The rapid growth in income inequality in the UK over the 1980s has excited a good deal of interest and concern. A primary reason for this concern has been the widely-drawn conclusion that the living standards of the very poorest have at best failed to keep pace with the living standards of the rest of society. This report sheds new light on the living standards debate, by considering how household expenditure has changed over the period 1979–92. Examination of the expenditure of households appearing in the Family Expenditure Surveys of 1979–92 reveals some rather different trends from the well-documented changes in household incomes.

Most statistics about living standards in the UK have focused on the measurement of income. These include the Households Below Average Income series published by the Department of Social Security (DSS, 1994) and our own study of the trends in household incomes over the last 30 years (Goodman and Webb, 1994a and 1994b). But income is not the only measure that could be used to capture the standard of living. How much a household spends on goods and services provides important information on the material well-being enjoyed by its members.

Often a household will choose to spend beyond its current income by running down its savings or by borrowing. Other households may decide to forgo the full benefits of their incomes today in order to save for the future. In these circumstances, spending patterns may provide an alternative indicator of the living standards of households.
circumstances, household expenditure might paint a rather different picture of living standards from the one painted by income.

Some evidence has already been published pointing to the usefulness of examining households’ expenditure to provide information about living standards. The Households Below Average Income (HBAI) series (DSS, 1994) compares the distribution of expenditure and the distribution of income in order to provide a ‘useful additional insight’ into household living standards, in particular for those households whose reported incomes are very low but whose expenditure is much higher.

There is very little evidence, however, on how the distribution of expenditure has changed over time. This report constructs a consistent series of household expenditure, using information contained in the Family Expenditure Surveys of 1979–92. This enables us to address the following key issues:

- whether there has been a rise in inequality of expenditure between households to match the dramatic rise in income inequality witnessed over the 1980s;
- whether the poorest groups have fared similarly over the period if living standards are measured by expenditure rather than by income;
- whether the people who are the poorest in terms of their spending are also the poorest by income;
- whether those with the very lowest incomes have comparably low expenditure, and whether this has changed over time.

The section that follows discusses the advantages and drawbacks of using expenditure as a measure of living standards, comparing this with the case for using an income measure. The methodology used to construct the expenditure and income measures is outlined briefly.

Section III describes the trends in the overall distribution of expenditure and looks at how the levels of expenditure of households at the top, middle and bottom of the expenditure distribution have changed since 1979. These are compared with the corresponding changes that have taken place in the distribution of income.

Section IV examines the sorts of people who are the lowest spenders, and how these have changed over time. For these purposes, the population is broken down into family type and economic status categories. The results are again compared with those for the income distribution.

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3 Blundell and Preston (1994 and this issue) also examine the distribution of household expenditure and income using the Family Expenditure Surveys of 1970–92. Their analysis is based on an examination of income and expenditure differences within groups classified by age and birth year. A recent study by Smeaton and Hancock (1995) examines how pensioners’ expenditure has changed between 1979 and 1991 and compares this with changes in the expenditure of non-pensioners.
Section V focuses on the expenditure of the lowest-income households, providing evidence that many of these households have higher expenditure than households with much higher incomes.

Section VI provides a summary and conclusions.

II. MEASURING LIVING STANDARDS

1. Expenditure or Income as a Measure of Living Standards

Although official statistics in the UK use measures of income to assess changes in living standards, the presentation of low income statistics is often accompanied by warnings about how these statistics should be interpreted. The Households Below Average Income series presents supplementary information about households’ access to consumer durables and household expenditure in order to present a fuller picture of living standards. In some cases, it appears that the living standards of certain groups may not be as low as their incomes suggest, and for some households at least, expenditure appears to be a more reliable indicator of living standards than income.

If expenditure is taken as a better measure of living standards than income in some particular cases, the more general question is raised of whether expenditure is always a better indicator of household living standards than income. If it is only a better indicator under certain circumstances, exactly what circumstances are these?

There is no single measure that can fully capture an individual’s standard of living. Income and expenditure provide different information about the circumstances of households, and neither can be discarded as irrelevant to that household’s standard of living. The choice of one particular measure over another, however, may have strong implications for the conclusions that are drawn.

One clear advantage to using income as a measure of living standards is that the data available on household incomes are better suited to measurement than those available on household expenditure or, more accurately, consumption. (The difference between consumption and expenditure and some of the problems involved in measuring them are outlined further below.)

Income may also better measure the opportunities available to a household to enjoy a particular standard of living if it chooses not to spend all of its income, but instead chooses to save some of it for the future. An income measure of the standard of living would treat two households of the same size and with the same income as enjoying the same standard of living, even if one were spending all its current income whereas the other were saving a large part of it, for example to facilitate consumption later in life. The income measure appears to be a good
one in these circumstances, since if the second household were choosing to save, the income measure captures this element of choice.

But income measures have the serious limitation that they cannot take into account that consumers may live beyond their current incomes by borrowing or by running down their savings. Such behaviour is particularly important when income streams are very variable or if future income is uncertain.

Consumption captures more directly than income the material well-being of a household at a particular time, by quantifying the benefits derived from the members’ consumption of goods and services. This is the traditional economists’ approach of linking the standard of living to the utility derived from consumption.

If one of the two households discussed above were not saving, but instead were borrowing beyond its income to finance extra consumption, an income measure would still treat the two households as enjoying the same standard of living. The expenditure measure, on the other hand, is able to capture the choice of one of the households to enjoy a higher standard of living by borrowing.

The limitation of the income measure again becomes clear if savings behaviour varies with age, for example. Consider the following stylised case: younger people typically receive higher incomes than pensioners, and people save and dis-save so as to smooth their consumption over a lifetime. This is a simplified characterisation of the life-cycle hypothesis, which predicts that individuals smooth the marginal utility of their consumption over a lifetime in the face of variable, and possibly uncertain, income streams. If the population were made up of households of varying age compositions, then even if all households smoothed their consumption to the same level throughout the whole of their lifetimes, an income measure would always show the younger generations to be ‘better off’ than the older ones.

For certain groups of the population, incomes are particularly variable, and for these groups it is likely that a large degree of consumption smoothing via saving and dis-saving will occur. The degree to which households’ incomes are subject to year-to-year variability is the topic of much current research in the UK since the release of the second (and soon third) wave of the British Household Panel Survey (see Webb (1995) and Buck, Gershuny, Rose and Scott (1994)). The extent to which some households face even shorter-term variability of incomes is rather less known, but typically such groups will include the self-employed and the short-term unemployed.

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1 See Sen (1985) for an alternative approach to the standard of living based on capabilities.
2 The fact that many pensioners actually save from their incomes highlights the limitations of this stylised case to explain savings and consumption behaviour fully. As well as issues of interpreting income differences across households of different age compositions and with different savings, there are also issues of interpreting the welfare implications of differences in consumption, both across and within groups of individuals of different ages. These are discussed fully in Blundell and Preston (1994 and this issue).
For these variable-income groups, it may be especially misleading to consider only their incomes in order to measure their standard of living. It is not only low-income households whose incomes will be prone to variability. Clearly if there are households within the Family Expenditure Survey (FES) whose incomes are unusually low, and therefore not a good indicator of living standards, there are equally likely to be households whose incomes are unusually high and thus as unreliable. It is therefore important to consider not just the expenditure of the lowest-income households to provide additional insights into household living standards, but the expenditure of households across the income distribution.

There is one reason why the incomes of low-income households in particular may be unreliable, and this is where it is likely that apparently low-income households’ incomes are being under-reported, even within the context of an anonymous survey such as the FES. Where under-reporting is occurring, consumption may not only give a better indication of the enjoyment of goods and services by that household, but may also provide a more accurate reflection of the actual income received. Even if income were taken to be the best indicator of living standards, the consumption levels of under-reporters could be taken to provide information about such income. This approach is taken in Baker (1993), who uses data from the FES from 1978 to 1992 on household expenditure on food in order to estimate the extent to which the self-employed under-report taxable income. HBAI provides information about the expenditure of low-income households, partly in order to explore whether or not income is being under-reported.

Despite these advantages to using a consumption measure, there are several reasons why the measurement of consumption is problematic. These difficulties are outlined below.

Measurement Issues

(i) The difference between consumption and expenditure

Many goods such as consumer durables are not consumed at any one time, but yield a stream of consumption over time. Taking current expenditure as a proxy for consumption of these goods will overestimate the amount of consumption derived from these at the time of the purchase, and will fail to capture the consumption derived from other goods purchased in the past that continue to yield a consumption stream.

The FES contains information concerning the household’s access to consumer durables, which could in principle be used in conjunction with current expenditure data to give a fuller picture of actual consumption. Quantifying the

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6 Although it is known that households with the very highest incomes are typically under-represented in the FES (see section 2 below).
benefit to a household from its use of durables is problematic, however; in order to impute the current value of a durable to a household, not only would information be required about the original expenditure on the durable, but also, in order to allow for depreciation in the quality of the durable over time, knowledge would be required about the length of time that the household has been enjoying its use.

(ii) Infrequent, irregular and seasonal purchases

Expenditure by households in the FES is primarily that which has been recorded by adult spenders in diaries kept over a two-week period, although some expenditures are captured over a longer time frame than this (see section (iv) below). Many occasional purchases and purchases made regularly but less frequently than every two weeks may thus only appear in the diaries of some spenders and not of others. Expenditure comparisons will then reveal differences in the timing of expenditures between households, which do not necessarily reflect consumption differences over even a slightly longer time frame.

One concern in analysing trends in household expenditure over time is that certain sorts of expenditures may have become more infrequent over time, and may be picked up in the diaries of fewer spenders appearing in later years of the FES as compared with earlier years. For example, it may be the case that more people now shop for necessities such as food once a month rather than once a week. The result of this would be that households in later years whose food spending is not picked up in the diaries will appear to spend less on food, and those whose food shopping does occur during the diary period will appear to spend more on food, than their regular-shopping counterparts in previous years’ FESs. This would clearly generate problems for comparing living standards on the basis of current expenditure not only across households within the same year, but also across different years over which the change in shopping habits had taken place. There is little clear evidence to suggest that this is a problem reflected in the data, however.

Some expenditures are strongly seasonal; for example, households interviewed in December (i.e. around Christmas) show markedly higher expenditure, particularly on alcohol, than their counterparts interviewed in other months. If the expenditures of households interviewed in different months are compared, it would appear that the December households have a higher living standard than the households interviewed earlier in the year.

These problems will also apply to income comparisons where sources of income are irregular, occasional or seasonal. However, the nature of many

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7 There do not appear to be fewer households reporting food expenditure in recent years of the FES, nor is it the case that the variance in food expenditure between households has become greater.

8 This ‘Christmas effect’ has been recorded in Blundell, Pashardes and Weber (1993), using the expenditure of households in the Family Expenditure Surveys of 1970–84.
purchases makes expenditure more prone to these difficulties than income. Although theories such as the life-cycle hypothesis suggest that consumers smooth their consumption over time, the period across which consumption is smoothed is likely to be relatively long, and, within a short time frame, expenditure is likely to be even more jagged or ‘lumpy’ than income.

(iii) Under-reporting of expenditure

Expenditures on tobacco and alcohol are known to be under-reported in the FES (for example, see Atkinson, Gomulka and Stern (1989)). This will put a downward bias on the expenditure of some households but not of others, possibly distorting comparisons between households.

(iv) Discontinuities in the expenditure data

The treatment of certain expenditures in the Family Expenditure Survey has changed over the period 1979–92. The two main discontinuities concern credit card payments and so-called ‘retrospective recall’ questions about purchases made in the months prior to interview. If these discontinuities were not corrected for, it is likely that some of the changes observed over time would simply reflect the discontinuities in the series rather than genuine trends in household expenditure. The measure used in this paper has been adjusted to account for the two main discontinuities and as a result is as consistent as possible.

2. The Construction of the Expenditure and Income Measures

This section outlines briefly the way in which the expenditure and income measures used in this study have been constructed. The reader is referred to Goodman and Webb (1994a) for further information about the income definition.

All the results in this article are based on detailed information about households’ incomes, expenditure and characteristics contained in the Family Expenditure Surveys of 1979–92. The FES is a voluntary survey of approximately 7,000 private households per year. Members of each household provide information both about their expenditure over a two-week period (and for some items over a longer time period) and about their income.

The methodology used to construct the measures follows that of the Households Below Average Income series designed by the Department of Social Security. The main features of the measures are as follows:
The measures are of current weekly total household income and expenditure. This means that expenditure on all goods and services has been accumulated across all ‘spenders’ and income from all sources has been accumulated across all members of the household. The income measure is net of direct and local taxes, and payments of direct and local tax are not included in expenditure.

In order to make the figures comparable across households of different sizes and compositions, all expenditures and incomes are expressed in terms of the equivalent income or expenditure that would be received/spent by a childless couple. This is done by means of the McClements equivalence scale (see McClements (1977)).

In order to overcome problems of non-response bias in the FES, the results for income and expenditure have been ‘grossed up’ by family type to ensure that they are representative of the overall UK population. In order to deal with non-response of the very rich, the incomes and expenditures of households with the very highest incomes have been adjusted so that they correspond to those contained in the Survey of Personal Incomes (SPI).

All incomes and expenditures are expressed in terms of January 1995 prices. This means that all changes described are in real terms, after the effects of inflation have been stripped out.

Results for expenditure are expressed both including and excluding housing costs, and results for income are expressed both before and after housing costs have been deducted. The issue of whether to include housing costs in income or whether to express income and expenditure net of housing costs is one discussed fully elsewhere (see Johnson and Webb (1992); the arguments apply equally to expenditure measures as to income).

In the analysis that follows, expenditure including housing costs is always compared with income before housing costs have been deducted. These two measures are described as ‘BHC’ for brevity; similarly, expenditure excluding housing costs is always compared with income after the deduction of housing costs, and the two measures are referred to as ‘AHC’.

III. THE DISTRIBUTION OF EXPENDITURE, 1979–92

1. The Overall Distribution

This section finds that the distribution of expenditure has widened considerably since the mid-1980s, but not to the same extent as the distribution of income.
Figures 1 and 2 show the entire distribution of expenditure in 1979 and in 1992, by graphing the number of individuals falling into different bands of expenditure expressed as a proportion of the mean in each year. Those households with expenditure more than 3½ times the mean have been grouped into the highest band. Expenditure here is measured including housing costs, and expressed in January 1995 prices so that the effects of inflation have been stripped out. The distribution is more unequal in 1992 than it was in 1979. This is apparent from the following features of the two graphs:

- more individuals are clustered into fewer expenditure bands in 1979 as compared with 1992;
- the tail of the distribution is longer in 1992 than it is in 1979, and there are more households grouped into the very highest band of at least 3½ times the mean. This indicates that in 1992 there are more households with higher expenditure compared with 13 years previously.

The growth in inequality of expenditure can be quantified by means of a widely-used measure of inequality, the Gini coefficient. The Gini coefficient ranges between 0 and 1, rising with rising inequality. It is also used to measure income inequality, so that changes in the distribution of income and the distribution of expenditure can be compared.

Figure 3 shows how the Gini coefficients for income and expenditure have changed between 1979 and 1992. The results are presented for BHC income and expenditure. The Gini coefficient for the expenditure distribution was higher than that for the income distribution in the early 1980s, but by the early 1990s the Gini coefficients for the two distributions were at about the same level. This shows that whilst expenditure inequality between households grew over the 1980s, income inequality grew faster.

Another way of measuring the degree of inequality in the distribution of expenditure is to compare the expenditure level of a household near the top of the distribution with the expenditure of a household near the bottom of the distribution. In order to do this, we have drawn the ‘90/10’ ratio. This is the ratio of the expenditure of a household that is 10 per cent from the top of the distribution (known as the 90th percentile) to the expenditure of a household that is 10 per cent from the bottom of the distribution (the 10th percentile). Again, this can be compared with the ‘90/10’ ratio for the income distribution. Both ratios are illustrated in Figure 4.

The gap between the ‘richest’ and ‘poorest’ in terms of both income and expenditure widened over the period. But the picture that emerges from these ratios is that, on this measure, income inequality in fact overtakes expenditure inequality by the early part of the 1990s. At the start of the period, the household

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10 See Goodman and Webb (1994a) for the derivation of the Gini coefficient.
FIGURE 1
The UK Expenditure Distribution (BHC), 1979

Expenditure as a proportion of the mean

FIGURE 2
The UK Expenditure Distribution (BHC), 1992

Expenditure as a proportion of the mean
at the 90th percentile by expenditure had spending about 3½ times as high as that of the 10th percentile household, whereas the 90th percentile by income had income that was only about three times as high as that of the 10th percentile. By the end of the period, both ratios had risen to more than four, but the ‘90/10’ ratio for income was in fact slightly higher than that for expenditure.

FIGURE 4
The ‘90/10’ Ratio for Income and Expenditure (BHC), 1979–92
(three-year moving average)
2. Changes in Expenditure Levels

This section looks at how the levels of household expenditure have changed over the period 1979–92, and compares them with the changes that have taken place in households’ incomes.

Figure 5 shows the mean household expenditure including and excluding housing costs. As can be seen from this figure, expenditure (both including and excluding housing costs) fell slightly in real terms between 1979 and 1982, and rose steadily over the 1980s, this growth slowing over the early 1990s. Overall growth in real mean expenditure including housing costs between 1979 and 1992 was 34 per cent, and excluding housing costs this growth was 33 per cent. The percentage changes in expenditure described in this section are summarised in Table 1.

The trend in the mean conceals wide variations across the expenditure distribution. In order to assess changes that have taken place at different parts of the expenditure distribution, individuals in the population are ranked according to their household spending and divided into 10 groups of equal size, known as decile groups. The bottom decile group contains the tenth of individuals with the lowest household spending, whilst the top (tenth) decile group contains the highest spenders in the country.

FIGURE 5
Mean Household Expenditure, 1979-92

The expenditure of the bottom decile group can be summarised by the spending level of the household directly in the middle of this group. This

\[11 \text{ More accurately, it is the household spending of the individual directly in the middle of the group which is used to summarise the spending of that group. For brevity, we refer simply to the household in the middle of the group.}\]
household is known as the 5th percentile. The corresponding household in the middle of the top decile group is known as the 95th percentile. The household with expenditure directly in the middle of the entire population is known as the median, or the 50th percentile household.

### TABLE 1

**Percentage Change in Real Equivalent Household Expenditure, 1979-92**

<table>
<thead>
<tr>
<th></th>
<th>Expenditure BHC</th>
<th>Income BHC</th>
<th>Expenditure AHC</th>
<th>Income AHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>34</td>
<td>37</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td>5th percentile</td>
<td>17</td>
<td>1</td>
<td>14</td>
<td>-18</td>
</tr>
<tr>
<td>Median</td>
<td>22</td>
<td>26</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>95th percentile</td>
<td>46</td>
<td>58</td>
<td>45</td>
<td>61</td>
</tr>
</tbody>
</table>

Note: The percentage changes in the 5th percentile, median and 95th percentile quoted for each measure are based on ranking for that measure.

Table 1 shows how the expenditures of the 5th, 50th and 95th percentile households have changed between 1979 and 1992. The expenditure of the 95th percentile grew faster over the 1980s than did the expenditure of the median household, which in turn grew faster than the expenditure of the 5th percentile, for expenditure both including and excluding housing costs, illustrating again that expenditure inequality has risen.

These changes in household expenditure at different parts of the expenditure distribution differ from those in income in several important respects. If each individual is ranked not by their household expenditure but by their income, and the population is again divided into 10 equally-sized groups, the changes that have taken place at different parts of the income distribution look considerably different.

Figures 6 and 7 compare the percentage changes in expenditure for each decile group of the expenditure distribution with the corresponding changes in income for each decile group of the income distribution between 1979 and 1992. Whilst the *income* of the 5th percentile stagnated between 1979 and 1992 if income is measured before housing costs, and actually fell by 18 per cent when income is measured after housing costs, the expenditure of the 5th percentile grew over the same period. The expenditure of the 5th percentile by expenditure grew by 17 per cent between 1979 and 1992 when housing costs are included, and by 14 per cent excluding housing costs. Thus the often-quoted result that the ‘poor got poorer’ over the 1980s is not upheld if expenditure is chosen as the measure of living standards.

The cost of living rose slightly faster for richer households than it did for poorer households between 1979 and 1992 (see Crawford (1994)). This means
FIGURE 6
Changes in Expenditure across the Expenditure Distribution and in Income across the Income Distribution (BHC), 1979-92

FIGURE 7
Changes in Expenditure across the Expenditure Distribution and in Income across the Income Distribution (AHC), 1979-92
that the growth in the expenditure of the 5th percentile has not arisen because poorer households have to spend more now than in 1979 to buy the same bundle of goods. Taking into account differential rates of inflation for richer and poorer households would in fact result in slightly higher real expenditure and income growth for the bottom of the distributions, and slightly lower real growth at the top of the distributions.

The overall pattern that emerges from Figure 6 is that the bottom four decile groups of expenditure saw higher expenditure growth over the period than the growth in income for the bottom four decile groups by income. But for the remaining top six decile groups, income growth was faster than expenditure growth. The differential becomes more marked as we move up the two distributions. The rise in the income of the richest has been considerably larger than the rise in the expenditure of the highest-spending on both definitions.

IV. THE COMPOSITION OF THE LOWEST-SPENDING GROUPS

In the previous section, we looked at the changing distribution of household expenditure, and at how the expenditure levels of households at different parts of the distribution have changed over time. We drew some sharp contrasts with the changes that have taken place in the distribution of income. In this section, we look at the sorts of people who are to be found amongst the lowest spenders, and at how these have changed over time. We find that the composition of the ‘expenditure- poor’ group is rather different from the composition of the lowest income group.

The population has been divided into family type and economic status categories, the definition of each of which is provided in the relevant section below. Each household is divided up into benefit units, consisting of a single adult or married (or cohabiting) couple, plus any dependent children. A household can consist of one or more such benefit units. The family type and economic status of each individual is then determined by the characteristics of the benefit unit of which he or she is a part.

There appears to be little significant difference between the lowest spenders whether the measures of expenditure include or exclude housing costs, and so the analysis that follows concentrates on BHC expenditure and income (unless otherwise specified).

1. Family Type

The population is divided into six family type groups, depending upon whether the head of the benefit unit is married (or cohabiting) or single, with or without dependent children, and above or below the state pension age. The six categories are as follows:
Fiscal Studies

- pensioner couple;
- single pensioner;
- couple with children;
- couple with no children;
- single person with children;
- single person with no children.

The composition of the bottom tenth of spenders in terms of family type has remained relatively stable over the 1980s. This is illustrated in Figure 8, which shows the family type composition of the bottom expenditure decile group. Pensioners are the largest group in the bottom tenth of spenders. In 1979 and over the first few years of the 1980s, they accounted for about half of the bottom expenditure decile group. Over the 1980s, this proportion dropped somewhat, but by 1992 pensioners still made up about 40 per cent of the bottom expenditure decile group.

This relative stability in the composition of the lowest spenders contrasts sharply with the changing composition of the bottom income decile group over the 1980s. Pensioners made up almost 40 per cent of the bottom BHC income decile in 1979, but this number dropped to only about 17 per cent in 1992. The result is even more marked for the bottom income decile if income is measured after housing costs. Pensioners made up only about 8 per cent of the bottom AHC income decile group in 1992, but made up about 40 per cent of the bottom AHC expenditure decile group.

What this shows is that the improvement in the position of pensioners over the 1980s relative to other groups is much less pronounced when living standards are measured by expenditure rather than by income.12

Looking at the composition of the bottom decile group takes no account of how over- or under-represented these groups are at the bottom of the distribution relative to their size in the total population. Pensioner couples, single pensioners and lone parents are over-represented at the bottom of the distribution throughout the whole period (i.e. they make up a higher proportion of the bottom expenditure decile group than they do of the total population), whereas couples with children and childless non-pensioners (couples without children and single people without children) are under-represented.

2. Economic Status

Eight different economic status categories are used, and these are determined by the economic activity of the adults in the benefit unit. The different categories are as follows:

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12 Smeaton and Hancock (1995) also find that the living standards of pensioners have risen by less if measured by expenditure rather than by income.
Distribution of Household Expenditure

FIGURE 8
The Composition of the Bottom Expenditure Decile Group (BHC), by Family Type, 1979-92

Note: The jump in the percentage of pensioners in the bottom expenditure decile group in 1990 appears to reflect a discontinuity in the data rather than a genuine trend.

- at least one in full-time self-employment;
- all in full-time employment;
- one in full-time employment, one in part-time employment;
- one in full-time employment, one unwaged;
- at least one in part-time employment and none in full-time work;
- at least one aged 60 or over and none in work;
- at least one unemployed and none in work;
- other (including those not seeking work, e.g. lone parents, disabled people, students).

Figure 9 shows the composition of the lowest tenth of spenders by economic status. Again, the pattern over time is relatively stable compared with the changes that have taken place in the composition of the bottom decile group of income. The largest single group is the ‘over-60’ category which took up about half of the bottom expenditure decile in 1979, falling to about 40 per cent by 1992. The other major groups at the bottom of the expenditure distribution are the unemployed and ‘other’ categories. The full-time self-employed make up only about 4 per cent of the bottom expenditure decile, and this is steady throughout the period. By contrast, in 1992, the full-time self-employed made up
around 13 per cent of the bottom income decile (BHC), and the over-60 category made up only 19 per cent.

Looking at the under- or over-representation of these economic status groups in the bottom decile group of expenditure shows that the full-time self-employed have been under-represented amongst the lowest spenders since the early 1980s, whereas they are over-represented in the bottom decile of income (see Goodman, Johnson and Webb (1994)). This indicates that income may overstate the extent to which the self-employed in particular are poor. The other groups to be under-represented at the bottom of the expenditure distribution are all those containing a full-time worker. The unemployed and ‘other’ groups are strongly over-represented at the bottom of it.

V. THE EXPENDITURE OF LOW-INCOME HOUSEHOLDS, 1979–92

Low-income households often have higher expenditure than those much higher up the income distribution. Only about one-third of those in the bottom income decile group are to be found in the lowest tenth of spenders in 1992. Of the remaining two-thirds, many are to be found just slightly higher up, in the second expenditure decile group, and almost all are in the bottom half of spenders. There are a small number whose expenditure is extremely high. In 1992, 2 per cent of those in the bottom income decile group were to be found in the top tenth of spenders.
Households with the very lowest incomes of all, i.e. those showing zero or negative incomes, tend to have high expenditure, not only relative to those with slightly higher incomes, but also relative to the population as a whole. Many of those on zero or negative incomes are to be found amongst the top half of the expenditure distribution. In some years, their average expenditure is higher than the average expenditure of the population as a whole. The expenditure levels of these households indicate that, for many, income is not giving an accurate picture of current living standards at all.

This mismatch between households’ ranking in the expenditure and income distributions is not specific to low-income households. It is also the case that a large proportion of those on the highest incomes are not found amongst the very highest spenders, and households in the middle of the income distribution are also to be found at either end of the expenditure distribution. This provides evidence that there may be considerable consumption smoothing by means of saving, borrowing and dis-saving going on right across the income distribution.13

Nor is this difference in expenditure and income ranking a new phenomenon; throughout the period of the study, there has been a significant proportion of the lowest income decile group in each year who are found considerably higher up in the expenditure distribution, and others with higher incomes to be found lower down.

Although there are considerable differences between the ranking of households by income and by expenditure right across the population, the lowest-income households merit particular attention as the levels of expenditure of many of these households appear to be particularly high considering their position in the income distribution.

In order to illustrate this, households within each income decile group have been ranked according to their expenditure. The expenditures of three different households in each income decile group have been picked out: one with relatively low spending for that decile group (the 25th percentile), one with spending in the middle of the group (the 50th percentile) and one with relatively high spending for the group (the 75th percentile).

Figure 10 shows the expenditure of these three different households within each income decile group in 1992. As can be seen in this figure, the bottom decile group looks different from the other decile groups. Across all but the bottom income decile group, spending levels of the lowest, middle and highest spenders in each income group rise with income. However, the highest spenders in the bottom decile group have higher expenditure than the highest spenders in the second and third decile groups, and the middle-spending households have higher expenditure than the middle-spending households of the second decile group.

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13 It may also provide evidence that measured expenditure is ‘lumpy’ because of infrequent or irregular purchases.
group. It is only the lowest of spenders in the bottom income decile group who spend less than their counterparts in the decile group above.

Whereas in almost every year between 1979 and 1992, the bottom income decile group has been unusual in that the highest spenders amongst this group have relatively high spending compared with the income decile group above, this has not always been a phenomenon spread across the decile group to the same extent as the data for 1992 suggest. This is illustrated by Figure 11, which shows the quartiles of expenditure by decile group of income in 1979. As can be seen in this figure, it is only the top spenders in the bottom income decile in 1979 who have higher spending than their counterparts in the income decile group above.

Average levels of spending in all income decile groups have grown in real terms since 1979. Figures 12 and 13 show the growth in the average expenditure (represented by the middle-spending household) of each income decile group between 1979 and 1992, comparing this with the income change for that same group.

The average expenditure of the lowest income decile group in 1992 was 27 per cent higher than the corresponding expenditure of the lowest income decile group (BHC) in 1979 and 30 per cent higher for AHC income and expenditure. This growth in expenditure at the bottom of the income distribution is startling when juxtaposed to the income changes for the same groups. The average growth in expenditure amongst the income decile groups just above the bottom is considerably lower.

FIGURE 10
Quartiles of Expenditure (BHC), within Decile Groups of Income (BHC), 1992
The conclusion to be drawn from Figures 10–13 is that the nature of low incomes has clearly changed since 1979. Although the income of the lowest income tenth has fallen in real terms since 1979 (when income is measured AHC), the expenditure of this lowest income group has risen. There are now more low-income households with relatively high expenditure.

This change is due at least in part to the dramatic changes in the composition of the lowest income groups that have taken place over the 1980s. One reason why the expenditure growth of the second and third income decile groups is so much lower than that of the bottom is because the emergence of a so-called ‘new poor’ over the 1980s has meant that pensioners have been displaced at the bottom of the income distribution.

Pensioners on average have considerably lower expenditure than non-pensioners throughout the period in question. This is illustrated in Figure 14, which shows the mean expenditure of the pensioner population as compared with the non-pensioner population. Over the 1980s, pensioners’ income has risen by more than their expenditure (Smeaton and Hancock, 1995), and although they still make up the largest single group amongst the lowest tenth of spenders, they no longer make up a large proportion of the lowest income decile group. The

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14 This is also found by Smeaton and Hancock (1995). A decline in work-related expenditures such as clothing and transport may be one reason why retired households may have lower expenditure than non-retired households (see Banks, Blundell and Tanner (1995)).
FIGURE 12
Changes in Income and Expenditure (BHC) across the Income Distribution, 1979-92

FIGURE 13
Changes in Income and Expenditure (AHC) across the Income Distribution, 1979-92
rising relative position of pensioners in terms of income, but not in terms of their expenditure, appears to be a key reason why expenditure at the bottom of the income distribution is higher and has grown more than the expenditure of higher income groups.

The growth in self-employment is another reason why expenditure is so much higher amongst the lowest income group in 1992 as compared with 1979. The expenditure growth of the bottom income decile group is lower if the self-employed are excluded from the analysis altogether, but is still about 24 per cent (including and excluding housing costs).

The number of unemployed people at the bottom of the income distribution rose sharply over the 1980s, and this could have played a part in driving the observed trend. In particular, those recently made unemployed might be expected to have relatively high expenditure, especially if they expect their spell of unemployment to be short. There is little evidence to suggest, however, that a significant number of the unemployed in the bottom income decile are amongst the highest-spending in this group.

FIGURE 14
Mean Expenditure of Pensioners vs. Non-Pensioners (BHC), 1979-92

Note: The dip in mean pensioner expenditure in 1990 appears to reflect discontinuity in the data, as in Figure 8.

15 Banks, Blundell and Tanner (1995) find that households’ expenditure falls less at unemployment than at retirement, providing evidence that the unemployed smooth their consumption when their income drops.
The changing composition of the lowest income groups plays an important part in explaining why there are now higher spenders amongst those on the lowest incomes. Those on the lowest incomes now typically include families of working age, such as the self-employed and the unemployed, who tend to spend more than families of pension age.

This cannot provide the full explanation, however. Even within groups of similar demographic and economic status, there appears to have been a change in the way in which low-income households spend in relation to their incomes. One possible further explanation of why there are now more households that report very low incomes but whose spending is relatively high is that incomes have become more volatile, or that some households’ spells on the very lowest incomes are now very short.

VI. SUMMARY AND CONCLUSIONS

- There is no one single measure that can fully capture all aspects of households’ living standards. Expenditure has the strong advantage that it allows for the fact that households may smooth consumption over time when their income is variable.
- One of the difficulties inherent in measuring household expenditure has been that expenditure measures available have not been consistent over time. This report constructs a consistent measure in order to make valid comparisons between households appearing in the Family Expenditure Surveys of 1979–92.
- The expenditure distribution widened considerably between the early 1980s and the early 1990s, but this rise in inequality was not as rapid as the rise in income inequality over the 1980s.
- The expenditure (excluding housing costs) of the bottom tenth of spenders rose by 14 per cent over the period 1979–92, whereas the after-housing-costs income of the bottom tenth of the income distribution fell by 18 per cent.
- Pensioners remained the largest single group amongst the lowest tenth of spenders throughout the 1980s and early 1990s; this contrasts sharply with the shift away from pensioners and towards families of working age in the lowest income group. The self-employed are under-represented amongst the

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16 One indication that households on low incomes were increasingly spending beyond their current incomes would be if the use of credit expenditure had grown amongst the bottom income group. This is not borne out in our data, however. Whereas about 30 per cent of the bottom income decile group reported some credit expenditure in the early part of the period, this had only risen to about 35 per cent by the early 1990s. The proportion of the overall expenditure of these households taken up by credit expenditure remained fairly constant at about 10 per cent.

17 See Walker (1994) for a full discussion of the importance of incorporating time into the analysis of poverty and low incomes.
bottom tenth of spenders, but over-represented amongst the bottom tenth by income.

- Throughout the population, there are many households that are ranked differently by expenditure than by income. A significant proportion of those in the bottom income decile group are to be found higher up in the expenditure distribution than others with higher incomes.
- The expenditure of the poorest tenth by income is considerably higher than that of the income decile group above it. An increasing number of those in the bottom income group have shown relatively high expenditure since 1979.
- Income is a particularly poor indicator of living standards for households reporting negative incomes. In some years, these households have shown expenditure higher than the average expenditure of the population as a whole.
- The average expenditure of the poorest tenth by income (after housing costs) in 1992 was 30 per cent higher than the average expenditure of the poorest tenth by income in 1979.
- The rising position of pensioners in the income distribution but not in the expenditure distribution, and the growth in self-employment, are partly responsible for this trend.

REFERENCES


