

Project no: 028412

AIM-AP

Accurate Income Measurement for the Assessment of Public Policies

Specific Targeted Research or Innovation Project

Citizens and Governance in a Knowledge-based Society

Deliverable 1.5b: The distributional impact of non-cash incomes in Italy

Due date of deliverable: April 2008
Actual submission date: December 2008

Start date of project: 1 February 2006

Duration: 3 years

Lead partner: European Centre Vienna

Revision: first draft

Aggregate distributional effects of non-cash incomes in Italy*

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This version: December 2008

* We are indebted to Mattia Makovec for providing us with estimates of educational related in-kind transfers.

1. Introduction

Most of the empirical analysis on economic inequality and poverty, within and between countries, focuses on the distribution of cash income, including mainly monetary earnings from labor, financial assets, private and public transfers. However, individuals and households benefit also from non-monetary income, which may arise from private in-kind transfers and from public services such as education, health, housing, fringe benefits and home production. A more comprehensive measure of the socio-economic disparities among individuals or households should, therefore, include not only monetary income but also in-kind benefits. A growing literature has been arguing in favour of these.¹ The reason for considering an extended definition of income rather than the simple monetary income is that the former provides a better measure of a person's well-being and access to economic resources.

Not only is the size of non-cash income important but also its distribution may have considerable effects on the distribution of well-being among different types of households.

Aim of the paper is the study of the impact on the income distribution of different types of households of non-cash incomes, namely education, health, imputed rent, fringe benefits and home production. For education and health related non-cash incomes we refer to the corresponding publicly provided in-kind benefits; imputed rent (henceforth, IR) consists of the income advantages enjoyed by households who reside either in owner-occupied housing or in rental housing, paying no rent or a below-market rent; fringe benefits is a form of employer-provided perquisites (e.g. use of company cars, employer-provided housing, low cost company stock options) that largely benefit highly compensated employees; home production consists of own production of goods and services for direct consumption or for barter with others.

Several studies focus on the impact that different in-kind benefits have on the distribution of income. Smeeding et al. (1993) evaluate the impact of imputed rent, health and education on the income distribution, inequality and poverty in seven countries, using the LIS (Luxembourg Income Study) data set from the beginning of the 1980s (Italy is not included in this study). Their result shows that the effect of non-cash income on mean incomes is greater in most countries for middle-aged families with children and for the very elderly. In particular, the addition of housing benefits changes the distribution only marginally, if compared to health and education.

Marical et al. (2006) propose a study on the distributional effect of publicly provided services, such as health, education and social housing in the OECD countries, including Italy; when adding social housing to cash income, inequality in Italy slightly reduces.

Focusing on the Italian case, several scholars have analyzed the distributional impact of in-kind benefits such as education and health (see, among others, Baldini et al., 2006 and Pacifico, 2006), but very few have looked at the effect of the inclusion of imputed rent and home production.

Most of the studies on Italy are reports of government agencies and very few are from academic research. E.g. the Italian National Statistical Office (henceforth, ISTAT) publishes each

¹ See, among others, Smeeding et al. (1993)

year a report on the distribution of households income which includes also the effects of imputed rent. The most recent report is ISTAT (2006) that compares, in terms of inequality and poverty, the cash income distribution with the distribution of income that includes imputed rent. It emerges that, when partitioning the population by income quintile, the income share of the lowest quintiles increases and income share of the highest quintiles reduces when adding imputed rent; therefore, the Gini index reduces both in the overall population and in each geographical region.

In what follows, we analyze the incidence and the relevance of in-kind benefits on the Italian population and its effect on the income distribution, in particular, on inequality and poverty, both for the entire population and for specific subgroups. Empirical analyses of these extended income measures, using Italian data, are rare and this paper aims at providing new estimates of the distribution of this type of extended income.

More than one dataset is employed in this report: the dataset that we use for the baseline cash income is the Italian version of EU-SILC² ("Survey on Income and Living Conditions"), a recent data set that is part of a European project aimed at monitoring income and living conditions of households in different European countries. The reference data set SILC 2004 does not contain any kind of information on home production nor on fringe benefits; therefore, we used data matching methods to estimate the extend and the monetary value of home production and fringe benefits through the survey on Use of Time 2002-2003 conducted by ISTAT, which contains detailed data on the time spent in domestic work activities, and the Bank of Italy dataset, which contains information on fringe benefits.

After a brief description of the data sets in the next section, we summarize in Section 3 the methods employed for estimating each non-cash component;³ in Section 4 we study the distribution of the enlarged income (cash income plus in-kind benefits) and compare it with the original distribution (concerning only cash income). Effects on the levels of inequality and poverty for both the overall income distribution and the distribution of subgroups are analyzed.

2. Data sets

2.1 EU-SILC 2004

Information on cash income is from the "IT-SILC XUDB 2004-versione Febbraio 2006", which contains the Italian data of the European Survey of Income and Living Conditions (EU-SILC), based on the European Union Regulation (no. 1177/2003) defining the EU-SILC project. In particular, it contains extra variables beyond the ones common to all the European countries that are part of the project.

This survey replaces the former European Community Household Panel (ECHP) with the main scope to provide, through harmonized definitions and methods, comparable data, cross-sectional

² "IT-SILC XUDB 2004 - versione Febbraio 2006"

³ For more details on the methods employed for determining the non-cash incomes, see D'Ambrosio and Gigliarano (2007a, 2007b, 2008) and Makovec (2007).

and panel, in order to analyse the distributions of income and welfare among the households and to monitor the effect of the European and the national socio-economic policies.

The Italian EU-SILC sample contains 24,204 households and 61,429 individuals (52,509 are 15 and more years old) living in 731 municipalities. For the analysis of this paper we take into account only individuals with strictly positive income; therefore, we reduce the sample to 24,048 households and 61,107 individuals.

Information on income refers to the year 2003 while information on living conditions refers to 2004. The income variable considered in EU-SILC 2004 for the baseline cash income is the total disposable income "HY020", given by the sum, for all household members, of gross personal income components, gross cash benefits (self-employment, sickness, survivor, unemployment, disability), income from rental of property, family allowances, housing allowance, interests and profits from capital investments, minus taxes on income, wealth, social insurance contributions.

2.2 SHIW04

The microdata employed for the estimation of fringe benefits is the 2005 Survey provided by the Bank of Italy on the 2004 Household Income and Wealth (SHIW04). During the period between May and September 2005, families have been interviewed about their income, wealth and other socio-economic conditions, regarding the preceding year. The data set is composed by 20,581 individuals grouped in 8,012 households, representative of the whole Italian population (58.2 millions of individuals and 22.6 millions of households).

The number of respondents that are employees, both as main activity and as secondary activity, is 6,014. In SHIW several information are collected regarding this category of workers, such as the number of hours of paid overtime, the kind of contract, the number of people regularly employed in the firm and so on. In particular, the employees were asked the following question: "In 2004 did you receive fringe benefits in the form of luncheon vouchers, trips, company cars, etc. (excluding housing)?" and, if yes, "What was the monetary value of these benefits?".

2.3 Use of Time 2002-2003

The data set employed for the estimation of home production is the Survey on Use of Time 2002-2003 ("Indagine Multiscopo sulle famiglie- Uso del Tempo") carried out by ISTAT. During the period between April 2002 and March 2003, families have been interviewed mainly on their use of time. The sample is composed by 55,773 individuals grouped in 21,075 households, representative of the whole Italian population (58.2 millions of individuals and 22.6 millions of households).

One-day time diaries were completed by all the household components aged 3 or more; parents filled the diaries for the youngest children. Respondents have been asked to fill the diary at a prefixed day, either weekday or weekend day, describing the activities that they have performed during the day as well as where and with whom they have carried out such activities. ISTAT then coded the collected information in order to get homogeneous data.

The survey provides also information on socio-economic characteristics of the household components, such as age, gender, educational level attained and occupation.

The individual time of interest for our analysis is the "domestic work time", that is time for food preparation, housework, odd jobs about home, gardening, repairs, do-it-yourself jobs, shopping, child care, plus domestic travel associated with these activities. Excluded from the definition of domestic work are hobbies and leisure activities, paid work related activities. Our analysis considers domestic work carried out during working weekday.

3. Methods to measure non-cash incomes

Aim of the paper is to translate into a monetary form the benefits received by the provision of public in-kind goods such as education and health and by private in-kind transfers, such as fringe benefits, imputed rent and home production, and study the overall implication on the income distribution.

3.1 Education related transfers in-kind

We estimate the monetary value of benefits in kind regarding education through public expenditures in education. We assign education related transfers to the individuals attending compulsory and non compulsory schools. The amount of these transfers is based on national expenditure in education, using the OECD estimates that exclude R&D. For more details on the methods of imputation we refer to Makovec (2007).

3.2 Health related transfers in kind

The most common way to measure health benefits in kind is to use the costs to produce these health transfers as a proxy for the benefits. We hypothesize that the marginal costs to produce such goods by the state are equal to the marginal benefits received by the agent that asks for the goods. We follow an insurance-based approach, assigning health related transfers to individuals proportionally to some socio-economic characteristics, such as gender, age and geographical area. The individual transfer may be considered as the premium an individual should have paid in order to be insured against the risk of illness. The amount of this premium should be determined according to some individual characteristics. The transfer is defined as proportional to the probability of losing good health condition, where the probability is a function of observable variables such as age and gender.

We use as a source for the health care expenditure the per capita amounts, specific for age group, provided by OECD (see Marical et al., 2006); Table 1 shows these estimates.

The definition of total health expenditures considered is the following: "total expenditure on health measures the final consumption of health care goods and services plus capital investment in health care infrastructure. This includes spending by both public and private sources on medical

services and goods, public health and prevention programmes and administration. Excluded are health-related expenditure such as training, research and environmental health” (OECD, 2005).

For more details on the method of estimation we refer to D’Ambrosio and Gigliarano (2007).

Tab. 1 Health care costs per capita per age group 2003

AGE	HEALTHCARE COST
0-4	1027.72
5-9	682.85
10-14	596.57
15-19	640.78
20-24	730.74
25-29	818.14
30-34	884.24
35-39	932.98
40-44	990.84
45-49	1086.49
50-54	1251.70
55-59	1508.19
60-64	1895.15
65-69	2370.35
70-74	2938.46
75-79	3556.47
80-84	4197.72
85+	3949.44

Source: Marical et al.(2006)

3.3 Imputed rent

The method followed here is the so-called “opportunity cost” approach, according to which IR is the opportunity cost of renting a house in a non-subsidized market. Therefore, the market tenants do not benefit from IR, while all the other individuals or households are assigned a value equal to the opportunity cost of renting their dwelling at the market price.

According to this method, the imputed rent is estimated with a linear regression of the logarithmic transformation of the rent per square meter (not including costs for heating, condominium charges and other sundry expenses) paid by the market renters; as explicative variables we employ information both on the characteristics of the dwelling, such as the year of construction, occupancy in year, community size, city center, geographic area of residency, basic amenities, and on some socio-economic characteristics of the householder, such as disposable income (for details, see D’Ambrosio and Gigliarano, 2007). A linear regression is implemented including a control for clustering effects at regional level.

An estimation of the gross value of the dwelling at market prices can be obtained for owners, subsidized tenants and rent-free tenants. An annual gross IR is obtained, by multiplying the estimated rent by the size of the dwelling and by 12 (number of months per year).

In order to arrive to an objective value it is necessary to deduct from it all the costs related to the main residence, which are specific for owners, rent-free and subsidized tenants, but not for market renters; in this way we obtain a net measure of imputed rent. Four are the main types of costs that we consider in the analysis: property taxes; interests on mortgage; owner-specific maintenance and operating costs; rent actually paid by reduced tenants (social tenants and reduced by landlord tenants). For details, see D'Ambrosio and Gigliarano (2007).

For each group of tenure status, in case of costs exceeding the estimated gross IR, the net IR is assigned a value of zero (i.e. no negative IR is assumed).

3.4 Fringe benefits and home production

The most common way to impute a value to home production is to multiply the time spent on domestic work by a fictitious hourly wage.

We first had to impute the domestic work time values included in the data set Use of Time 2002-2003 to respondents of the survey SILC 2004, by using regression matching methods. Imputation is restricted to the individuals aged 16 or more, since we want to focus only on individuals for whom household production is important (thus the exclusion of the younger).

We have adopted a two-steps regression, in order to control for the percentage of individuals that spend time in domestic work and to impute only to them the amount of time spent in home production.

For evaluating household domestic work time we used the so-called "housekeeper wage" approach, by defining domestic work time in terms of what it would cost to forgo an hour of paid work. We use as "housekeeper wage" the hourly net wage of a full-time employee that works in the construction sector with a qualification of blue collar; this information is provided by ISTAT for the year 2003 and for each region (see Table 2).

Tab. 2: Average hourly net wage (W) of blue collar workers in the construction sector in 2004, by region

REGION	W	REGION	W
Piemonte-Valle d'Aosta	6.76	Lazio	6.76
Lombardia	6.95	Abruzzo	6.93
Trentino Alto-Adige	7.10	Molise	6.74
Veneto	6.83	Campania	6.73
Friuli Venezia Giulia	6.94	Puglia	6.57
Liguria	6.81	Basilicata	6.60
Emilia Romagna	6.80	Calabria	6.72
Toscana	6.85	Sicilia	6.59
Umbria	6.52	Sardegna	6.62
Marche	6.71		

Source: Istat "Indagine sulla retribuzioni contrattuali", 2004

We estimated the value of home production (henceforth HP) for each individual aged 16 or more, by multiplying the estimated individual number of hours spent in domestic work by the housekeeper wage. If the fitted value of HP is negative, we put it equal to 0.

Finally, we also assumed that home production is pooled and shared equally within each household; each person is imputed with the equivalent domestic work value of the household to which she belongs. We apply the modified OECD equivalence scale to money income and to home production values.

We focus only on week days, assuming that domestic work time and time spent in a paid work are substitutes.

See D'Ambrosio and Gagliarano (2008) for more details.

4. Results from the empirical analysis

The results of the exercise of adding the different private and public in-kind benefits to the disposable cash income are illustrated in Tables 3 to 7 and in Figures 1 to 8.

Table 3 and Figure 1 reports proportional changes in disposable income per quintile after the inclusion of the various non-cash income components.

Fig. 1: % Increase of income after non-cash transfers, by quintile

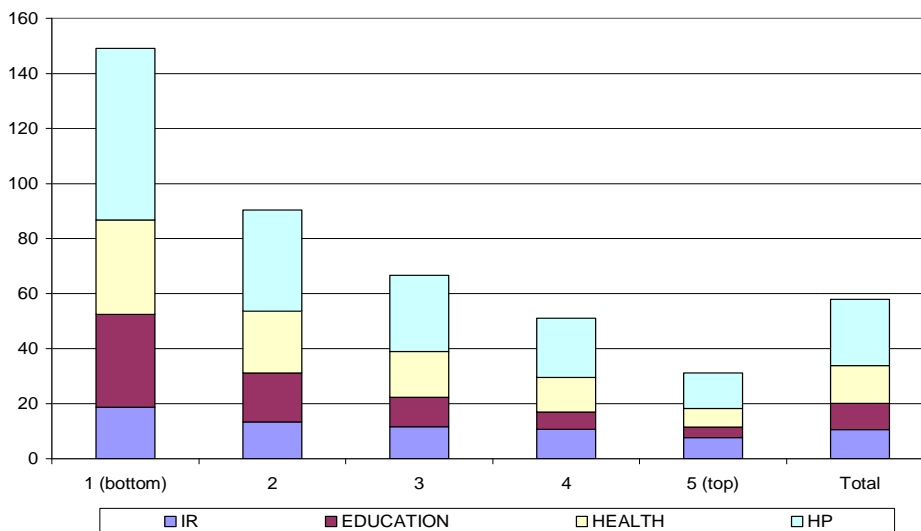


Figure 1 shows that for each non-cash component, the percentage increase in income due to the transfer reduces as the income quintiles augment. Overall, there is an increase in disposable income equal to 58%; differences across quintiles are huge: the increase for the first quintile equals 149%, while for the highest quintile it corresponds only to 31%. The highest proportional increase is due to home production.

Figure 2 shows that the absolute transfer due to non-cash incomes is quite homogeneous across quintiles. Again, results are driven mainly by home production (HP). In particular, IR

increases with income while education decreases with income; HP and health remain quite constant.

Fig. 2: Absolute increase (in euro) in income after non-cash transfers, by quintile

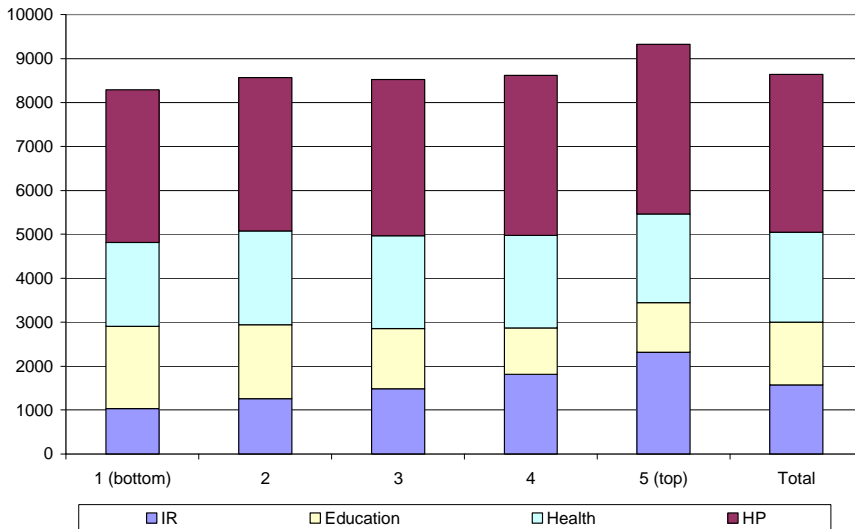


Fig. 3: Composition of the overall non-cash incomes, by quintile

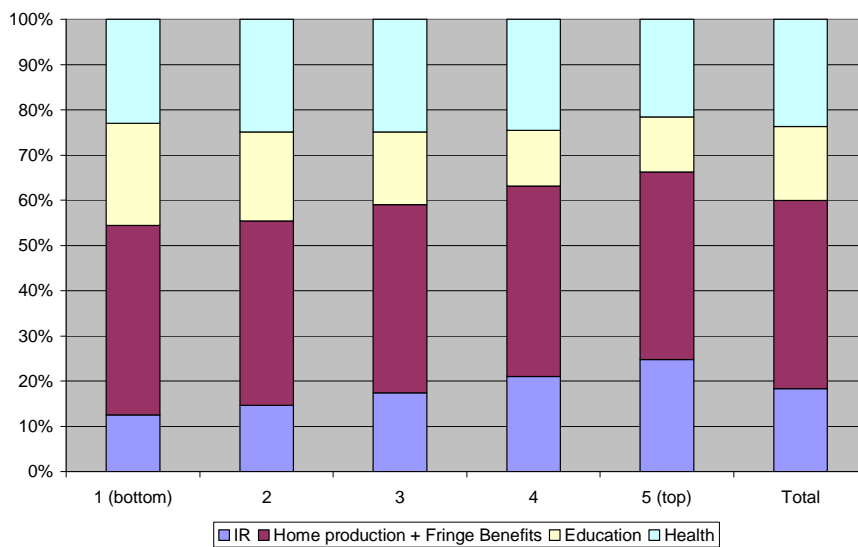


Figure 3 shows that the more relevant components of all non-cash incomes are home production (40%) and health (23%). Imputed rent has a greater impact for the richer, while education is more relevant for the poorer.

Interestingly, Figure 4 reveals that the extended income (cash and non-cash incomes) is composed, for the richer, mainly by monetary income (almost 80% for the highest quintile), while for the poorer mainly by non-cash incomes (60% for the first quintile).

Fig. 4: Composition of the extended (cash and non-cash) income, by quintile

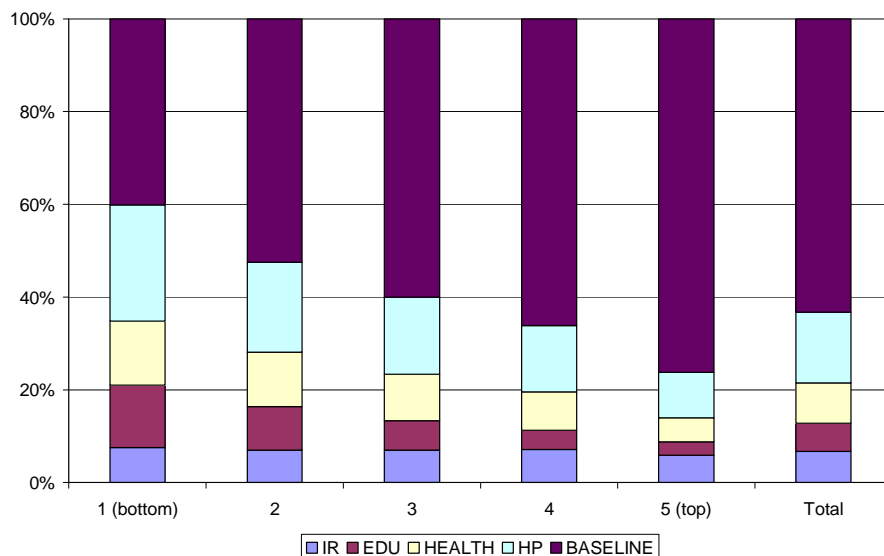
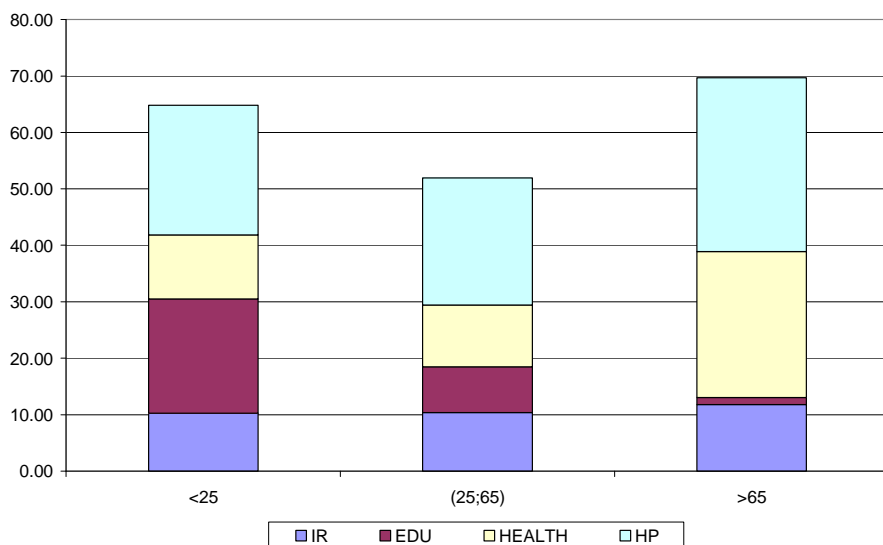


Fig. 5: Percentage increase of income after non-cash transfers, by age



If we focus in particular on age subgroups, we can see in Figures 5 and 6 that the main contributors, among the non-cash incomes, is education for the younger, and home production and health, for the elderly, both in relative terms and in absolute terms.

Fig. 6: Absolute Increase of income after non-cash transfers, by age

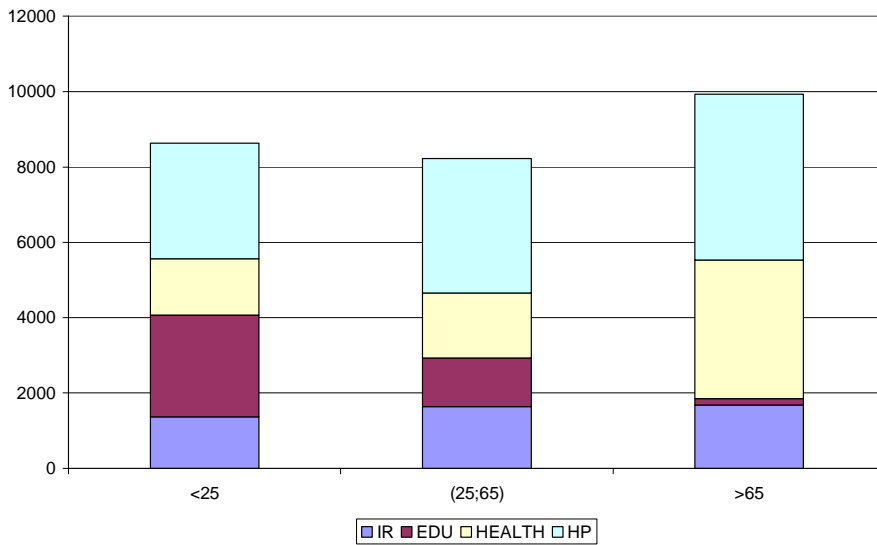


Table 4 and Figure 7 reports the corresponding changes in inequality and poverty indices; we note that both inequality and poverty reduces after adding each non-cash income; the strongest effects are registered with home production and health, followed by education and imputed rent.

Fig. 7: Inequality and poverty changes

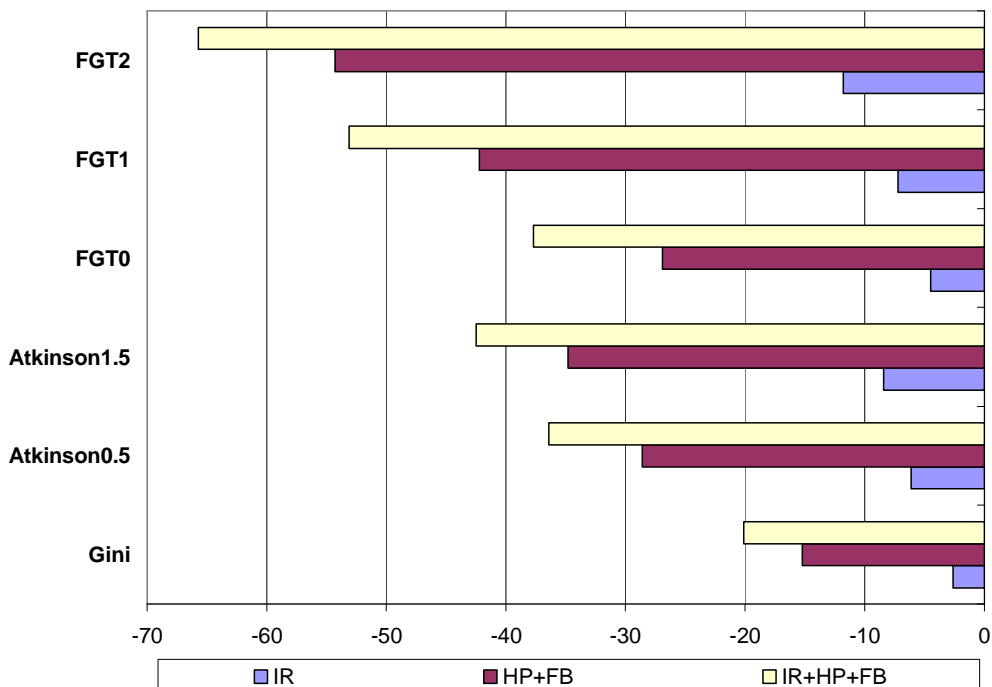
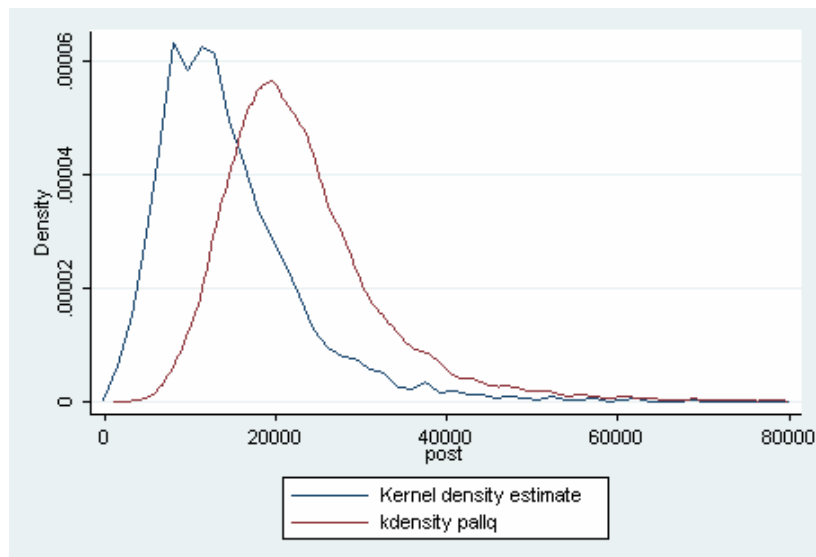


Figure 7, in particular, shows that overall there is a huge decrease both in inequality and in poverty. Effects of private non-cash components are slightly lower than public non-cash components; the strongest effects are due to HP and health, followed by education and by IR.

Figure 8 shows clearly that the income distribution is shifted to the right after adding the non-cash benefits.

Fig. 8: Kernel estimation of the income distribution before (blue line) and after (red line) non-cash incomes, for the overall population.



Tables 5 and 6 report the results of inequality and poverty decompositions, respectively. When we look at specific population subgroups, it turns out that the households with older, unemployed, pensioner or less educated householders are the social groups that benefit more from these transfers.

The impact of the non-cash incomes on inequality can be analyzed graphically through the Lorenz and Generalized Lorenz curves.

Figure 9 shows that before and after benefits in kind, the group of over65 is the most equal, while the Lorenz curves of the other two groups intersect. From Figure 10, moreover, we see that, while there is no dominance among the groups in terms of Generalized Lorenz curves of cash incomes, after the benefits in kind such dominance occurs, with the group of over65 enjoying the highest welfare level, followed by the 25-64 and by the 0-24 aged groups.

Fig. 9: Lorenz curves before (a) and after (b) non-cash incomes, by age groups (<25: blue, 26-64: red, >65: green)

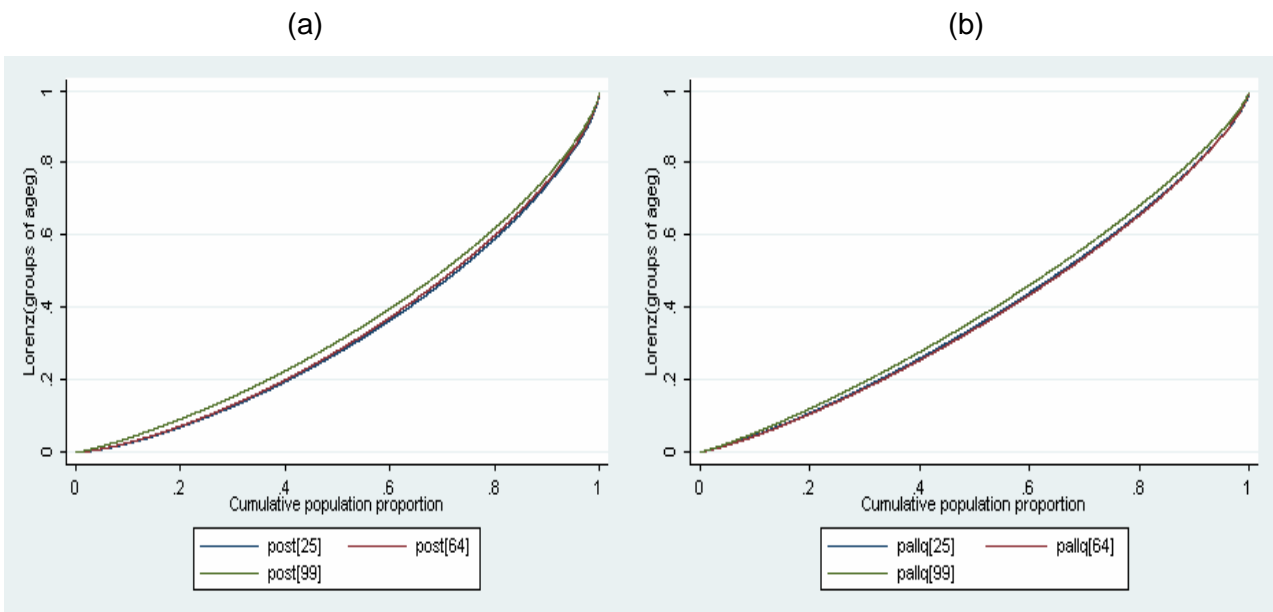
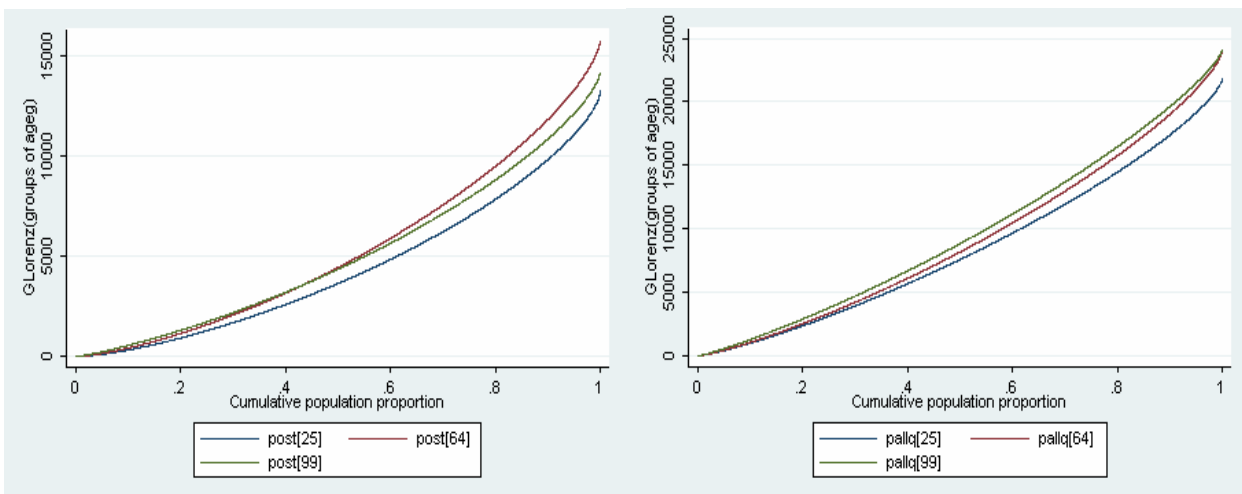


Fig. 10: Generalized Lorenz curves before (a) and after (b) non-cash incomes, by age groups (<25: blue, 26-64: red, >65: green)



Figures 11 and 12 compare the Lorenz and Generalized Lorenz curves of the subgroups created by the regional partition of Italy into North, Center and South. Looking only at the cash baseline income, South of Italy is the most unequal subgroup, while after adding the non-cash incomes the level of inequality becomes the same for the three geographical areas. In terms of generalized Lorenz curves, both before and after the transfers a welfare dominance exists among the groups, revealing that the highest welfare level is enjoyed in the North, followed by the Center and, much further, by the South; when including the non-cash incomes, the welfare of all the groups increases, but much more in the south, reducing, therefore, the distance from the rest of the country.

Fig. 11: Lorenz curves before (a) and after (b) non-cash incomes, by areas (North: blue, Center: red, South: green)

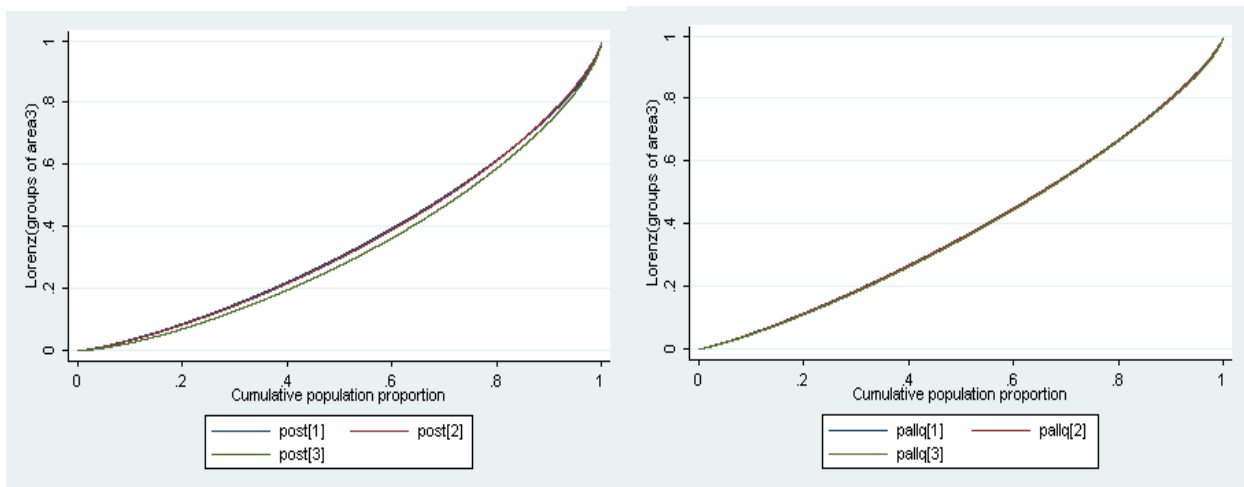
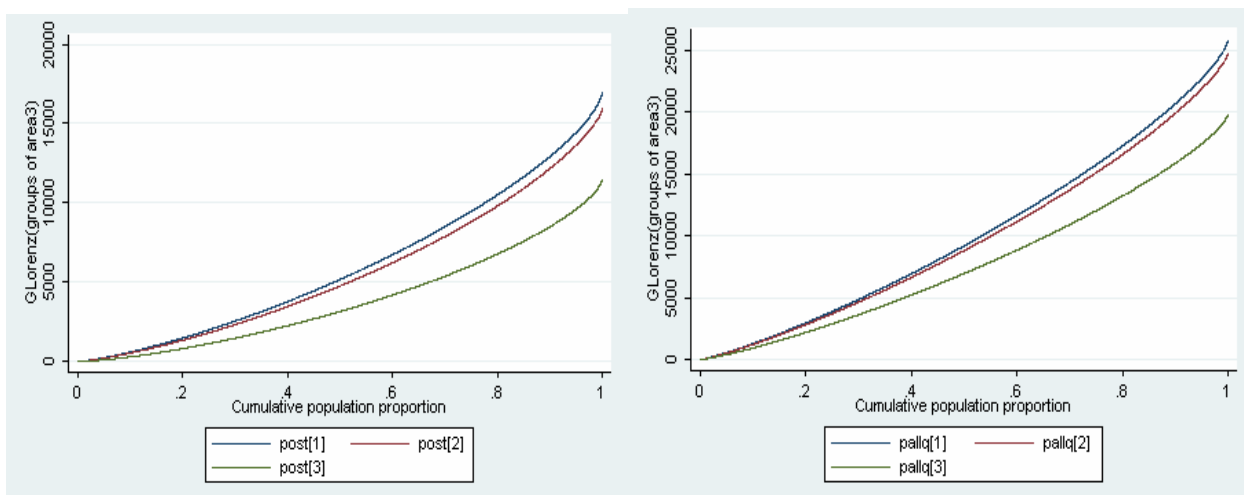


Fig. 12: Generalized Lorenz curves before (a) and after (b) non-cash incomes, by areas (North: blue, Center: red, South: green)



5. Concluding remarks

Aim of this paper is to bring together all the non-cash items examined in previous studies (on imputed rents, public education, public health care and other non-cash incomes).⁴ Our findings have shown that enlarging the definition of income, by taking into account several in-kind benefits, has a huge impact on the structure of the income distribution. The extended income increases considerably, while inequality and poverty sharply reduce for the overall population; it seems therefore incorrect to ignore these in-kind benefits in welfare analysis across countries or in inter-temporal comparisons.

⁴ See D'Ambrosio and Gigliarano (2007^a, 2007^b, 2008) and Makovec (2007).

Table 3. Non-cash incomes as a proportion of monetary income per quintile

Quintile	IR	Other non cash incomes	Education	Health	IR + other non cash incomes	Education + Health	IR+ Education + Health	All
1 (bottom)	18.7	62.4	33.7	34.3	81.1	68.0	86.7	149.1
2	13.3	36.8	17.8	22.5	50.0	40.1	53.4	90.2
3	11.6	27.8	10.7	16.6	39.4	27.3	38.9	66.7
4	10.7	21.5	6.3	12.5	32.3	18.8	29.5	51.0
5 (top)	7.7	12.9	3.8	6.7	20.6	10.5	18.2	31.1
Total	10.6	24.1	9.5	13.7	34.7	23.3	33.9	58.0

Table 4. Proportional changes in inequality and poverty indices

Index	IR	Other non cash incomes	Education	Health	IR + other non cash incomes	Education + Health	IR+ Education + Health	All
Gini	-2.6	-15.2	-9.0	-10.9	-16.4	-19.4	-20.1	-29.6
Atkinson0.5	-6.1	-28.6	-17.0	-20.8	-31.2	-34.5	-36.4	-50.4
Atkinson1.5	-8.4	-34.8	-18.8	-27.0	-37.3	-40.8	-42.5	-55.6
FGT0	-4.5	-26.9	-12.9	-19.9	-27.6	-36.8	-37.7	-36.2
FGT1	-7.2	-42.2	-22.7	-28.4	-44.6	-51.1	-53.1	-61.5
FGT2	-11.8	-54.3	-32.6	-37.6	-58.4	-62.5	-65.7	-76.5

Table 5. Values of inequality and poverty indices

Index	Baseline disposable income	Baseline + IR	Baseline + Other non cash incomes	Baseline + Education	Baseline + Health	Baseline + IR + other non cash incomes	Baseline + Education + Health	Baseline + IR+ Education + Health	Baseline + All
Gini	0.325	0.317	0.275	0.296	0.290	0.272	0.262	0.260	0.229
Atkinson0.5	0.091	0.085	0.065	0.075	0.072	0.062	0.059	0.058	0.045
Atkinson1.5	0.272	0.249	0.177	0.221	0.198	0.170	0.161	0.156	0.121
FGT0	0.186	0.178	0.136	0.163	0.149	0.135	0.118	0.116	0.119
FGT1	0.055	0.051	0.032	0.043	0.040	0.031	0.027	0.026	0.021
FGT2	0.027	0.024	0.012	0.018	0.017	0.011	0.010	0.009	0.006

Table 6. Inequality decomposition by population subgroup

Characteristic of household or household head	A	B	C	D	E	F	G	H	I
Household type									
Older single persons or couples (at least one 65+)	17.2	13916	23806	71.1	0.138	0.064	-53.6	12.3	12.5
Younger single persons or couples (none 65+)	14.8	17524	24798	41.5	0.208	0.118	-43.5	16.0	19.8
Couple with children up to 18 (no other HH members)	34.9	13845	22535	62.8	0.205	0.090	-56.2	37.0	35.4
Mono-parental household	2.7	11789	21051	78.6	0.273	0.090	-67.2	3.8	2.7
Other household types	30.4	15695	24214	54.3	0.181	0.083	-54.0	28.5	28.7
% Within groups inequality	./.	./.	./.	./.	0.188	0.087	-53.6	97.7	99.1
% Between groups inequality	./.	./.	./.	./.	0.004	0.001	-81.4	2.3	0.9
Socioeconomic group of HH head									
Blue collar worker	20.9	12085	19857	64.3	0.133	0.058	-55.9	14.3	13.8
White collar worker	18.6	17597	26414	50.1	0.121	0.069	-43.5	11.7	14.4
Self-employed	17.3	17939	26325	46.7	0.292	0.141	-51.8	26.2	27.6
Unemployed	3.2	8003	16066	100.8	0.379	0.107	-71.9	6.2	3.8
Pensioner	29.1	15116	24499	62.1	0.129	0.060	-53.3	19.4	19.8
Other	11.0	12415	21094	69.9	0.236	0.091	-61.4	13.5	11.4
% Within groups inequality	./.	./.	./.	./.	0.176	0.080	-54.5	91.2	90.8
% Between groups inequality	./.	./.	./.	./.	0.017	0.008	-51.8	8.8	9.2
Educational level of HH head									
Tertiary education	9.1	23796	33181	39.4	0.209	0.121	-42.2	9.8	12.4
Upper secondary education	28.8	16547	25150	52.0	0.164	0.081	-50.4	24.5	26.5
Lower secondary education	30.4	13315	21564	61.9	0.183	0.076	-58.3	28.8	26.3
Primary education or less	31.7	12398	21266	71.5	0.161	0.067	-58.1	26.4	24.2
% Within groups inequality	./.	./.	./.	./.	0.173	0.079	-54.3	89.5	89.4
% Between groups inequality	./.	./.	./.	./.	0.020	0.009	-53.6	10.5	10.6

Age of HH member									
Below 25	24.8	13312	21940	64.8	0.216	0.090	-58.4	27.7	25.2
25-64	55.9	15845	24064	51.9	0.196	0.094	-51.8	56.8	59.8
Over 64	19.3	14251	24180	69.7	0.140	0.065	-54.0	14.0	14.1
% Within groups inequality	./.	./.	./.	./.	0.190	0.087	-54.0	98.6	99.1
% Between groups inequality	./.	./.	./.	./.	0.003	0.001	-70.9	1.4	0.9
ALL	100.0	14910	23560	58.0	0.193	0.088	-54.2	100.0	100.0

Distribution A: Baseline distribution (equivalised disposable income per capita)

Distribution B: Distribution of equivalised (disposable income per capita + all non-cash incomes)

Columns:

A: Population share;

B and C (mean equivalent income relative to the national mean; distributions A and B);

D: % increase in mean equiv. income;

E and F: inequality index (mean log deviation – known as 2nd Theil index - distributions A and B);

G:% change in inequality;

H and I: % contribution to aggregate inequality (distributions A and B);

Table 7. Poverty decomposition

Characteristic of household or household head	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Household type																
Older single persons or couples (at least one 65+)	17.2	16.9	6.7	-60.0	15.6	9.8	3.2	0.8	-73.2	9.8	6.8	1.1	0.2	-83.8	7.0	4.8
Younger single persons or couples (none 65+)	14.8	13.6	14.0	2.8	10.9	17.5	4.6	3.1	-31.6	12.3	21.9	2.4	1.1	-53.6	13.4	26.3
Couple with children up to 18 (no other HH members)	34.9	22.2	14.0	-36.8	41.5	41.2	6.9	2.6	-62.5	43.7	42.6	3.5	0.8	-78.0	45.9	42.9
Mono-parental household	2.7	34.0	18.4	-45.9	4.9	4.2	13.0	3.3	-74.9	6.3	4.1	7.4	1.0	-86.8	7.5	4.2
Other household types	30.4	16.7	10.7	-35.7	27.2	27.4	5.1	1.7	-66.2	27.8	24.5	2.3	0.5	-80.5	26.3	21.8
Socioeconomic group of HH head																
Blue collar worker	20.9	24.1	16.3	-32.2	27.0	28.7	6.4	2.9	-54.2	24.2	28.8	2.8	0.8	-69.7	21.4	27.6
White collar worker	18.6	6.3	3.4	-45.8	6.2	5.3	1.0	0.3	-65.5	3.4	3.0	0.3	0.1	-80.2	2.2	1.8
Self-employed	17.3	20.4	13.7	-33.0	18.9	19.9	6.8	2.7	-59.4	21.1	22.3	3.4	0.9	-74.0	22.0	24.3
Unemployed	3.2	60.7	48.9	-19.4	10.2	13.0	29.6	11.6	-60.8	16.8	17.1	18.7	4.0	-78.4	21.9	20.2
Pensioner	29.1	12.6	5.9	-52.7	19.6	14.5	2.5	0.7	-73.5	13.4	9.2	0.9	0.1	-85.5	9.7	5.9
Other	11.0	30.4	20.1	-34.0	18.0	18.6	10.6	3.8	-64.4	21.1	19.5	5.5	1.2	-79.1	22.8	20.2
Educational level of HH head																
Tertiary education	9.1	7.6	4.2	-45.0	3.7	3.2	2.0	0.8	-59.9	3.3	3.5	1.0	0.3	-72.2	3.3	3.8
Upper secondary education	28.8	11.4	7.8	-31.8	17.6	18.9	3.2	1.3	-59.7	16.7	17.5	1.6	0.4	-76.7	17.0	16.9
Lower secondary education	30.4	22.9	15.5	-32.4	37.3	39.6	7.1	2.8	-60.0	39.0	40.6	3.5	0.8	-76.3	40.2	40.5
Primary education or less	31.7	24.4	14.4	-40.9	41.3	38.3	7.1	2.6	-63.9	40.9	38.4	3.3	0.8	-76.9	39.5	38.8
Age of HH member																
Below 25	24.8	25.1	15.9	-36.8	33.3	33.1	8.2	2.9	-64.6	36.8	33.9	4.2	0.9	-79.4	38.9	34.1
25-64	55.9	16.7	12.0	-28.1	50.0	56.5	5.2	2.2	-56.8	52.5	59.0	2.6	0.7	-73.1	53.3	60.9
Over 64	19.3	16.1	6.4	-59.8	16.6	10.5	3.1	0.8	-74.4	10.8	7.2	1.1	0.2	-84.9	7.8	5.0
ALL	100.0	18.6	11.9	-36.2	100.0	100.0	5.5	2.1	-61.5	100.0	100.0	2.7	0.6	-76.5	100.0	100.0

Distribution A: Baseline distribution (equivalised disposable income per capita)

Distribution B: Distribution of equivalised (disposable income per capita + all non-cash incomes)

Columns:

A: Population share;

B and C: Poverty index (FGT0 – poverty rate, distributions A and B);

D:% change in poverty;

E and F: % contribution to aggregate poverty (FGT1 – normalized poverty rate, distributions A and B);

G and H: Poverty index (FGT1 – normalized poverty gap, distributions A and B);

I:% change in poverty;

J and K: % contribution to aggregate poverty (FGT1 – normalized poverty gap, distributions A and B);

L and M: Poverty index (FGT2, distributions A and B);

N:% change in poverty;

O and P: % contribution to aggregate poverty (FGT2, distributions A and B);

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