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in the United Kingdom**

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The distributional impact of non-cash
incomes in the United Kingdom:
the combined effect of imputed rents and public
expenditure for education and healthcare

Holly Sutherland and Francesca Zantomio
Institute for Social and Economic Research, University of Essex

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1. Introduction

Despite being traditionally excluded from the standard measurement of income — which must be core to any analysis of poverty, inequality and redistribution — certain non-cash components of income enlarge individuals' command over resources, and therefore, potentially, their standard of living. This study aims to analyse how the picture of the United Kingdom household disposable income distribution would alter if relevant non-cash components were taken into account. The components considered are imputed rents for owner occupiers and subsidised tenants, and the foregone expenditure that would need to be borne for health and education services were they not publicly provided.

Such an exercise allows for more meaningful comparisons of resources distribution across countries characterised by different mixtures of cash and non cash welfare provisions, or where specific national housing market features lead to significant cross-country differences in the housing tenure distribution. Also, within each country, it allows for a better understanding of patterns over the life cycle of in-kind welfare provision, where specific non-cash components accrue mostly to particular age groups.

Previous studies (O'Higgins and Ruggles, 1981; Smeeding et al., 1993; Harding et al., 2006, Jones, 2008; Sefton, 2002) have found strong and consistent evidence of an equalizing effect of public expenditure on health, education and subsidised housing for UK households; and that the life cycle pattern of poverty risk results flattens once such income components are taken into account, as the two age groups at higher risk of poverty — children and elderly people — are those benefiting the most from public education and healthcare provision respectively. This study adopts a cross country common approach to maximise the scope for international comparison and includes not only non cash components stemming from government expenditure, but also the non cash advantage owner occupiers enjoy because of previous private investment. While this does not represent an exhaustive list of non cash incomes, it includes the most sizeable ones.

For each of the categories of resource, irrespective of whether the origin is public or private, the imputation approach that is adopted involves allocation to the household of the 'foregone cost' in other words what the household would need to pay — in terms of cost of provision — to get the same housing, education and availability of healthcare service that they actually enjoy. Imputed amounts therefore reflect the avoided additional expenditure rather than the utility value to the household; it might be argued in fact that households could prefer different quantities of each service, if they were receiving an equivalent in cash instead of the non cash provision. Besides, our analysis will be focussed on the immediate impact of any non cash component, while potential external or long term effects - e.g. higher wages in later life due to the education received; or a healthier society - will be disregarded, as beyond the scope of this study.

2. Data and methods

We use nationally representative micro data from the Family Resources Survey 2003/04, providing a large sample size of 28,860 households and a rich set of variables, covering household demographics, disposable income, house tenure and housing costs, and information about education currently attended by all household members. These data also represent the reference for government official poverty statistics and constitute the most up to date database available in EUROMOD. A brief methodological description is provided separately for each of the non cash components of income considered, as differences in their nature, or the data requirements each of them entailed, justifies using different approaches. More specific information can be found in the relevant UK country reports (Sutherland et al. 2007a for education; Sutherland et al. 2007b for imputed rents; Sutherland et al. 2007c for healthcare).

Imputation of the education subsidy follows a 'cost of provision' approach implying the allocation to each household of a monetary transfer for any person currently in primary, secondary, further or tertiary public education. The amount of

transfer is calculated based on the average public expenditure per full-time equivalent student in each education level as provided by OECD, based on national statistics. Tertiary education transfers are calculated net of any tuition fee privately paid and excludes Research and Development expenditure, while no transfer is assigned for children attending private education institutions (there are no tax reliefs for such expenditures in the UK).

Calculation of net imputed rents followed an 'opportunity cost' approach, aiming at representing what the occupant of non privately rented accommodation would have needed to pay in gross rent if renting in the private market the accommodation currently occupied, less what actually paid to live there (e.g. the subsidised rent; or mortgage interest instalments). Using the sample of private tenants observed in the data, it is possible to estimate a rent equation and use the resulting coefficients to predict the gross market rent for accommodation of other tenure types, based on the observable characteristics relating to the house/flat which are available in the data for all tenure types. The imputed rent calculated in this way can be interpreted as the subsidy received by public housing tenants or the income not paid in rent by owner occupiers.

The health transfer is calculated adopting an 'insurance based' approach, according to which each individual within the household is imputed an amount related to the own risk of needing health care, rather than actual usage. Actual usage is in fact not observable in the data. Moreover, it might be argued that the actual use of health care services compensates for sick individuals' lower well-being, rather than raising their control over resources or increasing their living standards. While following a 'consumption- based' approach would render individuals with lower health artificially better off in terms of potential income resources when compared to healthier individuals, the insurance based approach overcomes this limitation and still allows the analysis of the extent to which different population demographic subgroups benefit from the availability of public healthcare.

As with education, healthcare services are valued at the cost of production, rather than according to households' willingness to pay for them. Total public expenditure, as available in the OECD SOCX database is allocated to households

according to the age of households members. The risk of needing health care can in fact be seen as mainly determined by age, therefore the same amount of transfer was allocated to each individual belonging to a given age group, based on age pattern drawn from OECD data on health service usage.

The following distributional analysis has involved the comparison of the baseline “cash” household disposable income distribution with ‘augmented’ income distributions, where each component separately and all of them at the same time were added to the standard cash-only measure. The assumption that both cash and non cash income components are equally shared by household members underlies the analysis. Besides, to account for differential household composition, the modified OECD equivalence scale has been applied to household disposable income and non cash income components before any comparison of distributions is drawn.

3. Results

3.1 Beneficiaries

Table 1 reports the proportion of the population enjoying each type of non cash income, by equivalent disposable income quintile and Table 2 reports the same information separately for young, adult and elderly people.¹ Public education expenditure accrues to the households of about one third of the UK population, covering all income quintiles. Public education beneficiaries are overrepresented in the bottom three quintiles, with coverage in the top quintile (34.4%) about two thirds the size of the bottom quintile (46.0%). Even though not informative about the magnitude of the education transfer, a picture of the redistributive role for public expenditure on education emerges, and is confirmed when the three age groups are considered separately.

The insurance based approach that is adopted for the allocation of healthcare spending results in 100% of the population being beneficiaries, reflecting the fact that everybody in the population enjoys the availability of free NHS health care.

¹ The young people group includes those aged below 25 years old; the adults are defined as those aged between 25 and 64 years old and the elderly as those aged 65 years old or above.

TABLE 1Share of beneficiaries²

quintile ³	Share of beneficiaries ²		
	Education	Health	Imputed rents
1	46.0%	100.0%	85.5%
2	49.5%	100.0%	80.3%
3	47.2%	100.0%	80.9%
4	43.3%	100.0%	78.5%
5	34.4%	100.0%	74.1%
All	44.1%	100.0%	79.9%

TABLE 2Share of beneficiaries², by age group

Quintile ²	Education			Health			Imputed rents		
	Below 25	25-64	65 above ⁴	Below 25	25-64	65 above	Below 25	25-64	65 above
1	76.2%	41.8%	2.2%	100.0%	100.0%	100.0%	81.4%	83.6%	96.7%
2	80.4%	49.0%	2.3%	100.0%	100.0%	100.0%	75.5%	80.7%	86.9%
3	76.1%	43.1%	3.2%	100.0%	100.0%	100.0%	75.2%	81.7%	90.0%
4	69.2%	37.4%	5.2%	100.0%	100.0%	100.0%	72.3%	79.3%	90.5%
5	61.6%	28.3%	8.8%	100.0%	100.0%	100.0%	66.9%	74.3%	97.7%
All	73.7%	38.6%	3.4%	100.0%	100.0%	100.0%	75.0%	79.3%	91.6%

² Beneficiary is anybody living in a household where somebody receives education or healthcare public services; or in households enjoying a net imputed rent from owning the accommodation or renting it at a reduced price.

³ Quintiles of equivalent household disposable income (before the addition of non-cash components). Equivalisation uses the modified OCED scale, assigning weight 1 to the household head, weight 0.5 to each additional adult member and of 0.3 to each child (aged below 14 years old).

⁴ Individuals aged 65 years old or above result education beneficiaries when living in the same household as somebody in education.

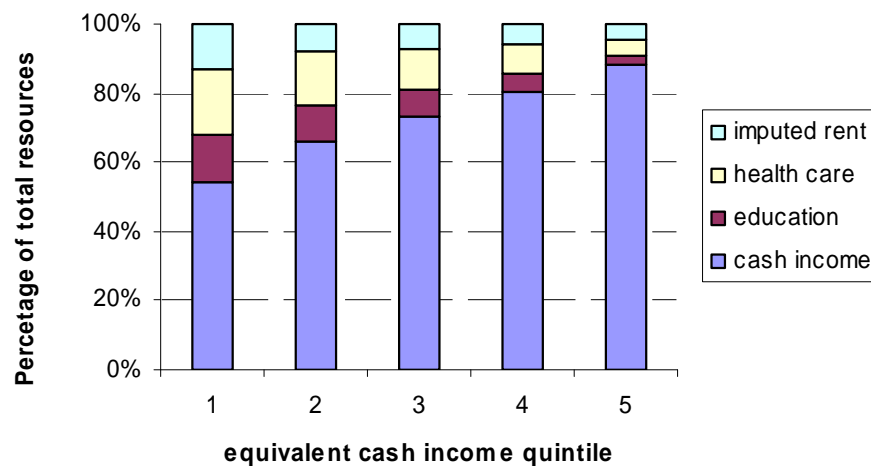
Around four fifths of the UK population is in households benefiting from net imputed rent. While the coverage decreases slightly in higher income deciles, the proportion of beneficiaries remains around a sizeable 75% of the population in the top income quintile. When compared to other European countries (Belgium, Germany, Greece, Ireland, Italy and the Netherlands) the UK population has one of the highest proportions benefiting from imputed rents, together with Ireland, Greece and Italy (Frick et al, 2008).

The incidence of positive imputed rents is particularly striking amongst elderly people: in all except the second quintile, more than the 90% of the elderly population benefit from imputed rents. This reflects the fact that a large majority of this group are either living in owner occupied accommodating without a mortgage or significant other outgoings, or are social tenants benefiting from subsidised rents.

3.2 Cash and non Cash Income portfolio

Here we consider the magnitude of non cash incomes, when compared to the baseline cash measure. Figure 1 plots the proportion of total cash and non cash households' resources covered by each component, in each baseline income quintile (and by age groups, defined as above, in the Appendix). A robust redistributive pattern of non cash incomes emerges: imputed rents, education and health transfers are about four times as important for the poorest fifth as they are for the richest fifth of the population. Almost half of total resources in the bottom quintile stem from non cash incomes. The share of total resources covered by the non cash component decreases systematically in higher income quintiles, reaching around one tenth for the top quintile. Overall, the role played by public health expenditure is larger than that of education expenditure and imputed rents; however public education expenditure contributes substantially to the living standards people in households with children, especially in the bottom quintiles, while imputer rent is relatively more important for people in the top income quintiles.

Figure 1: Income portfolio, by equivalent household income quintiles



Figures in the top panel of Table 3 show the percentage increase in total income resources once each non-cash component, and all of them at the same time, are added in. For the poorest fifth of the population, resources increase by more than the 85%, with imputed rent adding about 20% to cash income and education and health contributing with about a one third each. For each non cash component, the percentage increase in disposable income they bring consistently decreases in higher income quintiles. As the bottom panel of Table 3 clarifies, this is only partly due to the size of the denominator increasing as cash income rises. Also, the absolute value of each non cash component shows a broadly redistributive pattern, with higher average amounts imputed to individuals in the bottom two quintiles, and continuously decreasing values allocated to higher cash income quintiles. The health transfer is the most sizeable in all quintiles, followed by the education transfer except in the top quintile, where imputed rents play a bigger role than education. This is partly due to the higher concentration of children in lower income quintiles, but also to the higher probability that higher income children would attend private education institutions. People aged below 25 years old are those in households 'receiving' the most in absolute terms, from the non cash incomes imputation, as more than half of them benefit from each of the three non-cash elements at the same time, while less than one every three working age adults do so. Elderly people, though, receive the highest amounts from rent and health transfer imputation.

TABLE 3

Percentage increase in disposable income⁵

Quintile of equivalent household disposable income (cash only)	Education	Imputed rent	Health	All
1	31.53	20.5	33.6	85.7
2	19.9	11.0	21.9	52.9
3	12.8	8.6	15.3	36.7
4	7.6	6.8	10.6	25.1
5	3.2	4.9	5.6	13.7
All	10.2	7.9	12.7	30.8

Mean non cash income per capita, £/year⁶

Quintile of equivalent household disposable income (cash only)	Education	Imputed rent	Health	All
1	3,123	2,034	3,330	8,487
2	3,171	1,750	3,471	8,393
3	2,741	1,834	3,285	7,860
4	2,252	1,995	3,139	7,386
5	1,571	2,413	2,791	6,776
All	2,572	2,005	3,203	7,780
Below 25	4,786	1,731	3,171	9,688
25-64	1,992	1,960	2,775	6,727
65 above	126	2,715	4,761	7,602

⁵ total non cash component / total disposable income (in each quintile of equivalent household disposable cash income)

⁶ total non cash component / total number of individuals (in each quintile of equivalent household disposable cash income)

3.3 Inequality and Poverty

Table 4 reports the value of conventional inequality and poverty indices calculated using the baseline (cash) definition of resources, and their proportional change once non cash incomes are accounted for.

TABLE 4 Inequality and Poverty Indices

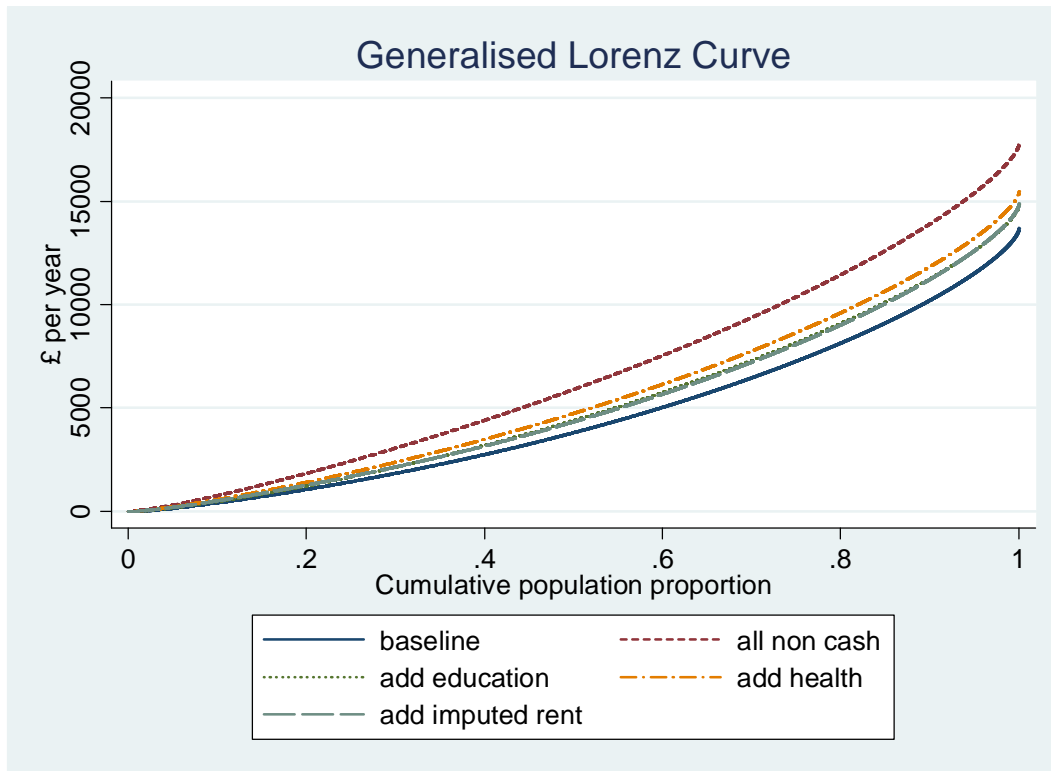
Indices	Baseline ^a value	Percentage change in index when adding non cash components			
		Education	Imputed rents	Health	All
INEQUALITY INDICES					
Gini	0.328	-7.93	-5.8	-12.3	-23.27
Atkinson 0.5	0.093	-13.93	-12.8	-23.7	-40.54
Atkinson 1.5	0.271	-12.36	-17.5	-27.9	-45.01
POVERTY INDICES ^b					
FGT0	0.174	-11.21	-16.7	-29.7	-53.05
FGT1	0.045	-7.45	-26.7	-36.7	-59.48
FGT2	0.022	-10.13	-33.1	-41.7	-66.03

^a Cash income only

^b For the calculation of the poverty indices the poverty line reflects the concept of resources used and is set at 60% of the median.

Each non cash component contributes substantially to reducing inequality, although to a different extent. Public health expenditure plays a prominent role, and would by itself reduce inequality by more than a quarter, according to the most inequality adverse measure shown in Table 4. Adding all non cash components reduces inequality by more than one fifth according the Gini index, which is more sensitive to changes at the centre, rather than the tails, of the distribution, and even more according to the Atkinson indices. Figure 2 plots the Generalised Lorenz Curve for the baseline household disposable income distribution, and the distributions ‘augmented’ by non cash income. The Generalised Lorenz Curve accounts for both the inequality of the underlying income distribution and for its mean level. Each of the augmented distributions represents a welfare improvement over the baseline cash income distribution (the solid line in Figure 2), since they all lie above it. In other words, accounting for non cash incomes results in an improved welfare picture for UK households, both in terms of level of resources available and of reduced inequality.

Figure 2



Based on equivalised resources

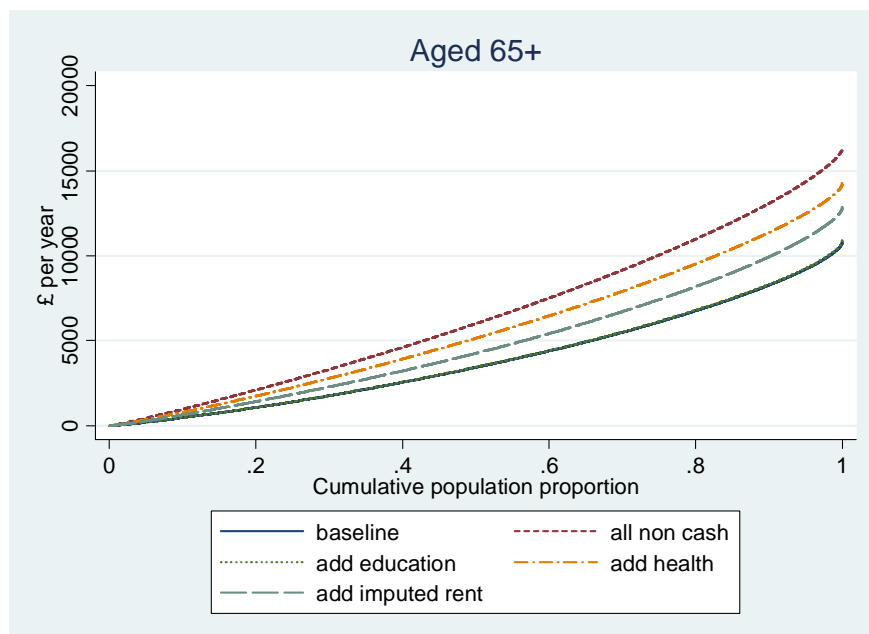
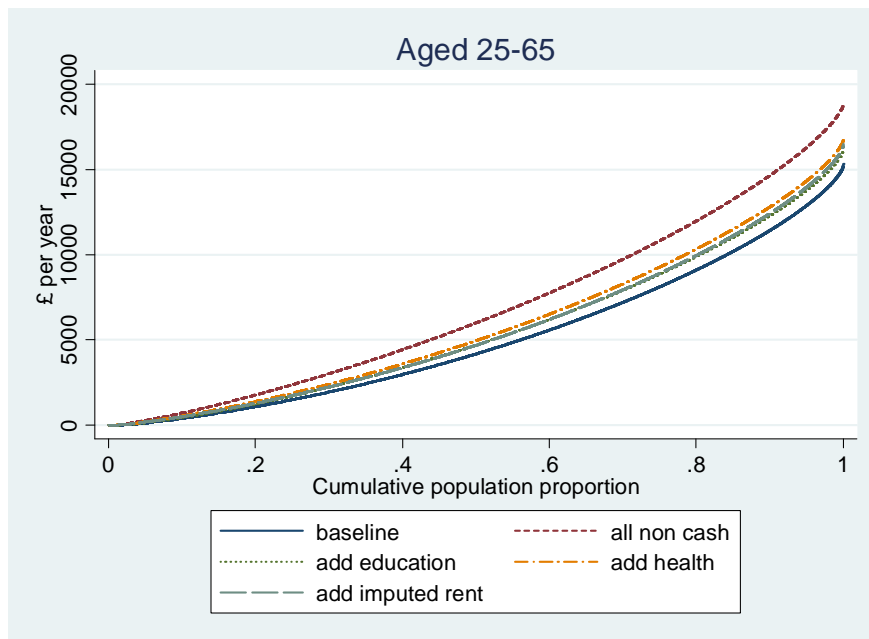
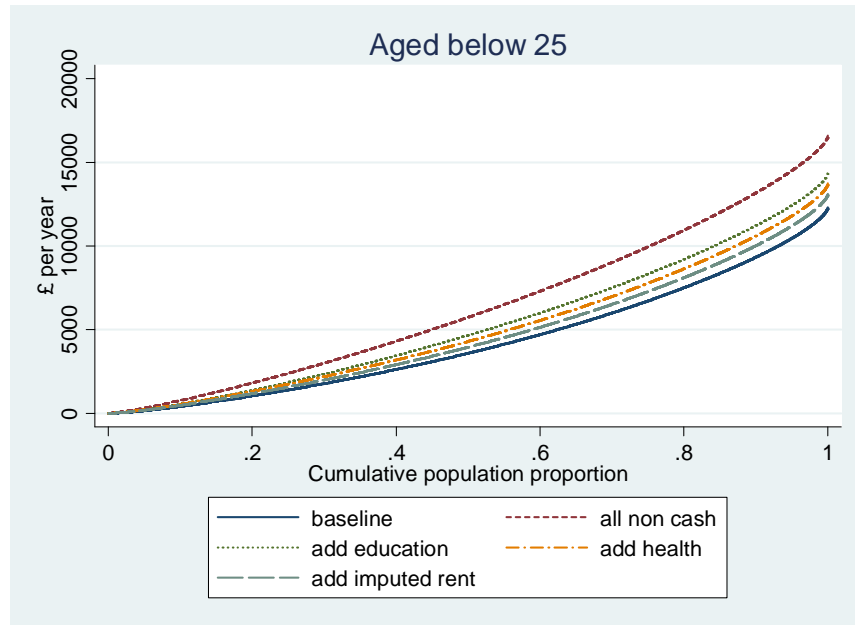
The most sizeable improvement is attributable to the health related transfer, followed by imputed rents. Figure 3 shows Generalised Lorenz Curves for different age groups. For individuals aged below 25 the highest increase is due to public expenditure for education, followed by health. For adults, and particularly for elderly people, the welfare improvement associated with the inclusion of imputed rents (the long dashed line) in the concept of resources is remarkable (even though less than the one associated to health expenditure - the dot and dash line).

The proportional change in poverty, as measured by the Foster-Greer-Thorbecke indices, is calculated allowing the poverty line level to shift according to the median of the underlying concept of resources used. Nevertheless, the poverty rate (FGT0 index in Table 4) is more than halved when all the non-cash income components are considered in addition to cash income. Again, irrespective of the index used, most of the poverty reduction is attributable to public healthcare expenditure, followed by imputed rents and education. Each of them brings a sizeable reduction in the poverty rate, at least 10% of the baseline value. Poverty

depth indices are less sensitive to the inclusion of education transfers than health transfers or imputed rents.

A more detailed picture of the inequality and poverty reduction patterns across particular population subgroups, defined according to household composition type, socioeconomic group and educational level of household head, and age, is given in Appendix Tables 5 and 6. These figures reinforce the idea that accounting for non cash income improves the relative position of otherwise more disadvantaged population subgroups, such as older people, lone parents, unemployed and low educated individuals.

Figure 3: Generalised Lorenz Curve^a, by age group



4. Conclusions

Fiscal policy reforms implemented in the UK in the last decade have been mostly targeted at improving the relative income position of children and the elderly, whose poverty risk is much higher than for the rest of the adult population (DWP, 2008). Official income measurement is based on a cash only concept of resources, while non cash components of resources available to individuals are not taken into account. This study has investigated how the relative income picture would be altered if such non cash components were taken into account. Figure 4 plots the relative income position of different age groups, relative to the population mean, using the cash-only and 'augmented' income distributions. Using this second definition of resources flattens the life cycle profile of relative income positions, even though children and older people still appear worse off relative to the population mean.

Figure 4: Income position, relative to population mean

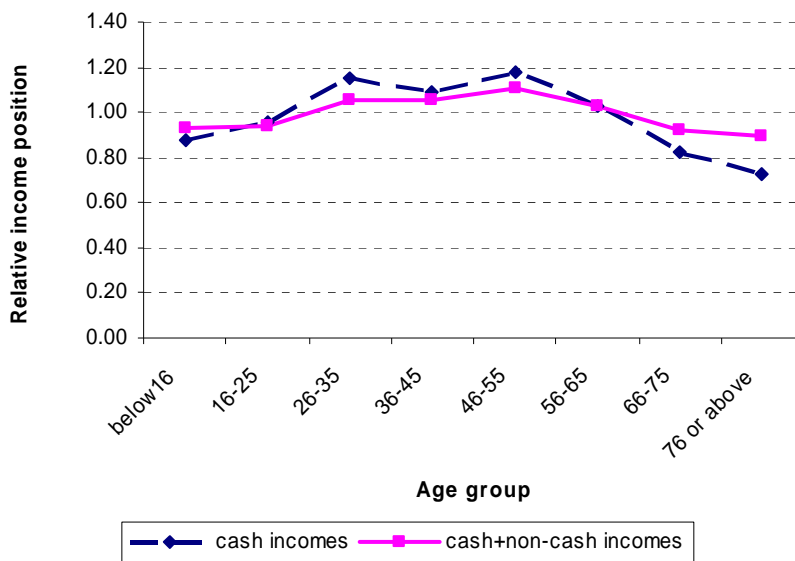
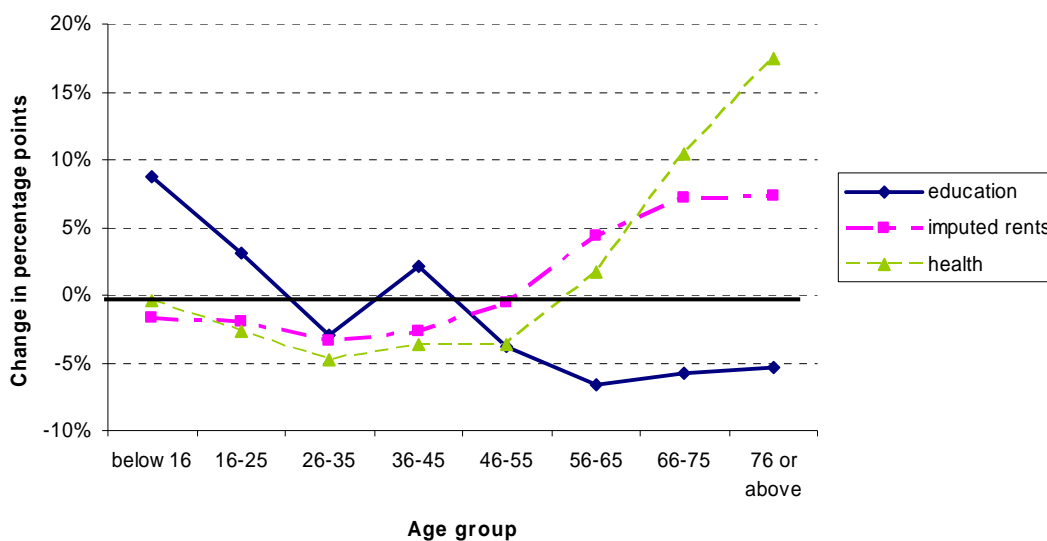


Figure 5 breaks down the effects into the three components and expresses them as the change in relative position compared with the baseline cash measure. It shows that the improvement is particularly striking for elderly people, whose relative income position is substantially increased when the health service availability, and to a smaller extent, imputed rents, are accounted for. Another group appearing to be almost 10 percentage points better off in terms of relative income position is that of

children, when public education expenditure is include in the resources measure. Parents too are shown to benefit.

Figure 5: Relative income position: change in % points



Overall, non cash incomes increase disposable income by almost one third and reduce income inequality by more than 40% amongst the most vulnerable age groups, children and pensioners. Also the poverty risk turns out remarkably reduced, by more than 90% for the elderly and more than 50% for those aged below 25 years old. While children benefit the most from the public education expenditure, elderly see their available resources substantially increased when health expenditure and imputed rents are taken into account.

Clearly, the methodological approach that we have adopted involves strong assumptions. Equating non-cash incomes with cash neglects the fact that recipients may not choose to spend cash on the three components we consider. We also ignore the externalities involved in providing healthcare, housing and education publicly. And our assumption of within-household income pooling is not necessarily realistic. Nevertheless, this study shows that measures of differences in living standards of different age groups are sensitive to the concept of resources used.

References

DWP (2008) "Households Below Average Income, 1994/95-2006/07", available at http://www.dwp.gov.uk/asd/hbai/hbai2007/pdf_files/full_hbai08.pdf

Frick, J.R., Grabka, M. M., Smeeding, T. and Tsakloglou, P. (2008) "Distributional effects of imputed rents in seven European countries", available at <http://www.iser.essex.ac.uk/msu/emod/aim-ap/deliverables/AIM-AP1.1.pdf>

Harding A., R. Lloyd and N. Warren (2006), "Moving beyond traditional cash measures of economic well-being: including indirect benefits and indirect taxes", National Centre For Social and Economic Modelling, Discussion Paper no. 61, University of Canberra, November.

O'Higgins, M., Ruggles, P. (1981) "The distribution of public expenditures and taxes among households in the United Kingdom", *Review of Income and Wealth*, June pp. 298-326.

Jones, F. (2008), "The effects of taxes and benefits on household income, 2006/07", in *Employment and Labour Market Review* 2 (7) Office for National Statistics available at http://www.statistics.gov.uk/elmr/07_08/downloads/ELMR_Jul08_Jones.pdf

Sefton T. (2002), "Recent changes in the distribution of the social wage", *CASE paper* 62, London School of Economics, London.

Smeeding T., S. Saunders, J. Coder, S. Jenkins, J. Fritzell, A. Hagenaars, R. Hauser and M. Wolfson (1993), "Poverty, inequality, and family living standards impact across seven nations: the effect of non cash subsidies for health, education and housing", *Review of Income and Wealth*. 39(3): September

Sutherland, H., Zantomio, F. (2007a) "The distributional impact of public education expenditure in the United Kingdom", available at <http://www.iser.essex.ac.uk/msu/emod/aim-ap/deliverables/AIM-AP1.2f.pdf>

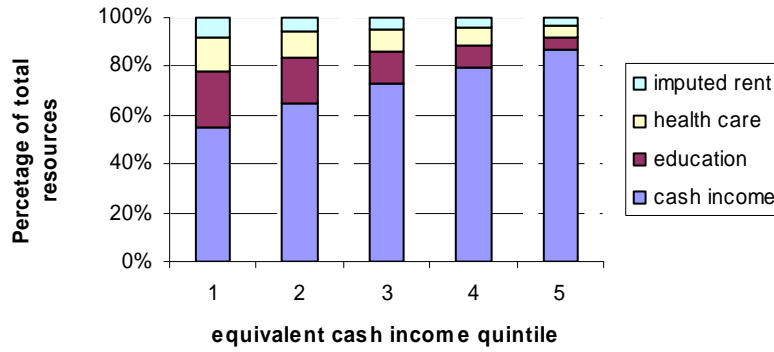
Sutherland, H., Mullan, K., Zantomio, F. (2007b) "The distributional impact of imputed rents in the United Kingdom", available at <http://www.iser.essex.ac.uk/msu/emod/aim-ap/deliverables/AIM-AP1.1f.pdf>

Sutherland, H., Mullan, K., Zantomio, F. (2007c) "The distributional impact of public health expenditure in the United Kingdom", available at <http://www.iser.essex.ac.uk/msu/emod/aim-ap/deliverables/AIM-AP1.3f.pdf>

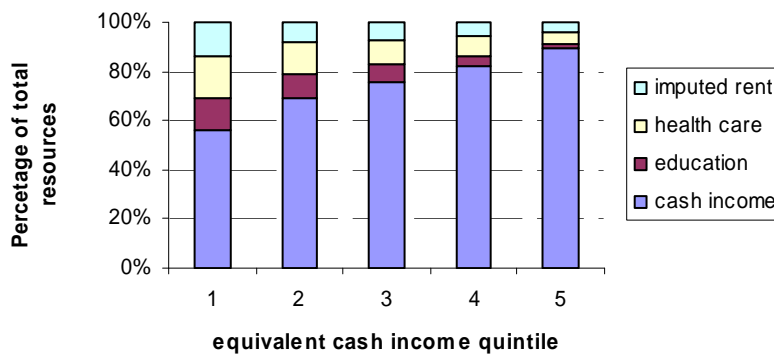
APPENDIX

Income portfolio, by equivalent household income quintiles for different age groups

Aged below 25 years old



Aged 25 to 64 years old



Aged 65 years old or above

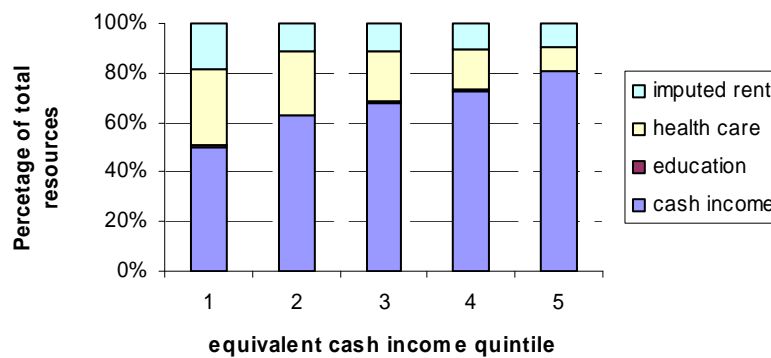


TABLE 5. Inequality decomposition by population subgroup

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+)	14.45%	0.79	0.92	16.72%	0.136	0.074	-45.72%	10.57%	9.77%
Younger single persons or couples (none 65+)	23.70%	1.25	1.12	-10.27%	0.230	0.165	-28.28%	29.24%	35.70%
Couple with children up to 18 (no other HH members)	21.82%	1.04	1.02	-2.05%	0.168	0.103	-38.53%	19.66%	20.57%
Mono-parental household	2.94%	0.68	0.75	10.96%	0.125	0.073	-41.84%	1.97%	1.95%
Other household types	37.09%	0.93	0.96	3.76%	0.158	0.085	-46.39%	31.55%	28.79%
% Within groups inequality	./.	./.	./.		0.173	0.106	-38.79%	92.86%	96.78%
% Between groups inequality	./.	./.	./.		0.013	0.004	-73.42%	7.14%	3.23%
Socioeconomic group of HH head									
Blue collar worker	25.82%	0.82	0.84	2.14%	0.112	0.062	-44.88%	15.59%	14.64%
White collar worker	34.61%	1.31	1.22	-6.86%	0.159	0.102	-35.69%	29.61%	32.43%
Self-employed	9.39%	1.34	1.26	-6.16%	0.252	0.173	-31.35%	12.72%	14.86%
Unemployed	1.19%	0.51	0.63	22.33%	0.131	0.075	-42.95%	0.84%	0.82%
Pensioner	16.22%	0.75	0.88	17.39%	0.107	0.057	-46.59%	9.34%	8.50%
Other	12.77%	0.64	0.73	14.03%	0.137	0.077	-43.97%	9.42%	8.99%
% Within groups inequality	./.	./.	./.		0.144	0.088	-39.20%	77.50%	80.22%
% Between groups inequality	./.	./.	./.		0.042	0.022	-48.35%	22.50%	19.79%
Educational level of HH head									
Tertiary education	21.72%	1.39	1.30	-6.79%	0.224	0.144	-35.70%	26.10%	28.57%
Upper secondary education	17.69%	1.09	1.07	-1.83%	0.168	0.103	-38.71%	16.01%	16.70%
Lower secondary education	60.43%	0.84	0.87	4.67%	0.139	0.076	-45.31%	45.27%	42.16%
Primary education or less	0.15%	0.71	0.83	17.04%	0.313	0.132	-57.96%	0.26%	0.18%
% Within groups inequality	./.	./.	./.		0.163	0.096	-41.27%	87.61%	87.61%
% Between groups inequality	./.	./.	./.		0.023	0.014	-41.26%	12.39%	12.39%
Age of HH member									
Below 25	31.13%	0.89649	0.9314	3.89%	0.161	0.089	-44.78%	27.00%	25.39%
25-64	53.43%	1.12136	1.06312	-5.19%	0.200	0.129	-35.67%	57.49%	62.97%

Over 64	15.45%	0.78881	0.91863	16.46%	0.126	0.067	-46.75%	10.42%	9.45%
% Within groups inequality	./.	./.	./.	./.	0.177	0.107	-39.44%	94.92%	97.87%
% Between groups inequality	./.	./.	./.	./.	0.009	0.002	-75.37%	5.08%	2.13%
ALL	100.00%	1.00	1.00	0.00%	0.186	0.109	-41.27%	100.00%	100.00%

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 6. Poverty decomposition (poverty line reflecting concept of resources used)

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+)	14.45	0.249	0.019	-92.23	20.68	3.42	0.045	0.002	-95.57	14.36	1.57	0.012	0.000	-96.80	7.95	0.75
Younger single persons or couples (none 65+)	23.70	0.152	0.132	-13.11	20.66	38.24	0.059	0.037	-36.30	30.96	48.67	0.038	0.018	-53.61	41.44	56.59
Couple with children up to 18 (no other HH members)	21.82	0.120	0.077	-36.25	15.05	20.43	0.034	0.016	-52.55	16.64	19.49	0.017	0.006	-64.10	17.54	18.54
Mono-parental household	2.94	0.340	0.182	-46.39	5.73	6.55	0.062	0.024	-60.62	4.05	3.94	0.021	0.006	-69.71	2.82	2.51
Other household types	37.09	0.178	0.069	-61.13	37.88	31.36	0.041	0.013	-68.60	34.00	26.34	0.018	0.004	-75.72	30.26	21.60
Socioeconomic group of HH head																
Blue collar worker	25.82	0.163	0.102	-37.68	24.24	32.17	0.047	0.024	-49.46	26.98	33.65	0.024	0.010	-60.10	29.10	34.18
White collar worker	34.61	0.067	0.041	-38.50	13.28	17.40	0.025	0.012	-50.34	19.31	23.67	0.016	0.006	-61.04	25.52	29.26
Self-employed	9.39	0.106	0.063	-40.88	5.72	7.21	0.036	0.017	-53.61	7.46	8.54	0.021	0.008	-63.10	9.27	10.06
Unemployed	1.19	0.593	0.327	-44.87	4.07	4.77	0.143	0.076	-46.62	3.80	5.00	0.068	0.029	-57.01	3.76	4.75
Pensioner	16.22	0.244	0.030	-87.82	22.69	5.88	0.046	0.003	-93.41	16.41	2.67	0.013	0.001	-95.68	9.56	1.21
Other	12.77	0.409	0.209	-49.05	30.01	32.57	0.092	0.038	-58.82	26.05	26.48	0.039	0.012	-69.40	22.80	20.54
Educational level of HH head																
Tertiary education	21.72	0.109	0.060	-45.24	13.61	15.88	0.039	0.016	-57.99	18.67	19.35	0.023	0.008	-66.72	23.01	22.53
Upper secondary education	17.69	0.126	0.064	-49.26	12.78	13.82	0.034	0.015	-55.40	13.25	14.58	0.018	0.006	-64.29	14.32	15.07
Lower secondary education	60.43	0.211	0.095	-55.20	73.28	69.94	0.050	0.020	-60.73	67.60	65.53	0.022	0.008	-66.20	62.04	61.75
Primary education or less	0.15	0.367	0.198	-46.22	0.32	0.37	0.144	0.065	-54.71	0.49	0.54	0.089	0.031	-65.00	0.63	0.64
Age of HH member																
Below 25	31.13	0.196	0.090	-54.26	34.94	34.04	0.046	0.017	-62.51	31.89	29.52	0.020	0.006	-70.57	29.33	25.39
25-64	53.43	0.143	0.094	-34.15	44.05	61.79	0.045	0.023	-47.82	53.22	68.53	0.025	0.010	-59.68	62.09	73.68
Over 64	15.45	0.238	0.022	-90.70	21.01	4.16	0.044	0.002	-94.67	14.89	1.96	0.012	0.000	-96.35	8.59	0.93
ALL	100.00	0.174	0.082	-53.05	100.0	100.0	0.045	0.018	-59.48	100.0	100.0	0.022	0.007	-66.03	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)

