Poverty in Official Statistics: Two Reports

by

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Preface

These two reports form the latest in a series of IFS studies on poverty and low incomes in the UK. We are grateful to the Joseph Rowntree Charitable Trust for financing the study of "Low Income Families" in 1987, and to the Joseph Rowntree Foundation for its support for the work on the treatment of housing in the low income statistics.

Since the publication of our original report in September 1989, "Counting People on Low Incomes" (also funded by the JRF), the issue of official low income statistics has been a subject of continued debate. Whilst carrying out analyses for the Social Services Select Committee in early 1990 on the regional pattern of low incomes and on family incomes relative to income support levels in 1987, we discovered errors in the official "Households Below Average Income" series. These errors have now been corrected in the latest edition of "Households Below Average Income 1981 – 87", published in July 1990. Our next project, also under the auspices of the Social Services Committee, is to produce "Households Below Average Income" analyses for 1988. These should appear in early 1991.

Throughout our work, we have been heavily dependent upon the goodwill and assistance of statisticians at the Department of Social Security. We are most grateful to Nick Kew (now at DES), Stuart Mitchenall, Lew Rogers and in particular Bill Barron for their continued helpfulness and co-operation. The paper on the treatment of housing costs benefited from discussions with Vanessa Fry, John Hills, Brian Nolan and Bill Robinson, though they do not necessarily share the views expressed in the paper. Anonymised FES data were provided by the Department of Employment. Responsibility for all subsequent interpretation rests with the authors.

We are also grateful to Chantal Crevel-Robinson for her rapid and accurate typing, and to Judith Payne for her usual assiduous copy-editing.

Paul Johnson is a Research Officer and Steven Webb a Senior Research Officer at the Institute for Fiscal Studies.

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1. Introduction

Until 1988 the Government produced a series of statistics known as "Low Income Families" (LIF), every two years. The figures showed the numbers of people receiving supplementary benefit (SB) and the numbers not receiving SB but with incomes either below their SB line or up to 140% of that line. The figures produced in 1988 (DHSS, 1988a) updated the series to the year 1985 which is the latest year for which such figures have until now been available.

The main purpose of this article is to update the series to the year 1987. Information relating to people on low incomes in 1987 does appear in the latest edition of the new "Households Below Average Income" (HBAI) series (DSS, 1990) which replaced LIF and which contains much interesting information. However, it contains no information comparable to that produced in the old LIF figures. Here we attempt to produce analyses for 1987 of the numbers of people receiving supplementary benefit or housing benefit supplement (HBS), or with incomes below 140% of the SB line, on a basis consistent with those produced by the (then) Department of Health and Social Security (DHSS) in previous years' Low Income Families analyses. We then use this to extend our knowledge of how the numbers have changed since 1979, and discuss the usefulness and validity of the numbers and their sensitivity to particular assumptions. Finally we look in more detail at the people with incomes below the SB line. Although this benefit is often considered a safety net below which nobody can or should fall, the official figures showed that in 1985 there were 1.6 million families with incomes below this level.

2. How the tables are constructed

To appreciate the significance of the figures that appear in the LIF tables, it is important to be aware of exactly what they represent and, perhaps more importantly, what they do not represent. There are two data sources for the tables. The information for the table showing the numbers of people receiving SB is drawn from the Annual Statistical Enquiry of Supplementary Benefit Recipients which is based on sample administrative data. Tables showing the numbers of people not receiving SB are derived from analysis of the Family Expenditure Survey (FES), an annual survey of around 7,000 households giving detailed information about household incomes, expenditures and composition. Because this is explicitly a survey of private households, those individuals not in private households (for instance, those in nursing homes, hospitals and prisons, and the homeless) are excluded from the analyses. Figures from the administrative data are also adjusted so that they similarly exclude those among the institutional population.

The choice of income unit and income definition is vitally important. The tables use normal, family income after the deduction of net housing costs and "other essential expenditure". We shall explain the exact implication of each of these in turn:

(1) The use of "normal" income for these purposes means that anyone who is sick or unemployed and has been receiving benefit for less than three months is treated as being "normally" employed and is assigned an income accordingly. No similar adjustment is made to the incomes of those who have been in work for less than three months.

(2) "Family" is defined in terms of the assessment unit for supplementary benefit, i.e. a single person or married couple plus any dependent children. A household may therefore contain several families on this definition.

(3) Net housing costs for householders consist of rent and rates (net of rebates), water rates, mortgage interest and a repairs and insurance allowance for owner-occupiers, less contributions to housing costs from other families in the household. For non-householders, net housing costs are assumed to be equal to the non-householder rent addition that applied in assessment for supplementary benefit entitlement. (This was an extra amount paid to non-householders in receipt of SB, nominally intended to defray their housing costs.)

(4) "Other essential expenditure" is a notional average amount deducted from the incomes of all full-time employees intended to represent fares to work. In 1985 the figure used was £5.85 per week. For 1987 we simply uprated this figure to £6.25 in line with the increase in the retail prices index.

This income measure of normal, net, family income less net housing costs less other essential expenditure is then compared with the supplementary benefit scale rate to yield a family's "relative net resources". Thus

$$RNR = \frac{(NI - NHC - OEE)}{SBSR} \times 100$$

where RNR = relative net resources;
NI = normal net income;
NHC = net housing costs;
OEE = other essential expenditure;
SBSR = supplementary benefit scale rate.

The basic supplementary benefit scale rate varies according to the composition of the family as shown in Table 1 for 1987. Division by this scale rate effectively equivalises the income measure. In other words, the income of each family is adjusted to take account of its size and composition. This is necessary because we are trying to measure how well off a family is, and clearly a married couple with children will be considerably worse off than a single childless person with the same income.

The consequence is that two families with the same relative net resources and therefore appearing at the same place in the tables could have widely differing incomes, both because of this effective equivalisation and because a post-housing-costs income measure is being used. Where somebody appears in the tables depends not only on their income but on the composition of their family and on the level of their housing costs. Furthermore, in interpreting the numbers shown as receiving supplementary benefit, one should note that many of these will have relative net resources not exactly equal to 100, as a result, for example, of receipt of some income, like interest on building society deposits, which is disregarded for the purposes of SB assessment.

Table 1. Basic Weekly SB Rates from April 1987

	SB rate (£)
Householders	
Pensioners	
Married couple	61.85
Single person	38.65
Non-pensioners	
Married couple	49.35
Single person	30.40
Non-householders	
Non-pensioners	
Married couple	49.35
Single person over 18	24.35
16 – 17	18.75
11 – 15	15.60
0 – 10	10.40

There are also two more detailed points about the tables which it is important to make. The first is that there are shortfalls in the number of pensioner families in the FES reporting receipt of SB, as compared with the administrative data. This fact is noted in the introduction to the 1985 "Low Income Families" (DHSS, 1988a). The figures in Tables 4 to 7 have been adjusted accordingly, but should none the less be interpreted with care. The second point refers to the category to which we have referred in the tables as unemployed / others. In the official figures this category is split in two. However, we found the split to be complex, confusing and somewhat counter-intuitive and have elected to have just one such category rather than extend the confusion further by defining our own categories. In this group are to be found all those under pension age who are not in full-time work and are not sick, including students and part-time workers.

3. Practical problems of continuing the series

To produce analyses for 1987 on a basis consistent with previous years, the first task was to reproduce tables from an earlier year so as to assure ourselves that our method was consistent with that used to produce the official figures. Using the Family Expenditure Survey, we attempted to do this for non-SB-recipients in 1985. A small part of the results of this exercise is shown in Table 2.

Table 2. A Comparison of DSS and IFS "LIF" Figures for 1985

Families, Great Britain, thousands

	Relative net resources (1985)							
	Below 100		Below 110		Below 120		Below 140	
	DSS	IFS	DSS	IFS	DSS	IFS	DSS	IFS
All families	1,600	1,830	2,480	2,700	3,140	3,540	4,910	5,090
Families over pension age	770	900	1,410	1,510	1,870	2,060	2,720	2,830
Families under pension age	830	930	1,060	1,190	1,280	1,480	2,190	2,260

It is clear that, despite considerable aid from officials at the DSS including detailed access to their methodology, programs and results, our figures disagree. Specifically we find more than 200,000 extra families with relative net resources below 100 and comparably larger numbers among the other low income groups. The reasons for this are not clear. Even given the incomes and housing costs for each family unit in the FES – as used by the DSS in constructing the official tables – and access to the FES allowing a detailed examination of the data for each household and family, we were unable to match their income and housing cost figures for a large number of sample family units. Possible reasons for these discrepancies include the following:

(1) adjustments to raw data made by the DSS of which we are not aware;
(2) difficulties in identifying those who are classified as "normally" employed;
(3) difficulties in interpreting mortgage data in the FES where no separate data for

mortgage interest payments are given (this problem arises because net housing costs include only the interest component of mortgages and not the capital repayment component); (4) computational error on our part or on the part of DSS statisticians.

Whatever the precise reasons for the discrepancies, however, we are firmly convinced that our figures represent at least one sensible interpretation of the data. We are convinced of this for two reasons. Firstly, we have in the past been able to replicate DSS low income figures used in the Households Below Average Income tables. To do this we had to overcome some difficulties mentioned above, including imputation of mortgage interest. This we managed successfully and we have repeated the method used in those tables in this work. Secondly, we have unparalleled access to FES data at IFS and were able to cross-check against the raw data numerous individual instances where our income or housing cost estimates for specific family units differed from those provided to us by the DSS. In each case we were able to justify the figure computed by our program.

Having been unable exactly to replicate the official 1985 figures, the figures we calculated for 1987 cannot be seen as being entirely consistent with the old LIF series, although they are in all essentials based on the same methodology and income definition. That is not to say, however, that they are not useful as a continuation of the series. The fact that we have computed figures for 1985 and replicated this method for 1987 means that there is an overlap between our series and that of the DSS and allows us to look at the change in the numbers of those in the low income groups over the period. There is no reason to believe that the proportionate changes we find between 1985 and 1987 are significantly different from those that would have been found by the DSS using their own programs. Bearing in mind these limitations, we now present our extension of the Low Income Families analysis to cover 1987.

4. Low Income Families 1987

Table 3 shows the numbers of families and people receiving supplementary benefit or housing benefit supplement in 1985 and 1987, with the third column in each case showing the percentage change between the years. In this case we use the figures published in the 1985 Low Income Families and our own figures derived from the 1987 Annual Statistical Enquiry. Tables 4 to 7 show the numbers of persons and of families not receiving SB or housing benefit supplement but with RNRs of less than 100, less than 110, less than 120 and less than 140 respectively. In these tables, the figures for 1985 are our own estimates, as are the figures for 1987. Finally, Table 8 shows the number of people and families of the various types in the population for the two years. The same format is used in each case, with the percentage change between the two years appearing in the final column.

An asterisk indicates that sample sizes are too small to provide reliable results. The DSS has estimated that a figure of 100,000 in these tables is subject to a margin of error of $\pm$ 35,000, whilst a figure of 1,000,000 has a margin of error of $\pm$ 100,000.

Table 3. Estimated Number of Families and Persons in Receipt of Supplementary Benefit or Housing Benefit Supplement, Analysed by Family Type and Economic Status, 1985 – 87

Thousands

	FAMILIES			PERSONS IN FAMILIES		
	1985	1987	% change	1985	1987	% change
All families	4,110	4,330	5	6,960	7,310	5
Families over pension age	1,620	1,610	– 1	1,880	1,870	– 1
Married couples	260	260	0	520	520	0
Single persons	1,360	1,350	– 1	1,360	1,350	– 1
Families under pension age	2,490	2,720	9	5,080	5,440	7
By family type:						
Married couples with children	440	420	– 5	1,860	1,780	– 4
Single persons with children	540	640	19	1,450	1,700	17
Married couples without children	260	300	15	520	600	15
Single persons without children	1,250	1,360	9	1,250	1,360	9
Of which large families (3 or more children)	230	240	4	1,170	1,240	6
By economic status:						
Sick / disabled	220	270	23	320	390	22
Unemployed / others	2,270	2,450	8	4,760	5,050	6

Table 4. Estimated Number of Families and Persons Not Receiving Supplementary Benefit or Housing Benefit Supplement with Relative Net Resources Below 100, Analysed by Family Type and Economic Status, 1985–87

Thousands

	FAMILIES			PERSONS IN FAMILIES		
	1985	1987	% change	1985	1987	% change
All families	1,830	1,910	4	2,780	2,890	4
Families over pension age	900	790	−12	1,100	930	−15
Married couples	200	140	−30	400	280	−30
Single persons	700	650	−7	700	650	−7
Families under pension age	930	1,120	20	1,680	1,960	17
By family type:						
Married couples with children	200	220	10	790	880	11
Single persons with children	20	40	*	70	90	*
Married couples without children	110	130	18	230	260	13
Single persons without children	590	740	25	590	740	25
Of which large families (3 or more children)	60	60	*	330	350	*
By economic status:						
Full-time work / self-employed	260	370	42	690	940	36
Sick / disabled	50	80	*	90	100	*
Unemployed / others	610	670	10	900	910	1

Table 5. Estimated Number of Families and Persons Not Receiving Supplementary Benefit or Housing Benefit Supplement with Relative Net Resources Below 110, Analysed by Family Type and Economic Status, 1985 – 87

Thousands

	FAMILIES			PERSONS IN FAMILIES		
	1985	1987	% change	1985	1987	% change
All families	2,700	2,680	0	4,220	4,140	– 2
Families over pension age	1,510	1,330	– 12	1,940	1,630	– 16
Married couples	430	300	– 30	860	600	– 30
Single persons	1,080	1,030	– 5	1,080	1,030	– 5
Families under pension age	1,190	1,350	13	2,280	2,510	10
By family type:						
Married couples with children	290	300	3	1,190	1,240	4
Single persons with children	30	50	*	80	120	*
Married couples without children	150	160	7	290	310	7
Single persons without children	720	840	17	720	840	17
Of which large families (3 or more children)	90	90	*	490	480	*
By economic status:						
Full-time work / self-employed	370	470	27	1,060	1,250	18
Sick / disabled	80	100	*	120	150	*
Unemployed / others	740	780	5	1,090	1,110	2

Table 6. Estimated Number of Families and Persons Not Receiving Supplementary Benefit or Housing Benefit Supplement with Relative Net Resources Below 120, Analysed by Family Type and Economic Status, 1985–87

Thousands

	FAMILIES			PERSONS IN FAMILIES		
	1985	1987	% change	1985	1987	% change
All families	3,540	3,470	–2	5,740	5,500	–4
Families over pension age	2,060	1,870	–9	2,690	2,350	–13
Married couples	630	480	–24	1,260	960	–24
Single persons	1,430	1,390	–3	1,430	1,390	–3
Families under pension age	1,480	1,600	8	3,050	3,150	3
By family type:						
Married couples with children	440	400	–9	1,750	1,650	–6
Single persons with children	50	70	*	130	180	*
Married couples without children	170	190	12	340	380	12
Single persons without children	830	930	12	830	930	12
Of which large families (3 or more children)	120	120	0	660	650	–2
By economic status:						
Full-time work / self-employed	550	620	13	1,630	1,710	5
Sick / disabled	100	110	10	170	180	6
Unemployed / others	830	870	5	1,250	1,260	1

Table 7. Estimated Number of Families and Persons Not Receiving Supplementary Benefit or Housing Benefit Supplement with Relative Net Resources Below 140, Analysed by Family Type and Economic Status, 1985 – 87

Thousands

	FAMILIES			PERSONS IN FAMILIES		
	1985	1987	% change	1985	1987	% change
All families	5,090	4,790	– 6	8,690	8,050	– 7
Families over pension age	2,830	2,560	– 10	3,750	3,280	– 13
Married couples	920	720	– 22	1,840	1,440	– 22
Single persons	1,910	1,840	– 4	1,910	1,840	– 4
Families under pension age	2,260	2,230	– 1	4,940	4,770	– 3
By family type:						
Married couples with children	720	660	– 8	2,940	2,780	– 5
Single persons with children	80	100	*	250	250	*
Married couples without children	290	260	– 10	580	520	– 10
Single persons without children	1,170	1,220	4	1,170	1,220	4
Of which large families (3 or more children)	210	230	10	1,160	1,250	8
By economic status:						
Full-time work / self-employed	950	960	1	2,890	2,820	– 2
Sick / disabled	230	180	– 22	380	350	– 8
Unemployed / others	1,090	1,090	0	1,680	1,590	– 5

Table 8. Population: Total Number of Families and Persons in Great Britain, 1985 – 87

Thousands

	FAMILIES			PERSONS IN FAMILIES		
	1985	1987	% change	1985	1987	% change
All families	28,650	29,160	2	54,170	54,150	0
Families over pension age	6,690	6,800	2	9,080	9,300	2
Married couples	2,360	2,460	4	4,750	4,950	4
Single persons	4,340	4,340	0	4,340	4,340	0
Families under pension age	21,960	22,360	2	45,090	44,850	– 1
By family type:						
Married couples with children	5,940	5,680	– 4	22,830	21,740	– 5
Single persons with children	910	1,040	14	2,370	2,630	11
Married couples without children	4,770	4,840	1	9,540	9,680	1
Single persons without children	10,340	10,800	4	10,340	10,800	4
Of which large families (3 or more children)	1,120	1,080	– 4	5,950	5,620	– 6
By economic status:						
Full-time work / self-employed	15,570	15,620	0	33,390	32,760	– 2
Sick / disabled	890	910	2	1,640	1,570	– 4
Unemployed / others	5,510	5,830	6	10,060	10,510	4

Concentrating on Table 4, which shows the numbers of people with incomes below the SB line, two distinct trends are observable. The first is a reduction in the number of pensioners with incomes below the SB line and the second is a significant increase in the number of non-pensioners below the line, the bulk of this increase occurring among single people.

Part of the reason for the different results for pensioners and non-pensioners can be seen in the relationship between the basic state pension and the basic long-term SB scale rate to which pensioners are entitled. For most of 1985, the basic SB rate for a married pensioner was £57.10, the basic pension only 20 pence more at £57.30. Since a heating addition worth £1.10 (in practice) was added to the SB scale rate, a married pensioner with just the basic state pension in 1985 would have been recorded as having income below the SB line. By contrast, the gap between the basic pension and basic SB rate had risen to £1.40 by 1987 and the heating addition to only £1.20.[1] Thus someone on the basic state pension (and with small net housing costs) would have been above the relevant SB scale rate. The bigger proportionate increase in the basic pension resulted from the method of uprating the benefits. The pension increased in line with the "all-items" RPI, and supplementary benefit in line with the RPI excluding housing costs which increased less quickly over the period.

From Table 4 it is clear that the largest increases among non-pensioners were among single people and the full-time work / self-employed category. Further analysis revealed that within these groups the major increases were in the numbers of young people living in the same household as their parents, and in the number of self-employed in general. Young people living at home with their parents are likely to be sharing in the living standards of the rest of the household and it is doubtful whether an increase in their numbers in the poorest group represents a significant increase in the number of people suffering genuine hardship. Interpreting the rise in the number of self-employed in the poorest group is made difficult by the unreliability of the data concerning the incomes of the self-employed, and strong conclusions should not be drawn from this result.

1 The actual heating additions were £2.10 and £2.20 in 1985 and 1987 respectively, but this was reduced by an amount called the available scale margin which stood at £1.00.

The tables showing people below 110% and 120% of the SB line show similar patterns, with the numbers under pension age increasing and the numbers over pension age falling. Again, the largest increases in absolute terms are among single childless people, while married couples with children do much better than other non-pensioners. There appear to have been relatively large increases in the numbers of full-time workers in these poorer groups, with much smaller increases in the unemployed / other category. This occurred despite significant growth in average real earnings between the two years. Much of the reason for this will have been the increase in the number of self-employed on low incomes. It is also partly attributable to employees on low earnings experiencing lower earnings growth than the average (a phenomenon consistent with theories of labour market segmentation), and to some of the unemployed having moved into low-paid work, unemployment having fallen slightly by 1987.

Overall, the numbers below 120% of the SB line fell slightly 1985 – 87, though this was more than accounted for by the fall in the number of pensioners in this group. The numbers below 140% fell more significantly (by 6%) and this included a small fall in the number of non-pensioners, with the fall concentrated among married couples.

Table 3 shows a small rise in the number of people receiving SB between 1985 and 1987.[2] Again this rise is confined to the non-pensioner population, with the bulk of the increase being among single people with and without children. The increase among this group can be explained largely by the increase in their numbers in the population as a whole, as seen in Table 8 (this probably explains nearly all of the increase in the numbers of lone parents). Categorisation by economic status reveals a significant increase in the number of sick or disabled on SB, a trend noticeable since 1983 in the LIF figures, and which has accompanied a large growth in the numbers of people receiving long-term sickness benefits. (See Disney and Webb (1990) for an analysis of this trend.) Otherwise the numbers of SB recipients are very stable. Note, however, that this table does not include everybody receiving SB, since all those who have been in receipt of SB for less than three months and all of the institutional population are excluded from these figures. The Annual Statistical Enquiry for 1987 shows a total of 4.89 million family units receiving SB.

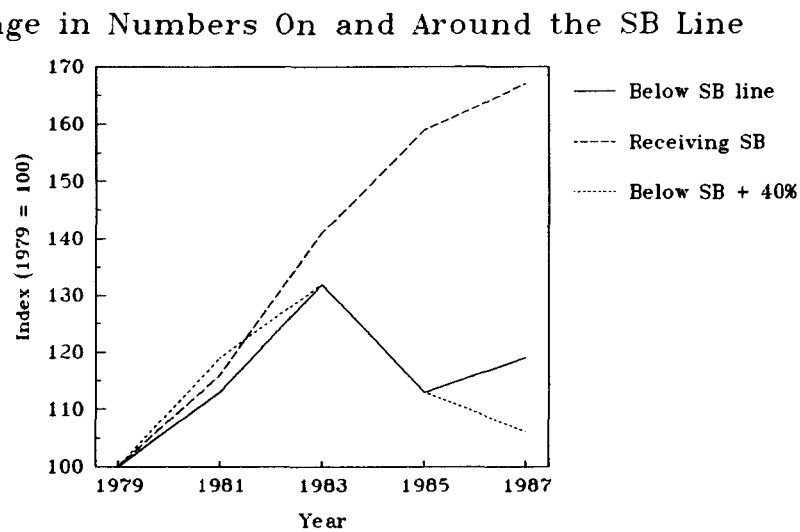
2 The figures may not be strictly comparable as we had access only to the Annual Statistical Enquiry and not the Quarterly Statistical Enquiries also used by the DSS.

5. Low Income Families since 1979

To put these figures into some perspective, comparison with figures back to 1979 is now made. The change in the numbers of families with income below the SB line, those receiving SB, and those not receiving SB but with income below 140% of the SB line is shown in Figure 1. In each case an index is used such that 1979 = 100. The figures for 1979 are as follows:

(a) number of families receiving SB or HBS: 2.59 million;
(b) number of families not receiving SB or HBS and with income below the SB line: 1.42 million;
(c) number of families not receiving SB or HBS and with income less than 140% of the SB line: 4.33 million.

FIGURE 1



The most notable change over the period has been the increase, by two-thirds, in the number of families receiving supplementary benefit. This is mainly a direct reflection of the increase in unemployment over the period, but also reflects the reduction in the proportion of unemployed persons receiving unemployment benefit. This is a result partly of the increased proportion of long-term unemployed (since those unemployed for over 52 weeks lose entitlement to unemployment benefit) and partly of a series of measures

that have weakened the role of unemployment benefit in favour of means-tested supplementary benefits (see Atkinson and Micklewright (1989) for a detailed examination of these changes). The effect was that whilst 50% of the unemployed were in receipt of SB in 1979, by 1983 this figure had increased to 64% and still stood at 61% in 1987.

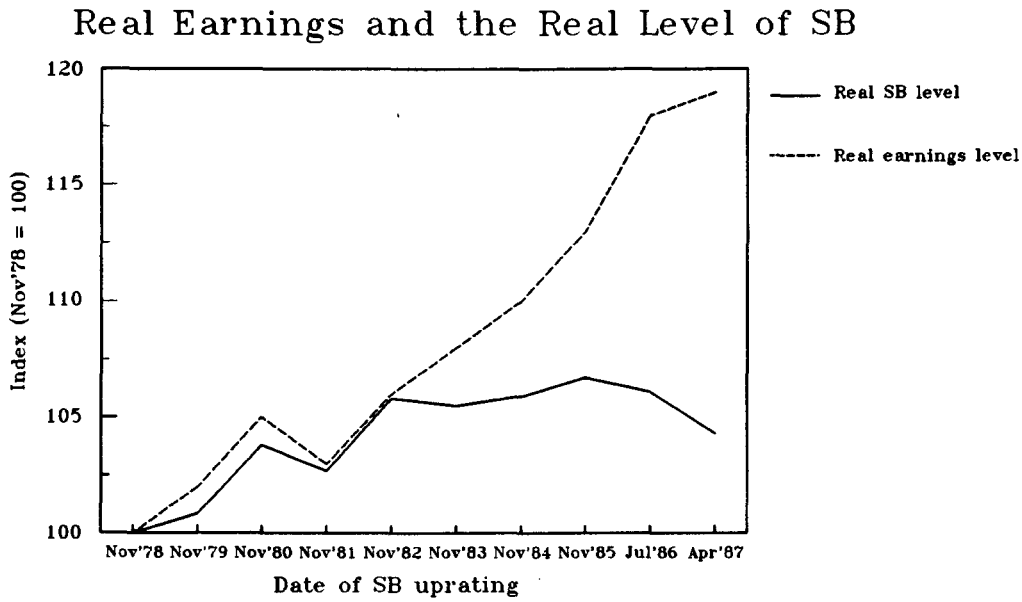
This extremely large increase in the numbers receiving SB has not been matched by anything like such big increases in the numbers with incomes less than the SB line and less than 140% of the line. Most of the increase that did occur appears to have been in the early 1980s, again as a result of unemployment. The relatively small size of the increases, particularly for the less-than-140% figure, results from the fact that those in work, even on low incomes, will have seen their incomes rise to some extent in real terms over the period, thus helping to offset the increased numbers on low incomes caused by unemployment.

The movements in the numbers of people around the SB line show only half the story. The change in the real value of the line is itself important. As can be seen from Figure 1, there were large jumps in the numbers of people below the SB line and in those below 140% of it, between 1979 and 1981 and between 1981 and 1983. These jumps coincided with real increases in the value of SB. Indeed, between November 1980 and November 1982 the SB scale rates increased faster than average earnings. Between 1983 and 1985, by contrast, the SB scale rates increased considerably more slowly than incomes, leading in part to the fall seen in the numbers below the SB line and in those below 140% of it (Nolan (1989) makes a similar point). These and other movements are shown in Figure 2, which compares the real levels of earnings and the SB line since November 1978, at which point both are indexed at 100.[3]

It is immediately clear that while the real value of SB scale rates actually increased a little over the period, average earnings increased much faster. This implies that, as well as the numbers on and around the SB line having increased considerably, the level of income represented by that line has fallen significantly in relation to average earnings. Thus, although people appearing in the tables in 1987 were in many cases slightly better off than those appearing in 1979, they were much further behind the rest of the population. This bears out the analysis presented in the "Households Below Average Income" statistics

3 The real level of the SB line is calculated using the RPI excluding housing, the real level of earnings using the all-items RPI.

FIGURE 2



published in July 1990 by the DSS. These showed a considerable widening in the income distribution between 1979 and 1987, marked by relatively low income growth for poorer groups and relatively high income growth for the rest of the population. What our figures demonstrate is the way in which people have fared relative to a minimum "safety net" figure set by Parliament. The number of families living on the income provided by that safety net has increased by two-thirds, and the number falling below it has increased by nearly a fifth.

6. Usefulness of the figures

In performing this exercise and producing a set of "Low Income Families" figures for 1987, we have continued a series which the Government wished to lay to rest. A number of reasons for this were given in a publication, "Low Income Statistics: Report of a Technical Review" (DHSS, 1988b), and many of the points made do appear to have some validity. Indeed, some aspects of the figures make them difficult to interpret and use. Some of the problems are set out below:

(1) As already mentioned, the table showing numbers of people receiving SB does not actually contain information about the level of income of people in that table. As many as 8% of the people appearing in the table actually have incomes more than 40% above the SB line.

(2) The income thresholds used are not consistent. Pensioners' incomes are compared with the long-term scale rate, non-pensioners' incomes with ordinary scale rates. The result is that a pensioner with exactly the same income, housing costs and characteristics as a non-pensioner will appear to be worse off.

(3) The income measure is unclear. As explained earlier, the tables are based on the relative net resources of family units, where relative net resources depend upon normal net income, net housing costs and a rather arbitrary number intended to represent travel-to-work costs. Furthermore, the choice of normal income as the income measure can produce biases. Whilst those who have been away from work sick or unemployed for less than three months are assigned their in-work income, no similar adjustment is made for those who have been in work for less than three months.

(4) The choice of the family as the income unit is determined by the SB assessment unit. It is often argued that this is inadequate as it takes no account of the income of other household members. More than 80% of administratively defined multi-family households contain adults living with other relatives and a degree of income-sharing is to be expected. Using the family as the income unit also leads to problems in determining the correct level of housing costs to assign to families in multi-family households. (See the Appendix for a detailed discussion of this issue.)

(5) Using a benefit line as the base for measuring the numbers on low incomes means that these numbers are partly determined by the way in which the benefit line moves. This was amply illustrated by the increase in numbers below the SB line in 1983, caused directly by the (unintentional) increasing of the SB line above the rate of inflation.

So do these criticisms mean that the series is of no value? For a number of reasons we believe not. The series is valuable in showing how well people are doing relative to a minimum benefit rate set by Parliament. It tells us how many people are receiving that benefit, how many are failing to reach the standard set by it and how many people are close to it. Even if it is not accepted as showing the number of people in poverty, it does provide some information about how well the benefit system is working and uses a generally acceptable line with which incomes can be compared.

In countering some of the specific criticisms made above, it is important to bear in mind that one of the major functions of the series is to compare incomes with a benefit line and measure the effectiveness of the benefit system. Remembering this, the first two criticisms outlined above lose much of their validity. The facts that some income is disregarded for the purposes of SB and that scale rates are different for different types of family merely reflect the judgements made about needs or deserts in setting the rates. The figures then give a fair indication of the way in which incomes relate to these levels as set out in the benefit system.

Criticisms based on the use of the benefit assessment unit as the unit of analysis depend partly on the degree of intra-household income-sharing that is believed to occur. If none occurs then the benefit or family unit would be the correct income unit; if all income in the household were shared equally then the household would be the correct unit to use. The truth lies somewhere between these two extremes and the preponderance of occurrences where at least two family units in a household are related to each other might lead one to feel that the household would be the better income unit. However, sharing is not complete and, furthermore, the benefit system is designed specifically to avoid using the household as the income unit because family units are considered to be independent, and because of the problems and injustices that any household means test would involve. Neither household nor family is ideal as a unit for income measurement, but when comparing incomes with benefit lines, the family is the natural unit to choose.

The fact that the level of the benefit line is not constant over years does make it difficult to draw firm conclusions from just two or three years' data. However, if changes in the level, for example as set out in Figure 2, are borne in mind, much of interest may be divined from the figures notwithstanding the undoubted complexity of the income measure used. Furthermore, over a longer period useful comparisons can be made of the way in which these minimum benefit rates relate to the living standards of people on low incomes over time. Of particular interest are the tables showing the numbers of people with incomes below the SB level and not receiving benefit. Disaggregating these into eligible versus non-eligible and exploring their characteristics would add much to the usefulness of the figures. We attempt such a preliminary analysis in the next section.

7. Families below the SB line

We have seen that nearly 2 million families containing just under 3 million individuals had incomes below the SB line in 1987, despite the fact that it is often assumed that the line is a safety net below which nobody should fall. By discovering more about the sorts of people who make up this group, we hope to be able to shed light on the effectiveness of the SB system as a whole, as well as explaining the figures produced.

First of all, however, it is instructive to look at the distribution of incomes below the line, or more precisely, below a level of relative net resources equal to 100. We find that of those with relative net resources of less than 100, the median level stands at 74. The distribution is shown in Figure 3. There is clear bunching, as one might expect, just below 100 but also significant bunching at zero and just below zero. Many of those in these latter categories are young people living with their parents and with nil or insignificant independent income. Such people would clearly share in the income and standard of living enjoyed by other household members and it is with regard to such cases that the argument in favour of using the household as the income unit is at its strongest. Others are taken to near-zero or negative RNRs by high housing costs which may have been incurred while their incomes were higher.

In Figure 4, those below the SB line are classified into broad categories according to the reasons for their low income or non-receipt of SB. In what follows, each group is discussed in turn. The order in which the groups appear shows the order of precedence given to the various characteristics by which they are distinguished. Thus, for example, full-time workers with savings over the capital limit appear as full-time workers and not as being disqualified because of excess capital. In general, people appearing in the first four categories would not have been entitled to SB while those in the second four categories were not taking up benefits to which they were entitled.

FIGURE 3

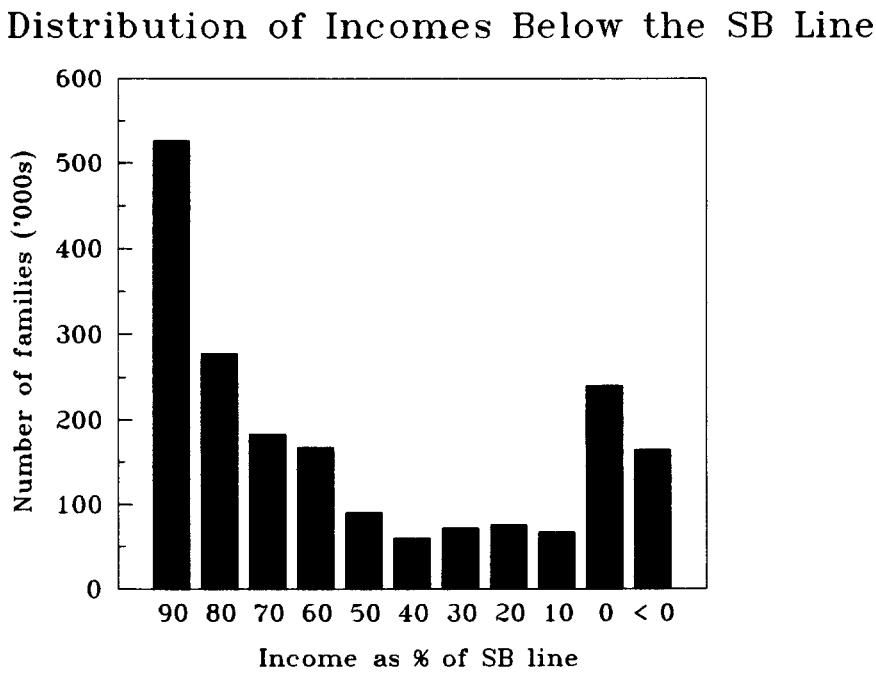
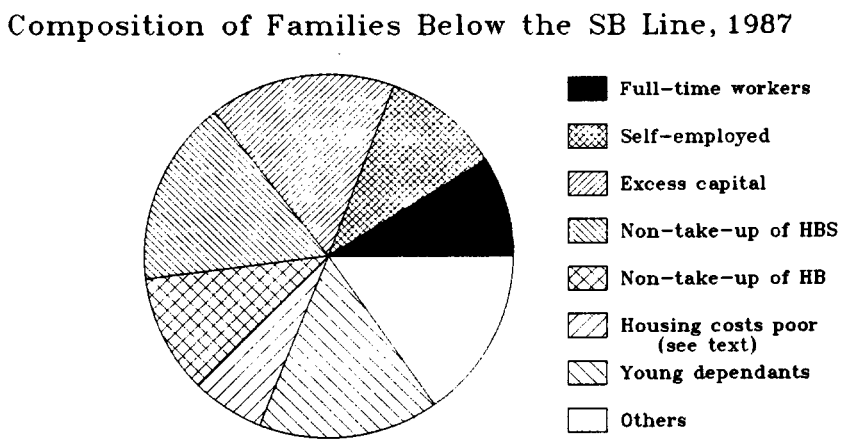


FIGURE 4



1. Full-time workers (170,000)

Full-time workers (those working more than 30 hours per week) were disqualified from receiving SB. Of the 170,000 with net resources below the SB line, 80,000 were childless. A childless full-timer in this position would have to have either very low earnings indeed, or exceptionally high housing costs relative to their income. This is indeed the case with many members of this group. Others appear in this poorest group because they are being assigned most of a household's housing costs where in fact it is likely that other household members would be sharing in the costs.

It is easier to imagine a full-time worker with children having relative net resources below their SB line, since their SB line increases with the number of children. There were 90,000 families in this group in 1987. However, any full-timer genuinely in this position should have been entitled to family income supplement (FIS). The number of full-time workers with children in this category in part reflects the fact that take-up of FIS was low (only around 50% of those entitled actually took it up).

2. Self-employed (200,000)

The data on the self-employed in the Family Expenditure Survey are notoriously unreliable. Their income data tend to be based on accounts of up to three or four years previously, though for the purposes of this work it is updated according to the growth in average earnings. This does not necessarily provide a reliable guide to the relationship between their income and the SB line. Furthermore, many of the self-employed record net losses which obviously reduces their recorded income. Presumably they would not be able to continue as self-employed if losses were genuine and prolonged.

3. Families with capital above the SB capital limit (310,000)

Those with capital of more than £3,000 were not entitled to receive SB, irrespective of the level of their other income. There appear to have been around a third of a million families in this position, of which around three-quarters were over pensionable age. This must, however, be an approximate figure, since FES data on capital holdings are somewhat limited.

4. Non-take-up of housing benefit supplement (320,000)

There appear to be around a third of a million families who are receiving standard housing benefit but whose income is nevertheless taken below their SB line by their net rent and rates. This situation was made possible by the structure of housing benefits, which did not typically give 100% rebates except to those actually receiving SB. This meant that those not entitled to SB may have been taken below the SB line by their housing costs even if they were receiving standard housing benefit. Housing benefit supplement was a benefit designed specifically for such people, to prevent this occurring, but was failing to do so for those in this group because they were not taking up their entitlements. This anomaly was cleared up by the 1988 "Fowler" reforms to the social security system.

5. Non-take-up of housing benefit (200,000)

As with the previous category, these 200,000 families were taken below their SB line by their rent and rates. Those in this group, however, were not even receiving standard housing benefit to which they would have been entitled and thus it is the fact that they were not taking up their entitlements to this benefit which caused them to fall below the SB line.

6. Families taken below the SB line by other housing costs (130,000)

This group includes a small number (around 20,000) taken below the SB line by their mortgage payments. The remaining 100,000 have pre-housing-costs incomes just above the SB line but are taken below the SB line by such things as water rates and a nominal amount added to the housing costs of owner-occupiers to cover maintenance and insurance, equal to the SB maintenance and insurance addition (£1.95 in 1987). None of those in this group have relative net resources of less than 90.

7. Young dependants (300,000)

This group is almost exclusively composed of single people under the age of 25 living with their parents. They typically have little income of their own and presumably share in the income and living standards of other household members. They would appear to be entitled to SB but do not take up that entitlement. The inclusion of people such as these in the low income statistics was one of the main reasons for the switch to the household as the income unit in "Households Below Average Income".

8. Others (290,000)

These appear to be a group who are not disqualified from SB and are not obviously living in households where they will be subsidised by parents. The group includes unemployed persons and pensioners who are simply not taking up their entitlement to SB.

These results shed light on some interesting issues which may have significant policy implications. The first point to note is that a considerable number of families with incomes below the SB line are disqualified from receiving SB because of the level of their savings. There is some question as to whether or not we would wish to consider people with over £3,000 in savings accounts to be genuinely poor. There is also considerable doubt as to the status we might wish to accord the 300,000 young dependants, most of whom live in households where they are likely to share the income of relatives. Nearly all of these should, however, be entitled to SB receipt. Where the self-employed are concerned, doubts about the reliability of the data make it difficult to draw firm conclusions. Some of the full-time employees may appear in this group because it is difficult to assign shared housing costs correctly in multi-family households, but this is not the case with many others, including those with children who are not taking up entitlement to FIS.

This still leaves us more than half a million families in this poorest group as result of non-take-up of housing benefit or housing benefit supplement, and a further 290,000 who do not appear to be receiving SB to which they are entitled. Undoubtedly some of these will not be genuinely poor because problems with FES data mean that some incomes, and in particular capital, may be difficult to estimate. Most, however, are genuinely poor

people whom the benefit system is intended to help and whom it is failing to help as a result of take-up problems. (See, for example, Fry and Stark (1987) and Blundell, Fry and Walker (1987) for a discussion of non-take-up.)

8. Conclusions

The main purpose of this paper was to extend the "Low Income Families" series to 1987. The new figures revealed an increase since 1985 of 4% in the number of families below the SB line and a similar percentage increase in the number of families receiving SB. In the period since 1979, the most notable characteristic of the figures has been an increase of more than two-thirds in the number of families receiving SB, despite only a very small increase in the real level of SB, far behind the increase in the level of real earnings. This was accompanied by a much more modest growth in the numbers of families below the SB line and in those below 140% of it.

The number of families with incomes below the SB line increased by 18% between 1979 and 1987. Of the 1.9 million families below this level in 1987, we have shown that some 800,000 were not entitled to benefit for various reasons. Of the remainder, over half a million were entitled to housing benefit or housing benefit supplement which they were not taking up, and around 600,000 (of whom about half were young dependants living at home) were not taking up entitlements to SB.

This analysis bears out that of the Government's own new "Households Below Average Income" series, which shows negligible income growth (after housing costs) for the poorest groups accompanied by significant income growth among the rest of the population over the period 1979 – 87. But it adds to that analysis by revealing how much of that stagnation in the incomes of the poor is a result of a huge increase in the numbers of people depending on SB, a benefit whose real value remained virtually static in a period of fast income growth for the population as a whole. It also shows increases in the numbers of people below the SB line and in those below 140% of it. Overall, then, a picture emerges of more people on low incomes, more people on the minimum "safety net" benefit and, indeed, more people with incomes below this minimum benefit level.

Appendix

The sensitivity of low income analyses to the choice of income measure and income unit was demonstrated by the present authors with reference to the new "Households Below Average Income" statistics (Johnson and Webb, 1989). It is our experience in producing low income statistics that many of the small technical assumptions made, which may seem abstruse and unimportant, can actually make a considerable difference to the figures that finally appear. One case in point, which relates to the use of the family as the income unit, involves the way in which housing costs of secondary family units are treated. That is, if there is more than one family unit, how should the household's housing costs be shared among the family units in the household?

The method used in the official statistics is to reduce the housing costs of the householder in a multiple-unit household by an amount equal to the SB non-dependant deduction. This is an amount removed from the assumed housing needs of a householder in assessing his or her entitlement to help with housing costs, representing a notional sum received from other non-householders. The amount varies according to the age and economic circumstances of any non-householders. It would seem logical that the housing costs of non-householders should be set equal to these amounts. In practice, however, the assumed housing costs of non-householders are set equal to an amount known as the non-householder rent addition. This was an amount paid to any person on SB aged over 21 living as a member of another person's household. Because the amount deducted from the housing costs of the householder is different from – and typically greater than – the amount added to the housing costs of the non-householder, the effect of doing this is that the total housing costs assigned to the family units within any household are different from the actual recorded housing costs of the household.

As an example, consider a household with total recorded housing costs of £20 per week and two family units, the second of which is a 25-year-old single person in work. Now, the housing costs of the first family unit will be £20 minus the non-dependant deduction associated with the second family unit, a total of £8.80 in 1985. Thus the householder, in the official figures, would be assigned housing costs of £11.20. The non-householder would be assigned the housing costs equal to the non-householder's rent addition, £3.30

in 1985. Thus the total housing costs assigned to the tax units in the household would come to only £14.50 despite the fact that the housing costs actually paid by the household were £20.

This does not seem to be an entirely appropriate treatment of housing, since it means the total assumed to be paid in the figures is different from (typically less than) the total actually paid by quite a considerable margin. It would appear sensible to assign the same housing costs to non-householders as are deducted from householders. We investigated the sensitivity of the figures to the assumptions made about housing costs, and a sample of the results is shown in Table A1 for 1985. The "DSS" figures are those we calculate using the DSS's method of assigning housing costs, while the "IFS" figures are those we obtain using our more consistent method.

Table A1. A Comparison of Two Methods of Assigning Housing Costs to Non-Householders

Families, Great Britain, thousands

	Relative net resources (1985)							
	Below 100		Below 110		Below 120		Below 140	
	DSS	IFS	DSS	IFS	DSS	IFS	DSS	IFS
All families	1,830	1,980	2,700	2,870	3,540	3,700	5,090	5,430
Families over pension age	900	900	1,510	1,510	2,060	2,050	2,830	2,830
Families under pension age	930	1,080	1,190	1,360	1,480	1,660	2,260	2,600
Single people without children	590	760	720	900	830	1,010	1,170	1,520

Making the housing cost measure consistent clearly has a significant impact. One hundred and sixty thousand more families appear in the poorest group if our alternative measure is used, while an extra 340,000 appear in the below-140%-of-SB category. All the change is among non-pensioner households, and among these most of the change is among single childless people, as one might expect, given that they are the most likely group to be non-householders.

The main point of this exercise was not to show that the official figures are in any sense wrong, but to emphasise that small differences in the assumptions made can lead to significantly different final results. Hence it is probably safer to concentrate on changes between years than on absolute levels when interpreting the final tables.

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The Treatment of Housing in Official Low Income Statistics

1. Introduction

For more than two years the Government's low income statistics have been at the centre of controversy. In 1988, the long-standing "Low Income Families" series, which measured numbers of families with incomes below or up to 140% of the supplementary benefit line, was ended with the publication of figures relating to 1985. In its place came "Households Below Average Income", an analysis of household incomes relative to the national average in each year and also relative to incomes in a base year. Controversy surrounded both the presentation of the new figures and the way in which income was defined.

In an earlier report (Johnson and Webb, 1989) we showed that by measuring incomes over a household rather than over the narrowly-defined family unit, the new figures removed well over one million people from the poorest group in 1983. The Government has, however, defended the change on methodological grounds, arguing that considerable sharing of incomes occurs *between* families in multiple-family households – a view with which we have some sympathy.

Since then, the debate has moved on, though with no satisfactory resolution of the households versus families argument. The Government has now produced a second set of "Households Below Average Income" (HBAI) tables with data up to 1987. The new series appears to be here to stay, but a new source of controversy has arisen, again relating to the way in which income is defined. The HBAI analyses show how the real level of household income has changed over the period 1981–87, with figures being presented on two bases – income "before housing costs" and income "after housing costs" (the precise meaning of these terms will be explained later). The two approaches produce rather different results for those on low incomes.

Consider, for example, the question "by how much did the real incomes of the poorest 10% of individuals increase between 1981 and 1987?". Measuring incomes "before housing costs" the answer is that they grew by 9.3%; using income "after housing costs" the figure is 2.3% – a significant difference. Similarly, the two approaches can yield very different results on within-year comparisons. The answer to the question "how many people had

incomes below half the national average in 1987?" is 8 million using income "before housing costs", but 11 million using income "after housing costs". The choice of measure is clearly important when examining the distribution and redistribution of income.

The Government has, perhaps not surprisingly, expressed a preference for the "before housing costs" measure. A memorandum to the Social Services Select Committee states: "The Government have no doubt that, if a single measure is to be used when making comparisons over a number of years ... the better method of comparison ... is the income before housing costs" (DSS, 1990b). The same document also refers to the "absurd" results which can sometimes arise when using the after housing costs measure.

In this paper we seek to throw light on this debate. In the main part of the paper we demonstrate that income growth figures based on the Government's preferred "before housing costs" measure may be deficient in a number of respects, and that as currently calculated may overstate the true increase in living standards of the poorest groups. We move on to offer an alternative measure of income "before housing costs" which has both practical and conceptual attractions, and demonstrate that this would produce a significantly smaller figure for the real income growth of the poorest groups during the 1980s. In the final section of the paper, we examine the remaining differences between the results "before" and "after" housing costs, and offer some reflections on the interpretation and use of the two series.

2. Real income growth "before housing costs": problems with the DSS measure

A. The treatment of housing benefit

The "Households Below Average Income" (HBAI) analysis has been expressly designed to measure changes in household living standards.[1] One consequence of this objective is that any increase in income which does no more than compensate for inflation should not be taken as representing an increase in living standards. Put simply, if prices have risen by 10% and incomes have risen by 10%, then real living standards have not changed.

It follows from this that accurate results will only be obtained if the correct price index is used. For its HBAI analysis, the DSS uses two price indices – the RPI excluding housing (the so-called "Rossi" index) for the "after housing costs" income measure, and the "all-items" retail prices index for the "before housing costs" measure.

To see why two different indices are needed it is necessary to examine the basket of goods that is being purchased in each case. Consider first the "after housing costs" income measure. This includes all household incomes such as earnings (after tax and National Insurance), social security and investment income, but deducts housing expenditures such as rent, domestic rates and mortgage interest. From this sum of money a household has to meet all of its expenditures *except* housing, and so the relevant price index is one which similarly excludes housing.

The "before housing costs" measure by contrast does not deduct rent, rates etc. but simply aggregates all forms of disposable income (including housing benefit). Since this income will be spent on all expenditure items, the appropriate deflator would appear to be an "all-items" RPI, which is what the DSS has used.

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1 It is noted in the introduction to the HBAI analysis that income "represents only one element, albeit an important one, of the assessment of living standards" (DSS, 1990a, p. 4).

However, there is in fact an inconsistency between the basket of goods purchased out of income "before housing costs" and the basket of goods contained in the all-items RPI. This inconsistency concerns expenditure on housing. Income "before housing costs" as defined by the DSS has to meet the *gross* housing costs of the household. That is to say, it already includes any benefits paid to assist with housing, and so full rent / rates have to be met out of that income. However, prior to 1987, the housing costs included in the all-items RPI were mainly *net* housing costs – that is to say, rents and rates after the deduction of any rebates.[2] There is thus a mismatch between the basket of goods being purchased and the basket of goods in the price index. This inconsistency may seem to be no more than an issue for the purist, but as the following example illustrates, this approach can produce spurious results for the growth in living standards.

Consider the case of a person on low income receiving help with his or her rent through the standard housing benefit system. (See Table 1.) We will assume that he is receiving 100% rent rebate, although a bias would arise whatever level of housing benefit was being received. In the base period, we assume that he has gross rent of £20 per week and an income "before housing costs" of £100. Suppose now that his rent rises by £2 per week. Given that he is receiving 100% rebate, there will typically be an offsetting increase of £2 per week in his housing benefit. His standard of living is thus unchanged. However, as Table 1 shows, the DSS will be recording these events as a real increase in living standards.

Table 1. Spurious Increases in Living Standards: An Example

Person receiving 100% standard housing benefit

	Rent (£ per week)	Rent rebate (£ per week)	Income "before housing costs" (£ per week)	DSS price index (mainly net housing costs)	Appropriate price index (gross housing costs)
Period 1	20	20	100	100	100
Period 2	22	22	102	100	102

DSS increase in living standards = 2%.

"True" increase in living standards = 0%.

2 The expression "mainly net" is borrowed from the RPI Advisory Committee (1986, para. 99). This term is used because whilst the rent and rates of standard housing benefit recipients are recorded as net of rebates, the housing costs of supplementary benefit recipients are recorded gross.

The argument runs as follows. The person's income "before housing costs" will have risen by £2 since it includes housing benefit. The price index used by the DSS will not have changed. This is because the price index is based on (mainly) *net* rent, and the person's net rent remained unchanged at zero. However, an appropriate price index based on gross housing costs will have risen by 2%. To sum up, the mismatch between price index used by the DSS and the basket of goods being purchased means that the resultant real income growth figures may be misleading.

To determine the quantitative significance of this oversight, we need to examine the difference between a price index containing mainly net housing costs (the one actually used) and an adjusted price index containing gross housing costs (the appropriate index) over the period 1981 – 87. There are two reasons why these indices will differ – different weights for housing in the base year and different rates of increase of housing costs over the period. We examine each in turn.

1. Differential weights

The RPI measures the increase in price of a basket of goods designed to be representative of the spending patterns of the majority of the non-pensioner population.[3] Each of the commodities in the index is assigned a weight according to its importance in household budgets, the weights being derived from the Family Expenditure Survey (FES), subject to certain adjustments.

In the 1981 RPI, housing expenditure was assigned a weight of 13.5%. Within this broad category, six subcategories were identified and these are listed in Table 2, together with the relative weights assigned to each in the 1981 RPI. The weights that should be assigned to *gross* rent / rates are also shown in Table 2, based on an examination of the 1981 FES.

The result of this part of the analysis is that whereas (mainly) net rent and rates received a weight of 6.6% in the actual RPI, a price index based on gross rent and rates would assign a weight of 7.2% to these two elements. Thus by using the RPI, the DSS has

3 Separate price indices are constructed for pensioner households. Furthermore, on the grounds of unrepresentativeness, the richest 3 – 4% of households are also excluded from the main RPI.

Table 2. The Weights of Housing Expenditures in Alternative Price Indices

Item	1981 RPI (based on "mainly net" rent / rates) (% of total index)	As 1981 RPI but based on gross rent / rates (% of total index)
Rent	3.0	3.3
Rates / water rates	3.6	3.9
Mortgage interest	4.2	4.2
House insurance / ground rent	0.3	0.3
Repairs, maintenance etc.	0.8	0.8
Decorations etc.	1.6	1.6
All housing expenditures	13.5	14.0
All other expenditures	86.5	86.0

Note: Columns may not sum to totals because of rounding.

Source: Department of Employment (1985) and authors' calculations based on 1981 FES.

assigned a slightly lower weight to what proved to be a relatively rapid rise in rent / rates over the period. We now move on to consider the different growth rates of gross and net rent / rates.

2. Differential rates of growth

An inflation figure is the product of two sets of numbers: the weights of each commodity in the price index, and the rates of price increase of those commodities. We have shown that an appropriate price index would include gross rent / rates and that these have a larger weight than net rent / rates. It is also the case that the rate of *increase* of gross rent / rates was greater than that for net rent / rates over the period. Table 3 shows

Table 3. Rates of Increase of Gross and Net Rent / Rates / Water Rates between 1981 (annual average) and January 1987

	Overall percentage increase
Gross rent	71.5
Net rent	54.4
Gross rates / water rates	66.4
Net rates / water rates	64.3

Source: *Employment Gazette* (various) and authors' calculations based on FES.

the results of a comparison of average levels of gross and net rents and rates between 1981 and January 1987,[4] based again on the Family Expenditure Survey and on published RPI indices.

The percentage increase in gross rents in particular and to a lesser extent that for gross rates are higher than those for the rebated equivalents. This is because of the existence of housing benefits. In 1981, for example, an increase of £1 in gross rent or domestic rates would typically produce only an extra 40p in net rent or rates for those on standard housing benefit. Indeed, the more generous the housing benefit system, the larger is the "wedge" between increases in gross and net rent / rates. This pattern reinforces the result that the use of an index based on net rent / rates produces a lower inflation figure.

3. The two effects combined

We have seen that the price index used to deflate the "before housing costs" income measure was deficient in two respects: it accorded too low a weight to rent / rates, and it applied too low a rate of increase to those expenditures. The combined effect of these two deficiencies is shown in Table 4.

4 We use January 1987 as our end date because the RPI itself changed to using gross rent / rates from this point onwards.

Table 4. Alternative Measures of Inflation between 1981 (annual average) and January 1987

	RPI ("mainly net" rent / rates)		"Adjusted" RPI (gross rent / rates)	
	Weight	% increase	Weight	% increase
Rent	3.0	54	3.3	71
Rates / water rates	3.6	64	3.9	66
Other housing expenditures	6.9	56	6.8	56
Other expenditures	86.5	30	86.0	30
All-items index	100.0	33.7	100.0	34.5

As Table 4 illustrates, an appropriate deflator for the DSS "before housing costs" income measure would be around three-quarters of one percentage point above the actual index used for the period 1981 – 87. It is interesting to note that this result is consistent with the estimate of the RPI Advisory Committee (1986, para. 99) which estimated that the change from "mainly net" treatment to gross treatment of rent and rates would add "between 0.1 and 0.2 percentage points" to the annual inflation rate, or between 0.6 and 1.3 percentage points to the figure for 1981 – 87. We would hope that future editions of the DSS's HBAI analysis will incorporate this small correction.

B. The exclusion of pensioners

In the previous section we have seen that the price index used by the DSS to deflate the "before housing costs" income measure was inappropriate because it included mainly net rent / rates rather than gross rent / rates. As a result, any purely inflationary increases in housing benefit would not be fully deflated and the resulting figure for real income growth would be artificially high. However, because of further problems with the way in which the weights used in the index are derived, even a "corrected" price index (i.e. one based on gross rent / rates) might still fail to "index away" purely inflationary increases in housing benefit.

As noted earlier, the basket of goods contained in the RPI is "weighted" according to the importance of each commodity in the spending patterns of households. The weights are derived from the annual Family Expenditure Survey, subject to certain adjustments. However, of the 7,000 or so households included in the survey, only around 6,000 are used in constructing the weights used in the RPI, with pensioner households being the principal exclusion. This is because pensioner households have significantly different patterns of expenditure from the rest of the population, and so separate indices are constructed for one- and two-pensioner households. Thus, although the HBAI document deals with the incomes of the whole population, the weights used in the price index reflect only the expenditure patterns of the non-pensioner population.

The particular problem that arises from the exclusion of pensioner households relates once again to housing. Gross rent and rates typically form a larger proportion of the total expenditure of pensioner households than of the non-pensioner population. As a result, increases in gross rent / rates (and associated increases in housing benefit) will receive insufficient weight in a price index based solely on non-pensioners.[5]

To quantify this effect, we return to the Family Expenditure Survey, to measure the relative importance of rent / rates in the budget of pensioners. The results of this analysis and of the reworked price index are shown in Table 5, together with the index used by the DSS, and also with the revised index shown in the previous section.

Analysis of the (adjusted) 1981 FES shows that gross rent / rates form a significantly larger proportion of the expenditures of the pensioner population than of the non-pensioner population. For non-pensioners, gross rent and rates take up just over 7% of total expenditures; for pensioners the figure is around 16%, producing a weighted population average of 8.5%. When this weight is applied to the relatively rapid rise in gross housing costs over the period, the overall price increase is 35.0% compared with 33.7% on the uncorrected DSS measure.

5 The same point could of course be made with regard to a range of expenditure items whose importance differs between pensioners and non-pensioners. We concentrate on rent and rates here because of the need to deflate correctly the housing benefit component of income "before housing costs".

Table 5. Price Indices for 1981 (annual average) to January 1987: The Effects of Including Pensioner Weights

	RPI ("mainly net" rent / rates)		"Adjusted" non-pensioner index (gross rent / rates)		"All household" index[a] (gross rent / rates)	
	Weight	% increase	Weight	% increase	Weight	% increase
Rent	3.0	54	3.3	71	4.3	71
Rates / water rates	3.6	64	3.9	66	4.2	66
Other housing expenditures	6.9	56	6.8	56	6.7	56
Other expenditures	86.5	30	86.0	30	84.8	30
All-items index	100.0	33.7	100.0	34.5	100.0	35.0

[a] This term is slightly misleading since this index still excludes the richest 3 – 4% of households who are also excluded from the main RPI.

C. The importance of housing in the budgets of the poor

The treatment of housing in the price index used by the DSS to deflate the "before housing costs" measure of income has been shown to be deficient in two respects: net rent / rates were used instead of gross rent / rates, and the weight given to rent / rates was too low because of the exclusion of pensioners in the construction of the index. We consider in this section a final respect in which the treatment of housing expenditures has probably led to an understatement of the "true" increase in the cost of living of the poorest groups.

The use of a single price index to deflate the incomes of households at different levels of income means that a single set of expenditure weights is being used for the whole population. Whilst this is clearly a simplifying assumption, it is also one which is likely to be inaccurate, particularly in the case of housing expenditures. (Since we are concerned with the treatment of housing benefit in the figures, we will limit our attention to rent and rates, although similar considerations would also apply to mortgage repayments.)

Although the absolute *level* of rent / rates is higher for those with higher incomes, the *share* of rent / rates in total expenditure declines at higher income levels. As a result, the weight given to rent and rates in even a corrected general price index will not reflect the importance of this item to poorer households. This means that those rises in housing benefit for poorer households that merely offset rent and rate rises will be recorded as increases in real income.

In order to quantify this effect, it was necessary to measure the share of gross rent and rates in the total expenditure of households at different income levels. This analysis was again based on the 1981 FES, and the results are presented in Tables 6 and 7, together with the actual weights used in the price indices that we have considered so far.

Table 6. Weight of Gross Rent at Different Income Levels, 1981

Per cent

	Population average
"Mainly net" rent (RPI definition)	3.0
Gross rent (non-pensioners)	3.3
Gross rent (all households, average)	4.3

	Deciles of income "before housing costs"									
	1 (poorest)	2	3	4	5	6	7	8	9	10 (richest)
Gross rent (all households, by income range)	4.8	6.3	7.8	6.2	4.5	3.5	2.5	2.5	1.8	1.4

Tables 6 and 7 show that for each of the poorest five decile groups, the share of rent and rates in total expenditure was larger than the population average. (It would be fair to point out that the weight of mortgage interest payments, which have also risen rapidly over the period, would be rather smaller for the poorest groups. This factor would partially offset the effect described above.)

Table 7. Weight of Gross Rates / Water Rates at Different Income Levels, 1981

Per cent

	Population average
"Mainly net" rates (RPI definition)	3.6
Gross rates (non-pensioners)	3.9
Gross rates (all households, average)	4.2

	Deciles of income "before housing costs"									
	1 (poorest)	2	3	4	5	6	7	8	9	10 (richest)
Gross rates (all households, by income range)	4.8	5.7	7.3	6.0	4.4	3.7	2.7	2.7	1.9	1.5

Following the method of the previous section, these weights were then applied to the increases in price of the various commodities, and price indices specific to each decile group were calculated. The resultant inflation figures (which thus take into account all the corrections outlined in this paper) are shown in Table 8, together with the inflation figure that was actually used by the DSS.

We see from Table 8 that an inflation rate adjusted simply for the differing shares of rent and rates in total expenditure varies by more than four percentage points between different income deciles, over the six-year period. As compared with the inflation rate used in the HBAI analysis, an inflation rate more appropriate to the poorest 10% would have been around 1.7 percentage points higher, that for the next poorest decile around 2.6 percentage points higher, and that for the next decile 3.7 percentage points higher.

When these inflation rates are used to deflate the actual income growth of the different deciles over the period, they produce rates of growth which are a little nearer to the "after housing costs" figures, but which are still clearly higher. This may be seen in Table 9, which covers the whole period 1981 – 87.

Table 8. Inflation Rates Corrected for Different Weights of Rent / Rates in Each Decile Group

Percentage increase, 1981 – 87

	Population average
Inflation rate used by the DSS	33.7
"Corrected" inflation rate	35.0

	Deciles of income "before housing costs"									
	1 (poorest)	2	3	4	5	6	7	8	9	10 (richest)
"Decile-specific" inflation rate	35.4	36.3	37.4	36.4	35.2	34.5	33.8	33.8	33.3	33.0

Table 9. The Effects of a Reweighted Price Index on Reported Real Income Growth, 1981 – 87

Percentage increase

Decile	Income measure		
	Income "before housing costs" (DSS)	Income "before housing costs", deflated by reweighted price index	Income "after housing costs" (DSS)
1 (poorest)	9.3	8.0	2.3
2	7.5	5.5	4.4
3	10.1	7.2	6.0
4	12.3	10.1	9.5
5	14.6	13.4	13.0
Population average	20.6	19.5	19.8

Deviating momentarily from our theme of the treatment of housing costs in the figures, it is worth examining whether this decile-specific approach might be applied to other categories of expenditure to provide a still more accurate price index. A previous IFS study (Fry and Pashardes, 1986) has shown that over the period 1974 – 82 the all-items RPI for the poorest 10% of households was more than 12 percentage points higher than that for the population as a whole.

However, a preliminary analysis of the period 1981 – 87 suggests that once housing has been taken into account, further adjustment at a decile-specific level would produce relatively little effect. Apart from housing, the other expenditure items that have a relatively large share in the budgets of the poor are food, fuel and tobacco. Of these, the most important is food, and the food component of the RPI actually rose by rather less than the all-items index between 1981 and 1987. Fuel prices rose broadly in line with the general price level, and tobacco prices somewhat faster, but not by enough to offset the beneficial trend in food prices. For this particular period, then, a price index of the non-housing expenditures of the poor probably rose broadly in line with that for the rest of the population, and so further adjustments would have little effect. Given, however, the special status accorded to housing in the HBAI analysis, it is important that the index used should at least reflect accurately the importance of housing to the poor.

To sum up, the inclusion of housing benefit in the "before housing costs" income measure may have produced artificially high income growth figures for three reasons:

(1) the price index used was based on net rather than gross rent / rates;

(2) the price index weights reflected only the consumption patterns of the non-pensioner population, rather than those of the whole population;

(3) the use of an average price index for all income groups failed to reflect the importance of rent / rates in the expenditures of the poor.

When these amendments are incorporated into the figures for 1981 – 87, the calculated real income growth for the poorest half of the population is reduced by between one-and-a-half and three percentage points.

3. An alternative to decile – specific price indices

In the last three sections we have considered different ways in which the DSS "before housing costs" income measure could be deflated to produce more accurate figures for real income growth over time. Whilst such adjustments would help to correct the biases arising from the inclusion of housing benefit in this measure of income, this approach would suffer from both practical and conceptual drawbacks.

At a practical level, if these corrections were to be incorporated into the published series, separate price indices would have to be calculated for each decile group for each base year, and presumably for income both before and after housing costs. Furthermore, whilst our examples above have corrected only for the under-representation of rent and rates in the price index, it may well be that in some other periods biases might occur for other commodity groups of importance to the poor and that only a completely revised price index would suffice. The calculation of such indices would add further complexity to what is already a very involved computational exercise.

At a conceptual level, it could be argued that the use of decile-specific price indices would cause difficulties when comparing tables for different years. Consider, for example, the figures for the share of income of the poorest 10% etc. in each year. Suppose that they showed that the poorest group had 3.0% of total income in a base year and 3.1% of total income in a later year. Ordinarily one would want to infer from this that the poorest group had experienced an increased share of total spending power. However, if the prices of goods purchased by the poor had risen more rapidly than the general price level, such a conclusion could not necessarily be drawn. In other words, once the effects of decile-specific inflation rates are incorporated, the figures for within-year income shares are being assessed on a different basis from the between-year growth figures.

Given both the practical and conceptual problems associated with the use of decile-specific price indices, it would appear that the otherwise desirable adjustments outlined in the third section in particular are unlikely to be incorporated in the official figures. In the light of this, we set out below an alternative approach which has both practical and conceptual attractions and might also provide a rather more intuitive measure of income "before housing costs".

It will be recalled that the original problem with the DSS measure of income "before housing costs" arose from the inclusion of housing benefit in that measure. This meant that the price index used was inappropriate because it incorporated only net rent / rates. Further consequences were that the exclusion of pensioners produced an upward bias in real income growth figures (because of the importance of gross rent / rates in the expenditure of pensioners), and that the use of an average index for the whole population produced upward biases in growth figures for the poorer groups because of the importance of gross rent / rates in their budgets.

All of these problems could be either diminished or removed, however, if housing benefit were simply to be *removed* from the "before housing costs" measure. We consider below how removing housing benefit from the "before housing costs" measure would deal with each of these problems.

1. Gross v. net

If housing benefit were excluded from income "before housing costs" then the relevant basket of goods would be one including net housing costs. An aggregate price index based on net housing costs (similar to the RPI prior to 1987) would then correctly align the price index with the basket of goods and remove an upward bias.

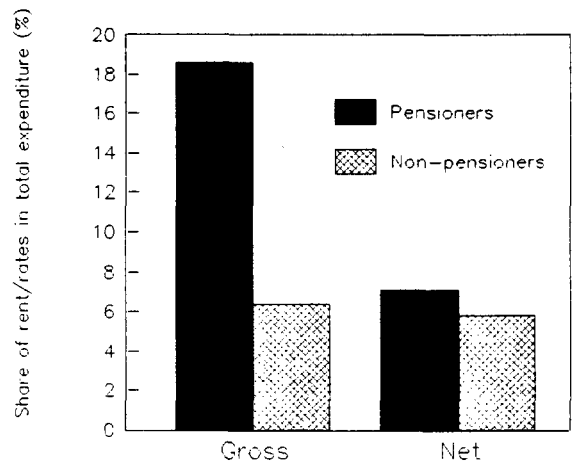
2. Pensioners v. non-pensioners

It is possible that the DSS might be willing to use a reweighted RPI that took account of the spending pattern of pensioners, which would remove a second source of bias. If it were not willing to do so, a switch to an income measure excluding housing benefit would at least reduce the bias from failing to do so. This is because housing benefits matter more to pensioners than to non-pensioners, as Figure 1 illustrates.

Figure 1 shows, for 1981, the share of gross rent / rates and net (i.e. rebated) rent / rates as a proportion of total expenditure, separately for the pensioner and non-pensioner population. We see that the difference between the weight of the gross rent / rates of pensioners and non-pensioners is far larger than the difference in weight between the net rent / rates of the two groups. It follows from this that the bias arising from ignoring pensioner weights is far smaller on an income measure based on net rent / rates.

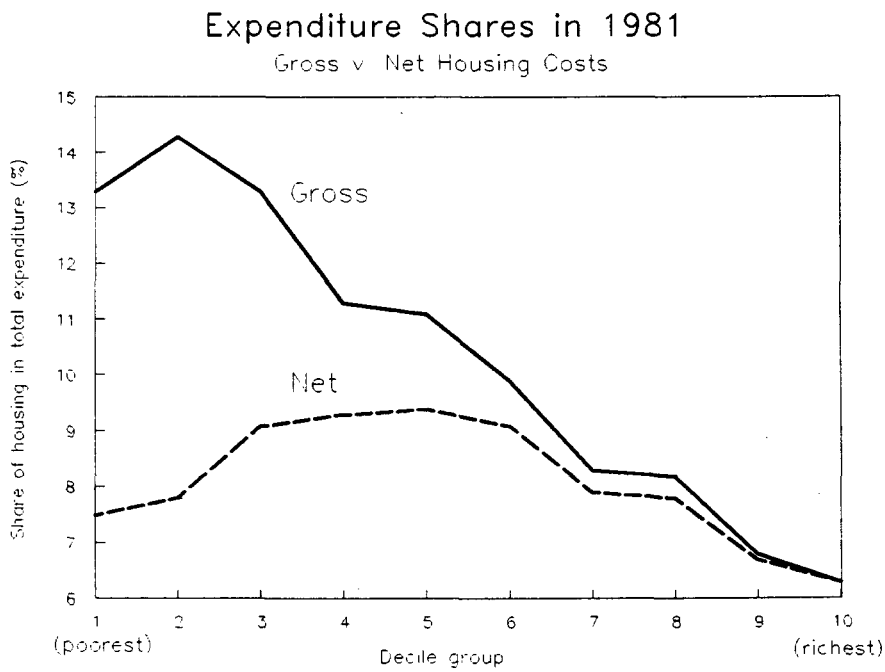
FIGURE 1

Share of Gross and Net Rent/Rates in Total Expenditure: Pensioners and Non-Pensioners



Source: 1981 FES (adjusted).

FIGURE 2



3. The bottom deciles

We saw earlier that the share of gross rent / rates in the total expenditures of the poorest groups is significantly higher than that of the richest groups. As a result, a move to decile-specific price indices would be necessary to remove biases in such a measure. If this approach were rejected, however, our alternative measure of income excluding housing benefit would again reduce the bias arising from failure to do so. As with pensioners, because of the operation of the benefit system, the share of net rent / rates in total expenditure is likely to be far more even across different income levels than the share of gross rent / rates (see Figure 2). Consequently, the bias arising from the use of a single index for all income groups will be correspondingly reduced.

In each case, then, a move to this measure of income "before housing costs" (which, with due modesty, we shall call the "Johnson – Webb" (or J – W) measure) would reduce biases without the need for extensive reworking of price indices or the use of different indices for different income groups. This measure might also coincide more closely with what would be generally understood by the terms "before" and "after" housing costs.

A measure of income "before housing costs" is surely one that leaves housing aside and looks at all other incomes, whilst a measure of income "after housing costs" should be one that looks at those incomes after deducting the housing costs *actually paid* by the households concerned. The DSS measure of income "before" housing costs includes a form of income that must be devoted exclusively to housing and the "after housing costs" measure is then obtained by deducting what, for SB recipients in particular, will be a rather meaningless figure for gross rent and rates.

Given then the attractions of a measure excluding housing benefit, why was this source of income included in the DSS measure in the first place? One important reason appears to have been data limitations arising from a reform to the housing benefit system. Prior to April 1983, supplementary benefit recipients received help with their housing costs as part of their weekly supplementary benefit payment, rather than through a separately identified payment of housing benefit as after April 1983. As a result, if housing benefit is to be excluded from any particular income measure, then for SB recipients this involves inferring how much of the SB payment was actually in respect of housing. Most SB recipients received 100% rebates and so imputation was not a serious problem. However, because of factors such as deductions from housing help because of non-dependants,

this rule could not be universally applied and an element of uncertainty is thereby introduced. It was at least in part in order to avoid this difficulty that housing benefit was first included in the DSS measure.

However, this small difficulty seems to provide insufficient reason to justify the continued use of a potentially biased measure. There are many areas in which the FES data are incomplete and where the DSS already applies imputation procedures, notably in the area of mortgage interest payments and of the income of the self-employed. It seems not unreasonable to suppose that a similar approach could be taken to inferring assistance with housing for pre-1983 supplementary benefit recipients.[1] Furthermore, the difficulty will gradually become less important in any case, since the role of pre-1983 years of the FES will tend to diminish with successive editions of the HBAI tables.

Given that there is a strong case for moving to a measure of income "before housing costs" which excludes housing benefit, we examine finally how the results from such a measure would differ from those published using the DSS measure. A comparison is provided in Table 10, which also shows the results on a *corrected* DSS "before housing costs" measure, and on the DSS "after housing costs" measure, all for the period 1981 – 87.

Whilst all four measures produce very similar results for the whole population, they produce very different answers for the individual decile groups. In particular, the J – W measure (which excludes housing benefit) shows a much smaller income growth for the poorest group compared with the other "before housing costs" measures.

There are two reasons for this. Firstly, as we have demonstrated, the upward biases caused by the exclusion of pensioner weights, and by the use of a single weight for housing for the whole population, are much smaller on this measure. Secondly, and more importantly, the group whose income growth is being measured is a different group from the poorest 10% on the DSS measure(s).

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[6] For this exercise, we have simply assumed that all pre-1983 supplementary benefit recipients were receiving 100% rent and rates rebates, except where this would exceed their recorded SB receipt. This is the most conservative assumption possible. A more realistic assumption, under which some households would be attributed only partial rebates, would further dampen the recorded income growth figures between 1981 and 1987.

Table 10. Real Income Growth 1981 to 1987 (annual averages): The Johnson – Webb Measure and the Alternatives

Percentage increase

Decile	DSS "before housing costs"	*Corrected* DSS "before housing costs"	J – W measure (no housing benefit)	DSS "after housing costs"
1 (poorest)	9.3	8.0	2.3	2.3
2	7.5	5.5	3.3	4.4
3	10.1	7.2	6.7	6.0
4	12.3	10.1	12.0	9.5
5	14.6	13.4	14.9	13.0
Population average	20.6	19.5	20.2	19.8

By including housing benefit, the DSS measure "before housing costs" takes out of the poorest group many of those who one would think of as relatively poor apart from housing help (such as supplementary benefit recipients) but includes more of the other lower income households who are receiving no help with their housing. By including more SB recipients, the J – W measure places greater emphasis on a group whose principal source of income has shown very little real growth in the 1980s.

To sum up, if the DSS prefers not to adjust its own measure to take into account the effects of the three biases outlined earlier in the paper, there exists an alternative measure which is relatively simple to construct and offers some conceptual and intuitive attractions. This measure produces similar results for the population as a whole over the period 1981 – 87, but shows a markedly poorer performance for the poorest group than the DSS "before housing costs" measure.

In Section 4, we proceed on the assumption that a satisfactory measure of income "before housing costs" has been obtained, and address the general question of whether this measure of income or one calculated after the deduction of housing costs is to be preferred.

4. Before or after housing costs? An evaluation

In 1988, in a technical review of low income statistics, a group of government statisticians sought to assess the relative merits of measuring incomes before and after housing costs. They concluded that "both measures – income before and after housing costs – have value and may throw light on the position of those in the lower income ranges" (DHSS, 1988, p. 23). This view is echoed in the 1990 HBAI publication which says "In looking at incomes at the lower end of the distribution it is useful to consider income both before and after housing costs" (DSS, 1990b, p. 5).

However, earlier this year the Social Services Committee published a report which focused mainly on the figures after housing costs, which produce far lower figures for the real income growth of the poorest groups during the 1980s. Partly in response to this, government Ministers have begun to talk of "the Government's preferred measure, income before housing costs", and the comments quoted in the introduction to this paper are also signs of a slight shift in position. It is perhaps not surprising that having seen the figures, the various protagonists have alighted upon the definition of income most favourable to their cause. The question that we seek to address here, however, is whether, and in what circumstances, either measure should be preferred.[2]

Various arguments have been advanced in favour of assessing the living standards of households in terms of their incomes after housing costs have been met. Perhaps the most powerful argument is that many households may have little choice over their housing costs and so increases in housing costs (with unchanged accommodation) will typically represent a real fall in living standards. This argument would be particularly true if variations in housing costs *between* families did not accurately reflect variations in housing quality, and there are various reasons for believing that this might be the case.

In the first place, the cost of (otherwise) comparable housing varies greatly between different regions, and of two families in similar types of accommodation, the one with the higher housing costs might legitimately be regarded as being worse off. This would only be picked up by a measure of income after housing costs. A second reason why

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7 In the discussion that follows, we draw freely on the various arguments put forward in the Technical Review, the HBAI publication, the reports of the Social Services Committee, and the Government's replies to those reports.

variations in housing expenditures may not reflect variations in housing quality is because of life-cycle effects. A young couple with a recently acquired mortgage may face interest payments far higher than those of an older couple who have paid off much of their mortgage or who acquired it a long time ago, even though the standard of accommodation may be identical. Similarly, fluctuations in the level of interest rates will affect the *cost* of housing without reflecting any variation in the *quality* of housing. For all of these reasons, a measure of income after housing costs might be preferred in order to capture fully differences in living standards.

If, however, housing is viewed primarily as a consumption item like any other, then there would seem to be little argument for looking at incomes after housing any more than incomes after spending on food, for example. It might be argued that over longer time periods, households can exercise considerable choice over the level of their housing costs, and that households which have chosen higher housing costs should not then be regarded as having a lower standard of living. The dramatic growth in the proportion of owner-occupiers over the 1980s might be cited as evidence in favour of this view. Similarly, the Government has argued that for the "substantial proportion" of the poorest decile after housing costs who are single people, there is likely to have been "a substantial element of choice in whether to set up, or remain in, a separate household" (DSS, 1990a, p. 1).

Certainly over a longer period of assessment it becomes reasonable to suppose that for the majority of the population, the level of housing costs may reflect the preferences of the household. However, for the poorest group (about whom we are presumably most concerned in this context) the chances of a change of housing tenure may remain limited for a prolonged period. The fact that in 1987 more than 60% of the bottom decile (after housing costs) were renters, even after a period of rapid local authority and private sector rent increases, suggests that for the poorest groups, housing options may still be rather few even into the medium term.

As regards the argument that the large number of single people in the bottom decile after housing costs is evidence of the exercise of choice, this contention does not seem borne out by the figures. In 1987, one in five individuals in the bottom decile after housing costs was a single, childless non-pensioner – exactly the same proportion as in

the population as a whole. The tables appear to provide no evidence for the view that disproportionately large numbers of the "after housing costs poor" are simply single people who have chosen to live in expensive accommodation.

Perhaps a more persuasive argument for caution in using income after housing costs relates to the treatment of those with mortgages. It could be argued that whilst those with large mortgages may be temporarily on low incomes, they are acquiring an asset which might appreciate considerably in value, and they are also likely to face a downward path of housing costs in the future as inflation erodes the real value of their interest payments. Following this reasoning, the presence of large numbers of households with mortgages in the poorest groups after housing costs would be of limited concern, and attention should be diverted to incomes before housing costs.

It is possible, however, to overstate the importance of this factor, certainly as regards the most recent figures. This point is illustrated by Table 11, which is drawn from the detailed technical appendix to the recent HBAI publication.

Table 11. Tenure Patterns in the Poorest Groups in 1987

Thousands

Tenure type of household	Population in lowest decile group:			
	before housing costs	after but not before housing costs	before but not after housing costs	after housing costs
Owned with mortgage	1,300	450	200	1,600
Owned outright	1,300	50	800	500
Rented	2,800	1,050	550	3,300
TOTAL	5,400	1,550	1,550	5,400

Source: DSS, 1990b, p. 74.

Table 11 shows the tenure patterns of the poorest 10% on the DSS's two income measures, and shows which types of households are brought into the poorest group by the deduction of housing costs. Of the 5.4 million individuals in the poorest decile after housing costs, it is striking not merely that 3.8 million do not have mortgages, but that a further 1.1 million individuals with mortgages were in any case in the poorest group before housing costs. Thus fewer than 10% of the "post-housing-costs poor" are individuals with mortgages who are brought into that group by dint of having a large mortgage. Ironically, it is in fact renters whose relative position deteriorates most after the deduction of housing costs.

Given then this range of conflicting arguments, what general conclusions may be drawn? What emerges is that the choice of the most appropriate income measure will depend crucially on how housing expenditures are viewed (as noted in the discussion contained in the HBAI). In our view, in the short term and for the poorest groups, it is difficult to see increases in housing costs as other than an unavoidable burden, and as such it seems reasonable to take them into account when assessing standards of living. Conversely, over longer periods and for more affluent population groups, reliance might be more appropriately placed on some suitable measure of income before housing costs.

This conclusion will, however, need to be subject to continual review as tenure patterns change. A proper evaluation can only be based on detailed information about the tenure composition of the poorest groups, such as is provided in the excellent and detailed technical appendix to the HBAI. The provision of such information has enabled the debate over the choice of income definition to be conducted at least in part in the light of detailed analysis, rather than on the basis of hypothesising about the housing options facing those on low incomes.

5. Conclusions and recommendations

The treatment of housing costs is a central issue in the compilation of low income statistics. Published figures show that the real income growth of the poorest groups over the period 1981 – 87 was far higher using income before the deduction of housing costs, rather than income after housing costs. However, we have shown that the way in which "real" growth in income before housing costs has been calculated appears to be deficient in three respects:

(1) the price index used was incorrectly based on net rather than gross housing costs; a corrected measure would reduce the reported income growth for all groups by around three-quarters of one percentage point over the period 1981 – 87;

(2) the weights used in the price index ignore the expenditure patterns of pensioners; when these are included, the reported income growth for all groups falls by a further half of one percentage point;

(3) account is not taken of the importance of gross housing costs in the expenditures of those on low incomes; a deflator that took account of this would reduce the income growth for the poorest groups by up to a further two percentage points;

There are, however, practical difficulties associated with simply correcting the present DSS measure to allow for these considerations. We have therefore proposed an alternative measure of income "before housing costs" which is easily calculated, has some intuitive attractions, and avoids (or greatly reduces) the biases listed above. This measure produces similar results for the whole population between 1981 and 1987, but records a substantially lower growth figure for the poorest decile.

The difference between incomes "before" and "after" housing costs may thus be somewhat less than the published statistics suggest; the remaining differences are, however, of interest and we recommend the continued publication of analyses of income "before housing costs" (though more appropriately measured), "after housing costs", and also of the changing tenure pattern of those on low incomes.

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