive equity and would reduce the burden for the Government[57].

| TABLE 12    A NEW MINIMUM INCOME PROPOSAL FOR ITALY, 2002 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Number of beneficiaries | Mean benefit (euros) | Total cost (thousands of euros) | Absolute head count | | Total cost (thousands of euros) | |
| | | | | residual value | variation* | North | Centre | South |
| First hypotesis | 682.928 | 3.491 | 2.384.156 | 0,0 | -3,3 | 481.791 | 217.324 | 1.685.041 |
| Second hypotesis | 378.580 | 3.810 | 1.442.365 | 1,5 | -1,8 | 130.040 | 136.203 | 1.176.122 |
| Third hypotesis | 496.272 | 3.877 | 1.924.137 | 0,9 | -2,4 | 397.073 | 207.325 | 1.319.739 |
| Fourth hypotesis | 513.511 | 3.906 | 2.005.760 | 0,8 | -2,5 | 401.862 | 207.325 | 1.396.573 |
| Fifth hypotesis | 413.177 | 3.709 | 1.532.329 | 1,3 | -2,0 | 130.040 | 136.203 | 1.266.056 |
| Sexth hypotesis | 533.439 | 3.784 | 2.018.424 | 0,7 | -2,6 | 397.073 | 211.648 | 1.409.703 |
| Seventh hypotesis | 550.677 | 3.813 | 2.100.048 | 0,6 | -2,7 | 401.863 | 211.648 | 1.486.537 |

First hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold even if the family own assets (real or/and financial). Second hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold and whose financial and real assets are equal to zero. Third hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold and whose real assets are equal to zero and financial assets are not greater than 2,582 euros. Fourth hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold and whose real assets are equal to zero and financial assets are not greater than 5,164 euros.

Fifth hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold and whose financial assets are equal to zero and for real assets only homeownership is allowed and its value must be not greater than 51,646 euros. Sixth hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold and whose financial assets are less 2,582 euros and for real assets only homeownership is allowed and its value must be not greater than 51,646 euros. Seventh hypotesis: the benefit is given to all households whose equivalent disposable income is below the absolute poverty threshold and whose financial assets are less equal 5,164 euros and for real assets only homeownership is allowed and its value must be not greater than 51,646 euros.

* This column measure the absolute difference between the residual head count and the income poverty national rate with macro-area thresholds (3.3).

Source: ITAXMOD microsimulation model on Bank of Italy's Survey on Household Income and Wealth 1998 data.

The simulated hypotheses are seven. They are differentiated only as to the definition of the eligibility criteria about (real and financial) wealth. Results are displayed in Table 12. In what follows we shortly describe hypotheses and main results. The monetary benefit - which is equal to the difference between the threshold and the income - is transferred to all families whose disposable income is below the absolute poverty line of the geographical area where they live. This happens considering households:

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[53] The Minimum Income Scheme exists in 13 over 15 countries of the European Union. The exceptions are Greece and Italy.

[54] The main references are Law n. 449/97 and Decree Law n. 237/98. They guarantee to all citizens a certain and defined allowance. The RMI monthly amount for one component family is equal to the difference between the defined threshold (258 monthly euros) and household disposable income. To compute RMI for different dimension households the ISE equivalence scale is applied. In case of labour income a 25% deduction is applied to avoid poverty trap effects. Recipients must not have financial or real assets, excluding the propriety of the residence house.

[55] For people in working age, non-employed and able to work the availability to attend professional training is compulsory.

[56] The present RMI law includes among the eligibility criteria the absence of any wealth, excluding the residence house, till a threshold to be defined by the local administrations.

[57] In the policy simulations presented, we did not just take into account the different cost of living, but also the other aspects highlighted by the Commission for the RMI. We tried to find appropriate solutions: the absence of discrimination between owner and non-owner of the residence house and the likely of holding wealth.

1)    Independently from real or financial wealth. This hypothesis, which allows to completely eradicate absolute poverty, results to be the most expensive (about 2.4 billions €); the average per-household yearly transfer is about 3,500 €;

2)    Without real and financial wealth. The requirement of the absence of any wealth results to be relevant to determine the number of beneficiaries; in this case, the burden for Government is noticeably reduced with respect to the previous hypothesis (1.4 billion €) and the poverty incidence after the transfers is 1.5%;

3)    With no real asset and with financial wealth for an amount not exceeding 2,582 €. Poor families may hold modest real assets: extending the access to RMI to these households increases the costs with respect to the second hypothesis of about 0.5 billions €, and it reduces national poverty to 0.9%;

4)    With no real asset and with financial wealth for an amount not exceeding 5,164 €. Doubling the financial assets threshold the situation slightly changes (cost: 2 billions Euro, poverty incidence: 0.8%);

5)    With no real or financial assets, excluding the residence house if it has a value lower than 51,646 €. Families living in situation of economic deprivation may own the residence house: this happens, even if not frequently. This less binding constraint with respect to the hypotheses 2-3-4 brings the cost to 1.5 billions Euro;

6)    With no real or financial assets, excluding the residence house if it has a value lower than 51,646 € and financial wealth not exceeding 2,582 €;

7)    With no real or financial assets, excluding the residence house if it has a value lower than 51,646 € and financial wealth not exceeding 5,164 €;

Allowing the access to the RMI to families holding both assets within the mentioned limits (hypothesis 6 e 7) rises the cost by almost 0.7 billions of euros with respect to the second hypothesis; the residual poverty ratio would result in this case very low (0.6%).

The eligibility criteria to have access to RMI provided by present Law are similar to those described in point 5: the estimated cost in case of extending this tool to all national territory would be just above 3 billions Euros[58]. Taking into account the cost of living differential and the status of ownership of the residence home in the threshold definition, as we did in the present paper, considerably reduces the cost, on the basis of our estimate reducing to about 1.5 billions Euros. This cost reduction at a national level is associated to higher monetary transfers, in percentages, in the North of Italy. While with a unique threshold only less than 4% of the programme total cost would go to the North, with differentiated threshold the percentage received would be more than doubled (8.5%).

In terms of policy, the choice of the hypothesis to use depends, besides theoretical and empirical aspects, upon the administrative costs, which are crucial to verify the necessary requirements. Unfortunately the

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[58] Refer to Commissione d'Indagine sull'Esclusione Sociale (2001).

introduction of the RMI does not appear as social priority in the agenda of the present Italian Government. On the contrary in the so-called "Patto per l'Italia", signed among social parts in July 2002, it is affirmed[59] that it would not be possible, according to the results of the experimental phase, to determine access conditions identical on all national territory. It leaves therefore to regions, on the base of their financial availability, the decision on how much to destine to socially and economically weak groups.

## 7. Conclusions

Our survey tends to underline how the geographical gaps cannot be underrated in poverty analyses for Italy. In particular, the stress was laid on the different purchasing powers implicit in one single poverty threshold for the whole country, by emphasising to what extent it may lead to an overestimation of poverty in the South and to an underestimation in the North, where price levels are generally higher, particularly with regard to housing.

Though with some limits, the empirical analysis confirms those assumptions, by stressing a high sensitivity of the poverty threshold to the different price levels and showing higher incidence rates in the North and lower ones in the South, compared to traditional analyses. Besides, that result also brings about a lower incidence for the whole of Italy, though it might be (at least partially) due to the way in which the housing component is included in the analysis.

Recently, an interesting study (Bradshaw *et al.*, 2001) sheds light on absolute poverty threshold in Europe, aiming at the estimation of a European minimum bundle. The analysis carried on, though wide and accurate, does not consider different purchasing powers; this seems to be a potential limit, mostly for such a vast and heterogeneous area.

Furthermore, differentials in purchasing powers might usefully be considered by policy makers. For this purpose, we estimated the cost deriving from the application of different Minimum Income schemes by geographical areas: the adoption of such a measure would cost 1.4 billions of Euros, if one adopt strict wealth constraints, and 1.5 billions of Euros when provisions currently assumed by Italian Government for the experimentation of the measure are used: in both cases, the amounts here suggested are much lower than the costs estimated from several Italian research institutes with regard to a single amount for Italy as a whole.

It is worth mentioning some possible future works which might improve the threshold evaluation, the estimation of households' resources, and which might shed light on some aspects only marginally examined or not considered at all. Undoubtedly, a fundamental issue is price surveying of goods included in the bundle. More thorough data would be useful, particularly breaking down by municipalities' demographic dimensions. Another problem only mentioned here regards the most suitable price to use - either minimum or medium prices, or something in-between: this theoretical problem involves a mainly practical one, that is to what extent the poor are really able to buy the necessary goods at their minimum prices.

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[59] «The implementation of the minimum income allowed to verify the impossibility to identify through a State law the subjects who have the right to enter in this security net. [...] It seems therefore preferable to realise the co-financing, with part of resources of the

Finally, the lack of data is not the only problem. Indeed, the quantity invariance in the minimum basket, though in some way acceptable in the context of basic needs, yet underrates gaps in consumption levels that might uphold, owing to geographical and cultural differences not cancelled in a "basic need" framework. More research on this point seems valuable.

Fund for regional programs social policies, approved by the Central Government, with the purpose of guaranteeing a minimum income to citizens who are not assisted by any other measure of income integration».

**References**

Atkinson A.B. (1983), *The Economics of Inequality*, Oxford, Clarendon Press.

Atkinson A.B. (1987), "On the Measurement of Poverty", *Econometrica*, n. 55.

Atkinson A.B. (1992), "Measuring Poverty and Differences in Family Composition", *Economica*, vol. 59.

Atkinson A.B., Bourguignon F. (1982), "The Comparison of Multidimensioned Distribution of Economic Status", *Review of Economic Studies*, n. 12.

Atkinson A.B., Bourguignon F. (1987), "Income Distribution and Differences in Needs", in Feiwel G.R. (ed.), *Arrow and the Foundations of the Theory of Economic Policy*, London, Macmillan.

Banca d'Italia (2000), "Indagine sui bilanci delle famiglie italiane nell'anno 1998" *Supplementi al Bollettino Statistico*, n. 22, Roma.

Barr N. (1993), *The Economics of the Welfare State*, Stanford, Stanford University Press.

Beckermann W. (1980), "Stime della povertà in Italia nel 1975", *Rivista internazionale di scienze economiche e sociali*, n. 2.

Bernstein, J., Brocht, C., Spade-Aguilar, M. (2000), *How Much Is Enough? Basic Family Budgets for Working Families*, Washington D.C., Economic Policy Institute.

Betson, D. M. (1995), "The Effect of Home Ownership on Poverty Measurement", *Poverty Measurement Working Paper*, Washington D.C., Census Bureau.

Bottiroli Civardi M., Chiappero Martinetti E. (1999), "Strutture famigliari e povertà: un raffronto tra diversi metodi di analisi", in *Ricerche quantitative per la politica economica 1997,* Atti del Convegno Banca d'Italia-CIDE, Roma, Banca d'Italia.

Bottiroli Civardi M., Chiappero Martinetti E. (2002), "Povertà nei gruppi e povertà tra i gruppi", in Carbonaro (a cura di), *Studi sulla povertà. Problemi di misura e analisi comparative*, Milano, Franco Angeli.

Bradbury, B., Jäntti, M., (1999), "Child Poverty across Industrialised Countries", *Innocenti Occasional Paper, Economic and Social Policy Series, N. 71,* Florence, UNICEF.

Bradshaw J., (1993), "Budget Standards for the United Kingdom", *Studies in Cash & Care,* Avebury, Aldershot.

Bradshaw J., Nolan B., Maitre B., Finch N. (2001), "The Measurement of Absolute Poverty: Final Report to Eurostat", *Social Policy Research Unit Working Paper*, University of York.

Brandolini A. (1999), "The Distribution of Personal Income in Post-war Italy: Source Description, Data Quality, and Time Pattern of Income Inequality", *Temi di discussione*, n. 350, Roma, Banca d'Italia.

Brandolini A., Cipollone P., Sestito P. (2001), "Earnings Dispersion, Low Pay and Household Poverty in Italy, 1977-1998", *Temi di discussione*, n. 427, Roma, Banca d'Italia.

Buhmann B., Rainwater L., Schmaus G., Smeeding T.M. (1988), "Equivalence Scales, Wellbeing, Inequality and Poverty: Sensitivity Estimates across Ten Countries Using the LIS Database", *Review of income and wealth*, vol. 34.

Campiglio L. (1996), *Il costo del vivere*, Bologna, Il Mulino.

Cannari L. (1994), "Povertà e livello dei prezzi", in Commissione d'Indagine sulla Povertà e sull'Emarginazione, *Terzo rapporto sulla povertà in Italia*, Roma, Istituto Poligrafico e Zecca dello Stato.

Cannari L., D'Alessio G. (1992), "Mancate interviste e distorsione degli stimatori", *Temi di discussione*, n.172, Roma, Banca d'Italia.

Cannari, L., D'Alessio G. (1993), "Non-reporting and Under-reporting in the Bank of Italy's Survey of Household Income and Wealth", *Proceedings of the 49th Session of the International Statistical Institute*, Firenze.

Cannari, L., D'Alessio G., Raimondi G., Rinaldi A. I. (1990), "Le attività finanziarie delle famiglie italiane. Risultati di un'integrazione tra le indagini campionarie condotte dalla Banca d'Italia e dalla Banca Nazionale del Lavoro", *Temi di discussione*, n.136, Roma, Banca d'Italia.

Cannari, L., Franco D. (1999), "Poverty among Children in Italy: Dimensions, Characteristics, Policies", *mimeo*, paper prepared for the Conference on "Child Well-Being in Rich and Transition Countries", Luxembourg, 30 September to 2 October, 1999.

Carbonaro G. (1985), "Nota sulle scale di equivalenza", in Commissione d'Indagine sulla Povertà e sull'Esclusione Sociale, *Primo rapporto sulla povertà in Italia*, Roma, Istituto Poligrafico e Zecca dello Stato.

Caruso M., Sabbatini R., Sestito P. (1993), "Inflazione e tendenze di lungo periodo nelle differenze geografiche del costo della vita", *Moneta e credito*, n. 183, vol. 46.

Cebula R.J. (1983), *Geographic living-cost differentials*, Toronto, Lexington Books.

CENSIS-Scenari Immobiliari (1999), *Monitor Immobiliare, Rapporto sui mercati immobiliari italiani 1999*, Roma.

Cimino E., Coli A. (1999), "La matrice di contabilità sociale nel sistema dei conti nazionali: riflessioni e proposte alla luce dei risultati ottenuti in un esercizio per il 1990", mimeo, Report for the research project "Measures and parameters for economic and social policies", Roma, ISTAT.

Citro C.F., Michael R.T. (eds.) (1995), *Measuring Poverty: a New Approach*, Washington, National Academy Press.

Coccia G., Colombini S., Masi A. (2002), "Territorial Poverty Analysis: a Comparison of Different Approaches", in *Atti della XLI Riunione Scientifica della Società Italiana di Statistica, 5-7 giugno 2002*, Università Milano-Bicocca, CLEUP.

Coli A., Tartamella F. (2000), "L'integrazione tra informazioni tratte da fonti diverse in una matrice di contabilità sociale", Milano, *IRER*.

Commissione di Indagine sull'Esclusione Sociale (2000a), *La povertà delle donne in Italia: la ricerca, i dati, le metodologie di analisi*, Roma, Ministero del Lavoro e delle Politiche Sociali.

Commissione di Indagine sull'Esclusione Sociale (2000b), *Le politiche nazionali contro la povertà in Italia*, Roma, Ministero del Lavoro e delle Politiche Sociali.

Commissione d'Indagine sull'Esclusione Sociale (2000c), *Rapporto sulle politiche contro la povertà e l'esclusione sociale*, Roma, Ministero del Lavoro e delle Politiche Sociali.

Commissione d'Indagine sull'Esclusione Sociale (2001), *Rapporto annuale sulle politiche contro la povertà e l'esclusione sociale*, Roma, Ministero del Lavoro e delle Politiche Sociali.

Commissione d'Indagine sulla Povertà e sull'Emarginazione (1996), *Le misure della povertà in Italia: scale di equivalenza e aspetti demografici*, Roma, Istituto Poligrafico e Zecca dello Stato.

Commissione d'Indagine sulla Povertà e sull'Emarginazione (1998), *La povertà in Italia 1997*, Roma, Istituto Poligrafico e Zecca dello Stato.

Cotton C., Bishop K., Michaud S. (2002) "Methodological Issues in the Production of Canada's Market Basket Measure", *mimeo*, paper prepared for the 27th General Conference of the International Association for Research in Income and Wealth, Stockholm, August 18-24, 2002.

D'Alessio G. (1994), "Alcune considerazioni sulla misurazione della povertà", in Commissione d'Indagine sulla Povertà e sull'Emarginazione, *Terzo rapporto sulla povertà in Italia*, Roma, Istituto Poligrafico e Zecca dello Stato.

Di Leo F. (1997), "La revisione degli affitti", in ISTAT, *La revisione della contabilità nazionale annuale*, Metodi e norme, nuova serie, n. 1.

Donatiello G., Roberti P. (1998), "Definizioni della povertà e costruzione di una linea di povertà", in CNEL, Indagine sulla riforma dell'assistenza sociale, n. 5, *Analisi delle problematiche, istituzionali, economiche e sociali relative all'introduzione del concetto di "minimo vitale"*, Roma, Camera dei Deputati.

Förster M. F. (1994), "Measurement of Low Incomes and Poverty in a Perspective of International Comparisons", *Labour Market and Social Policy Occasional Papers*, n. 14, Paris, OECD.

Foster J.E. (1984), "On Economic Poverty: a Survey of Aggregate Measures", in R.L. Basmann, G.F. Rhodes (eds.), *Advances in Econometrics*, vol. 3, Greenwich, JAI Press.

Foster J.E. (1998), "Absolute versus Relative Poverty", *American Economic Review*, vol. 88 n. 2.

Foster J.E., Greer J., Thorbecke E. (1984), "A Class of Decomposable Poverty Indices", *Econometrica*, n. 52.

ISAE (2000a), "Povertà e disagio: analisi e rimedi" in *Rapporto trimestrale ISAE - Priorità nazionali: regolamentazione, competitività, cittadinanza*, Roma.

ISAE (2000b), "Differenze di povertà su scala nazionale e internazionale", *Temi dei Rapporti Trimestrali dell'ISAE*, Roma.

ISAE (2001), "La progettazione di un nuovo indicatore di benessere della collettività romana", in OPER, *III Rapporto sull'economia romana*, Roma, Comune di Roma.

ISTAT (1999), "La povertà in Italia nel 1998", *Nota Rapida*, anno 4 n. 9, Roma.

ISTAT (2000), *Rapporto annuale: la situazione nel paese 1999*, Roma.

ISTAT (2001a), "Indagine sui consumi delle famiglie", *File standard anno 1999,* Roma.

ISTAT (2001b), "La povertà in Italia nel 2000", *Nota Rapida*, anno 6 n. 3, Roma.

ISTAT (2002), "La povertà in Italia nel 2001", *Nota Rapida*, anno 7 n. 2, Roma.

Jäntti M., Danziger S. (2000), "Income Poverty in Advanced Countries", in Atkinson A.B., Bourguignon F. (eds.), *Handbook on Income Distribution*, Amsterdam, North-Holland.

Lanjouw J.O. (1999), *Demystifying Poverty Lines*, UNDP Poverty Related Publications.

Livi Bacci M., Cialfa E., Masselli M. (1997), "Studio di fattibilità per la definizione di un paniere minimo di beni e servizi", *mimeo*, paper prepared for the seminar "New Approaches in the Analysis of Poverty and Social Exclusion", Roma, ISTAT, July 14, 1997.

Maasoumi E. (1986), "The Measurement and Decomposition of Multidimensional Inequality", *Econometrica*, n. 54.

Marenzi, A. (1996), "Evasione fiscale", in N. Rossi (ed.), *Competizione e giustizia sociale - 1994-1995, Terzo rapporto CNEL sulla distribuzione e redistribuzione del reddito in Italia*, Bologna, Il Mulino.

Nolan B., Whelan C. (1996), *Resources, Deprivation and the Measurement of Poverty*, Oxford, Clarendon Press.

Orshansky M. (1963), "Children of the poor", *Social Security Bulletin*, n. 26(7).

Orshansky M. (1965), "Counting the poor: another look at the poverty profile, *Social Security Bulletin*, 28(1).

Parker H. (ed.) (1999), *Low Cost but Acceptable: a Minimum Income Standard for the UK: Family with Young Children*, Bristol, Policy Press.

Parker H. (ed.) (2000), *Low Cost but Acceptable Incomes for Older People: A Minimum Income Standard for Households Aged 65-74 Years in the UK*, Bristol, Policy Press.

Ravallion M. (1994), *Poverty Comparisons*, Chur, Harwood.

Ravallion M. (1996), "Issues in Measuring and Modelling Poverty", *Economic Journal*, n. 106.

Rowntree S., (1901), *Poverty: A Study of Town Life*, London, Macmillan.

Ruggles P. (1990), *Drawing the Line: Alternative Poverty Measures and their Implications for Public Policy*, Washington D.C., Urban Institute Press.

Sarpellon G. (1982), *La povertà in Italia*, Milano, Franco Angeli.

Saunders P. (1998), "Towards a Better Poverty Measure", *Focus*, vol. 19, n. 2.

Saunders P., Bradshaw J., Hirst M. (2000), "Using Expenditure Data in the Measurement of Poverty: a Comparison of Australia and the United Kingdom", *mimeo*, paper prepared for the 26th General Conference of the International Association for Research in Income and Wealth, Cracow, Poland, 27 August to 2 September, 2000.

Sen A.K. (1976), "Poverty: an Ordinal Approach to Measurement", *Econometrica*, n. 46.

Sen A.K. (1981), *Poverty and Famines: an Essay on Entitlement and Deprivation*, Oxford, Oxford University Press.

Sen A.K. (1996), *Inequality Re-examined*, Oxford, Oxford University Press.

Sen A.K. (1999), *Development as Freedom*, Oxford, Oxford University Press.

Short K. (2001), *Experimental Poverty Measures: 1999*, Washington D.C., Census Bureau.

Short K., Garner T.I., Johnson D., Doyle P. (1999), *Experimental Poverty Measures: 1990 to 1997*, Washington D.C., Census Bureau.

Slesnick D.T. (1993) "Gaining Ground: Poverty in the Post-war United States", *Journal of Political Economy*, vol. 101, n. 1.

Toso S. (2000), "Distribuzione personale del reddito e tassazione progressiva", in Bosi P. (a cura di), *Corso di scienza delle finanze*, Bologna, Il Mulino.

Townsend P. (1962), "The Meaning of Poverty", *British Journal of Sociology*, n. 8.

Townsend P. (1979), *Poverty in the United Kingdom*, London, Allen Lane & Penguin.

UNDP (1999), *Human Development Report 1999*, New York, Oxford University Press.

UNDP (2000), *Human Development Report 2000*, New York, Oxford University Press.

World Bank (2000), *Making Transition Work for Everyone - Poverty and Inequality in Europe and Central Asia*, Washington D.C., World Bank.