For Richer, For Poorer: The Changing Distribution of Income in the UK, 1961–91

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I. INTRODUCTION

This article describes the changing patterns in income inequality and real living standards over the last 30 years. Whilst it is well documented that inequality has been rising since 1979,[2] there is rather less information on how the pattern of inequality changed in the period up to 1979. This study is based on an analysis of detailed information on the incomes and characteristics of around 200,000 households between 1961 and 1991, and provides for the first time ever a consistent description of trends in household incomes over such a long period.

This study uses a measure of income as a proxy for living standards. This contrasts with other approaches which use measures of expenditure levels or actual consumption of goods and services to capture living standards. Whilst

[2] For example, see the government's own statistics (Department of Social Security, 1993).

income is generally a good proxy to use, particularly given the available data, the choice of any measure of living standards will inevitably exclude perspectives which could be gained from the choice of other measures. For example, examination of the expenditure patterns of households reporting zero or negative incomes reveals that these households are often not those with the lowest expenditure, illustrating the fact that in some cases simply looking at incomes may not tell the whole story about living standards.

A detailed description of the construction of the figures, and what exactly is meant in this context by 'living standards', is to be found in Goodman and Webb (1994). What follows is a brief outline of how the results have been produced. The methodology follows that used by the Department of Social Security in its relatively recently introduced Households Below Average Income statistics. The results are based on annual Family Expenditure Surveys (FESs) of 1961–91 inclusive. The income measure that is used is *current, equivalent, household income*: the living standard of each household is determined by accumulating after-tax income from all sources, and is then adjusted to reflect the different needs of households of different size. Account is also taken of varying response rates among families of different types, and fluctuation in the coverage of the very rich. Results are presented in terms of incomes both before and after housing costs.

An inevitable consequence of using survey data over a long period of years is that there will be some problems of consistency and comparability of results over time, for example because of changes in the questions respondents are asked or changes in the way their answers are classified. Whilst it will always be the case that certain inconsistencies remain, every effort has been made to correct for discontinuities in the data and to ensure that the results upon which they are based are robust. There may also be fluctuations in coverage which remain uncorrected for. This is particularly likely for the results based on FES data prior to 1968, when the sample sizes were smaller. For historical reasons, the results for 1964 are based on only around 1,500 households and should be treated with considerable caution. In the analysis that follows, a few results are presented on the basis of changes taking place over just one or two years, in cases where the change described appears to be particularly significant. In general, however, because of the possibility of sampling errors, it is unwise to place too much emphasis on fluctuations from year to year.

The results of the analysis are presented in the sections that follow. Section II describes the income distribution as a whole, looking at inequality and real living standards and at the changing shape of the overall distribution. Section III breaks down these results to show which sorts of households are to be found at different points in the distribution and how this has changed over time. Section IV breaks the results down in a different way, focusing on the changing composition of total household income. A summary and conclusion are presented in Section V.

II. THE DISTRIBUTION OF HOUSEHOLD INCOME

1. Inequality

We begin by describing inequality over 30 years in terms of the Gini coefficient for the before-housing-costs and after-housing-costs income distributions as a whole. The Gini coefficient is one of the most widely used summary measures of inequality which rises with rising inequality and varies between zero (everyone has the same income) and one (one person has all the income).

Figure 1 shows a three-year moving average of the Gini coefficient for both the before-housing-costs (BHC) and after-housing-costs (AHC) measures of income. The dotted vertical lines on the graph subdivide the period into periods of rising inequality and periods of falling inequality.

The growth in income inequality that occurred over the 1980s has been quite unprecedented in recent times. The most striking feature of the Gini coefficients is that since 1977 we have seen continually rising inequality on both measures of income. This is the longest sustained period of inequality growth since the start of our study.

The Gini coefficients for individual years show that by 1991 the growth in inequality has been arrested, although as yet we cannot determine if this will form part of a trend towards falling inequality.

FIGURE 1

Gini Coefficient
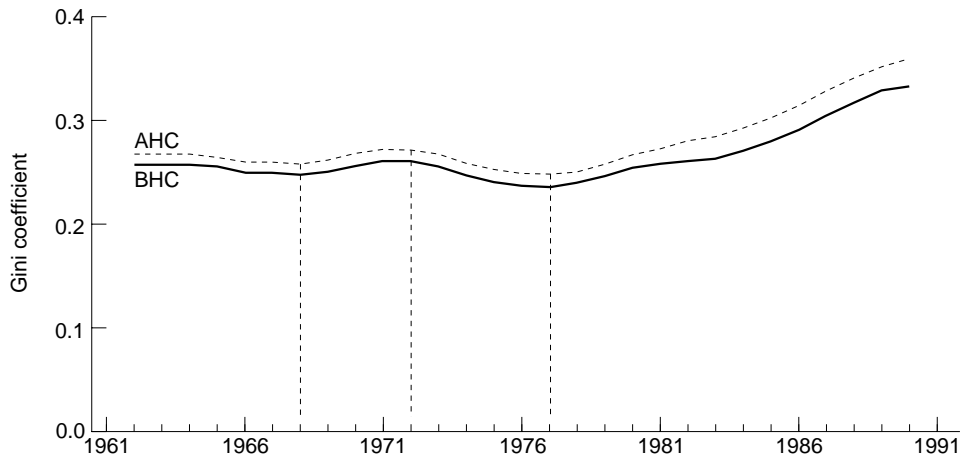**(three-year moving average)**

Figure 1 indicates that the rise in inequality since 1977 does not simply represent the reversal of a long-term trend of declining inequality as is sometimes claimed. Rather, there have been earlier periods of rising inequality such as the late 1960s, although clearly on nothing like the same scale as witnessed during the 1980s.[3]

Housing costs have played an interesting role in the inequality growth of the last decade. A notable feature of the changing distribution is the divergence of the Gini coefficients for the before-housing-costs and after-housing-costs measures of income from 1980 onwards. After-housing-costs income has always been more unequally distributed than before-housing-costs income, reflecting the fact that housing costs form a higher proportion of the income of poorer households than of richer households. As can be seen in Figure 1, the AHC Gini lies everywhere above the BHC Gini, but up until 1980 the two lines run parallel to each other. During the 1980s, for the first time, the AHC Gini rose faster than the BHC Gini over various years. This implies that the difference between the burden of housing costs on poorer households and the burden of housing costs on richer households has grown.

One explanation for this lies in the massive increase in home-ownership during the 1980s. At the end of 1990, about 68 per cent of households were owner- occupiers as opposed to only 40 per cent in 1961. More people, particularly at middle and lower incomes, have taken on mortgages over a period when house prices were rising, and also over a period when mortgage interest rates reached record levels. A rise in mortgage interest rates will have little effect upon the distribution of before-housing-costs income, but since there are now mortgage- holders at the bottom of the distribution, extra mortgage payments will hit the after- housing-costs incomes of poorer as well as richer households. Indeed, the extra mortgage repayments will eat up a higher proportion of the income of a poorer mortgage-holder than of a richer one.

A further explanation of the divergence between the BHC Gini and the AHC Gini over the 1980s lies in the fact that housing benefit is included among all other social security benefits in BHC income. The effect of a rise in rents is to compress the BHC distribution, as poorer households receive an increment to BHC income in the form of housing benefit to pay for the higher rent. On the other hand, the AHC income of the poor remains unchanged, as the extra housing benefit received is cancelled out by the higher rent payments due. Similarly, although numerically less important, rising mortgage payments and the inclusion of mortgage interest help through income support in the BHC measure of income will have the same effect. What this meant for the 1980s was that BHC inequality rose less quickly than it would have done if rents (and

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[3] See Atkinson (1993) and Jenkins (1994) for previous studies of the UK income distribution covering periods before the 1980s.

mortgages) had remained unchanged, whilst AHC income inequality continued to rise apace.

2. Real Living Standards

To understand the forces driving the changes in the distribution of income over the last 30 years, we need to look at what has happened to the real living standards enjoyed by households at the top, the middle and the bottom of the distribution over time. We look at real incomes, expressed in January 1994 prices. We would stress that all monetary amounts are for household *equivalent* income and are the figures for a childless couple, so that real living standards can be compared across households of different sizes. To be at the same place in the income distribution as a given childless couple, a single person would need around 40 per cent less money, and a couple with two children at primary school around 40 per cent more.

The population is ranked in order of income and divided into ten equally sized groups known as *decile groups*. We show the median income of the bottom decile group, the median income of the total population and the median income of the top decile group, i.e. the incomes of the 5th, 50th and 95th percentiles. Results are presented for BHC income in Figure 2(a) and for AHC income in Figure 2(b). Each chart is split into two parts, the left-hand chart showing the 5th percentile against the median, and the right-hand chart (on a more compressed scale) showing the median against the 95th percentile.

Looking first at BHC incomes, and taking the period as a whole, we see that the income of the 95th percentile has grown more, not only in absolute terms but also proportionally, than the income of the 50th percentile, which in turn has grown substantially more than that of the 5th percentile.

In 1961, the income of the 95th percentile was £261 per week; by 1991, this has risen to £555 per week. This represents a growth of 113 per cent. This compares with the weekly income of the 5th percentile of £55 in 1961 and £87 in 1991, representing a far smaller growth of about 58 per cent.

FIGURE 2(a)

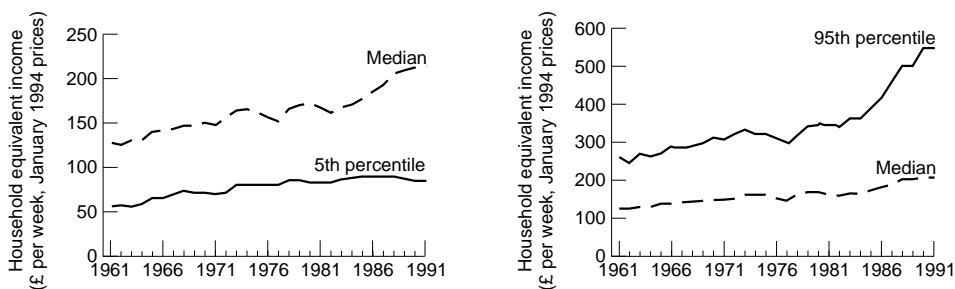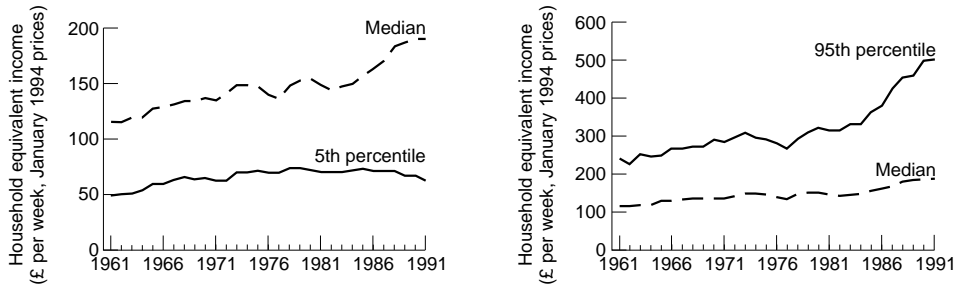**5th Percentile, Median and 95th Percentile BHC Incomes**

FIGURE 2(b)

5th Percentile, Median and 95th Percentile AHC Incomes

Overall, the BHC income of the 5th percentile has gradually drifted upwards, reaching a peak over the whole period of £90 per week in 1987. Interestingly, we see stability in the 5th percentile even during the recessions of 1973–75 and of 1980–81.

The AHC income of the 5th percentile looks rather different, particularly during the 1980s when, as can be seen on Figure 2(b), real income actually fell over a number of years. This is perhaps not surprising bearing in mind the rising housing costs over the 1980s discussed earlier in this section. The peak for the income of the 5th percentile on the AHC measure was in 1979 at £73 per week. By 1991, the combination of recession and still very high mortgage interest rates put the AHC income of the 5th percentile as low as it was a quarter of a century before, at just over £61 per week. How far this is a cause for concern depends on the extent to which high housing costs are a matter of personal choice.[4]

The fortunes of the incomes of those at the very top look dramatic,

on both the AHC and BHC measures. The very sharp rises between 1977 and 1979 (reversing losses over the previous four years) and again between 1982 and 1988 account for most of the real income growth of the 95th percentile over the last 31 years. The income of the 95th percentile fell very little in proportional terms between 1979 and 1982. Looking at changes in real income, again an important difference is brought out between the recession of the early 1980s and that of the 1970s. Whereas in the 1973–75 recession, all but the bottom decile took real income falls, it was the middle decile groups which bore the brunt of the income falls in 1980–81.

Real income falls for those at the very top may be partly explained by the negative real interest rates of much of the 1970s. These would have depressed

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[4] See Johnson and Webb (1992) for a discussion of the relative merits of the BHC and AHC measures and for a proposed single alternative income definition. See also Harris and Davies (1994).

the real value of interest-rate-dependent investment income, which takes up a larger proportion of the incomes of the rich. Clearly this can only account for a small part of the income falls which we observe. A more general explanation of the real income falls experienced during the 1970s must lie elsewhere. For this we look in greater detail at the incomes policies which were in force at various times throughout the 1960s and 1970s.

3. Pay Policies

A prominent feature of government policy throughout the first two decades of our study was a series of incomes policies designed to control inflation by limiting pay claims. These took a variety of forms and were adhered to with varying degrees of stringency.Given the importance of earnings in total income (an issue we turn to in Section IV when we look at the sources of household income), we would expect that government incomes policies which exerted specific controls over the growth of earnings would potentially have important effects upon income levels and upon the way that incomes were distributed.

The major features of the incomes policies during the 1960s and 1970s are set out in Box 1.

The pay policies with some flat-rate element have been highlighted in bold, as these are the ones which, if adhered to, would be expected to have the strongest impact on the way in which earnings are distributed. This is because the same cash increase represents a higher percentage increase for the less well paid than for the more highly paid. In the case where prices are rising, a particular cash increase might even result in real income gains for those at the bottom of the distribution by increasing their incomes by more than inflation, while at the same time resulting in real income falls for those at the top of the distribution. Note that an incomes policy which specified a wage standstill as opposed to a flat-rate cash rise would have the same effect on the real wage for all earners: the real wage would fall exactly in proportion to the rate of inflation and, rather than eroding incomes differentials, it would hold them constant between earners.

The movement of the Gini coefficient follows exactly that which we would expect to result from the incomes policies which were in place at the time. The pattern which emerges is one of temporary compressions during pay policy regimes (1966–68 and 1972–77), followed by a rewidening of the distribution as the policies broke down and differential wage claims ensued (1968–72 and 1977 onwards). Wage dispersion shows a similar pattern over this period.[5]

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[5] See Gosling, Machin and Meghir (1994).

BOX 1

Income Policies, 1961-78

	Those policies involving some flat-rate element are highlighted in bold.
July 1961	**Non-statutory 'pay pause'.**
Oct 1962	Voluntary 'norm' of 3-3.5 per cent for annual wage increases encouraged by National Incomes Commission (NIC).
1965	Voluntary 3-3.5 per cent norm set by National Board for Prices and Incomes (NBPI).
July 1966	**Statutory pay freeze imposed for six months**, followed by period of 'severe restraint' with a 'nil norm' and pay rises only if linked to productivity improvements or justified by criteria for exceptional treatment.
1968-69	3.5 per cent ceiling, replaced at end of 1969 by 2.5-4.5 per cent.
1972-74	
Stage I Nov 1972-Mar 1973	**Standstill on wages, dividends, rents and prices.**
Stage II Mar 1973-Sep 1973	**Annual increases limited to £l per week per employee + 4 per cent of the employer's pay bill per employee in the preceding year up to a maximum of f250 per individual.** This rule defined the total sum available for a group of employees; how it was divided up between them was determined by a process known as 'kitty bargaining'.
Stage III Nov 1974	**Ceiling of 7 per cent of the group pay hill (excluding overtime or £2.25 per person per week, to a limit of f 350 per individual** and with provision for productivity agreements and indexation: wage increases triggered automatically if the price level rose above a designated threshold.
1975-77	The 'Social Contract' era.
July 1975	**Pay increases restricted to 96 per week, with no increase at all for those above £8,500 per annum.**
July 1976	**Pay increases restricted to 5 per cent, with a lower limit of £2.50 per week and an upper limit of £4 per week.**
1977	Pay increases restricted to I 0 per cent.
1978	Attempt to restrict increases to 5 per cent.

Source: Clegg, 1979.

4. The Changing Shape of the Income Distribution

As well as looking at an overall measure of income inequality such as the Gini coefficient, we can gain several clear insights into the way that income

inequality has changed over the period by looking at the shape of the whole distribution.

TABLE 1

Mean Household Equivalent Incomes (BHC and AHC) in Selected Years

| | *January 1994 prices* | |
	BHC	AHC
1961	£140	£127
1971	£165	£149
1981	£186	£165
1991	£258	£227

In order to focus exclusively on distributional issues rather than on increases in average living standards, we examine the distribution of incomes *relative to average income* in the year in question. For reference, Table 1 shows how real mean incomes have changed on our two definitions for the four years we will be examining — 1961, 1971, 1981 and 1991.

Figure 3 shows the distribution of BHC and AHC incomes for each of our selected years. Whilst it is impossible to summarise the trends over three decades by picking four isolated years, these charts do, however, give an indication of the general trends.

The horizontal axis in each picture gives ranges of income as a proportion of mean income in the year in question. The left-most range covers all negative incomes (relevant only to the AHC measure), the next range covers incomes up to 10 per cent of the national mean, the next incomes between 10 and 20 per cent, and so on up to the penultimate bar which covers incomes between 290 and 300 per cent of mean income. The final bar includes all incomes in excess of 300 per cent of mean income. The vertical axes are all on the same scale and range from 0 to 7 million individuals.

A number of clear distributional changes can be identified from Figure 3:

Shifting peak. The heaviest concentration of incomes on both measures is now to be found at around half the national mean rather than at around 80–90 per cent three decades ago.

Lengthening tail. Over each decade, the tail of the distribution has lengthened. In 1961, there were relatively few individuals with household incomes more than twice the national average, whereas by 1991 in particular, there are several million individuals in this position and more than twice as many with incomes in excess of three times the national average.

Proliferation of negative after-housing-costs income. The cluster of individuals below zero AHC income in 1991 is much larger than in any other year we have shown. This reflects the high mortgage interest rates, which have

FIGURE 3

Income Distribution (BHC)

1961

1971

1981

1991

Income Distribution (AHC)

1961

1971

1981
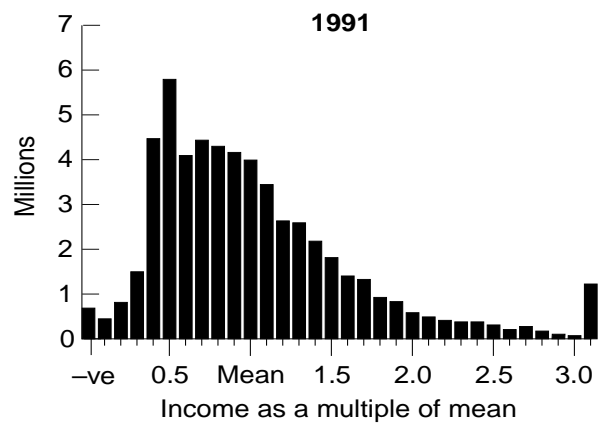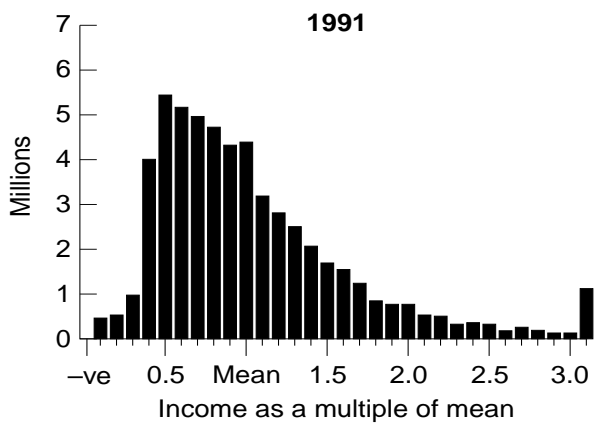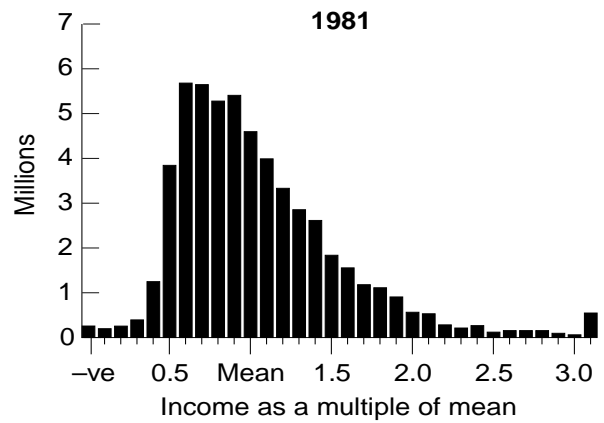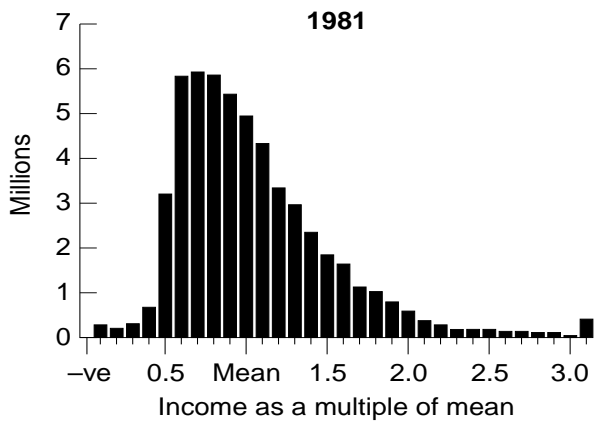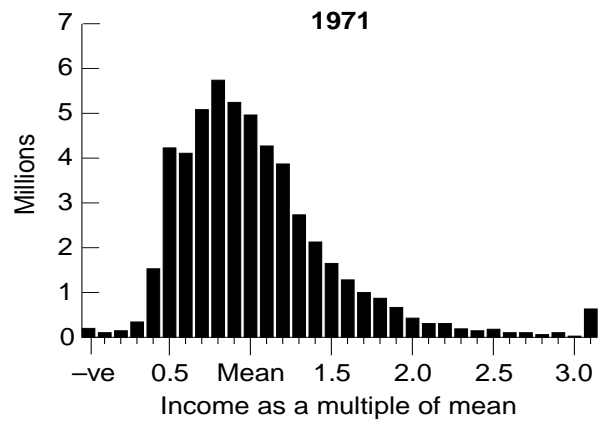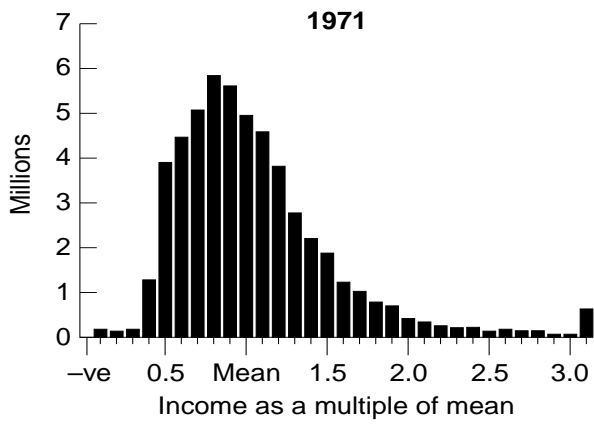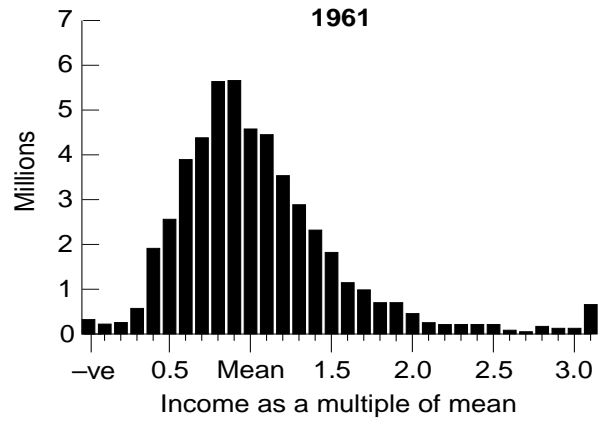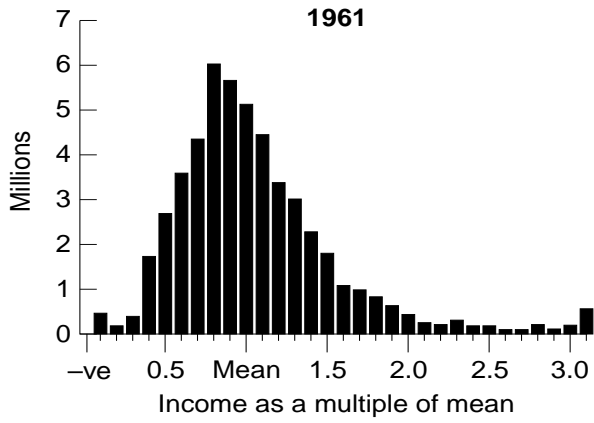
1991

pushed mortgage-holders into negative incomes, and also growing numbers of people reporting losses or zero profits from self-employment.

Two peaks in 1991? The distributions of both BHC and AHC incomes in 1991 are beginning to show two peaks rather than one. Such distributions are said to display 'bi-modality'. This means that individuals are clustered around two different income levels. The shape of the distribution here follows a trend much commented upon in the literature about the US income distribution and which has been labelled 'the disappearing middle'.[6]

5. Numbers Below Fractions of Mean Income

Cross-national studies often define poverty within a country relative to some fraction of the national mean income (or expenditure) in that country. This approach clearly embodies a very relative notion of poverty, since an increase in income to the richest household in the nation will, via its effect on the mean, lead to an increase in poverty on this measure. On the other hand, it would be difficult to argue that poverty had no relative dimension. Clearly, as decades go by and general living standards advance, so the perception of the minimum acceptable living standard also rises.

Figure 4 charts the proportion of the population whose incomes are below half the national mean.

FIGURE 4

The Proportion of the Total Population Below Half Mean Income

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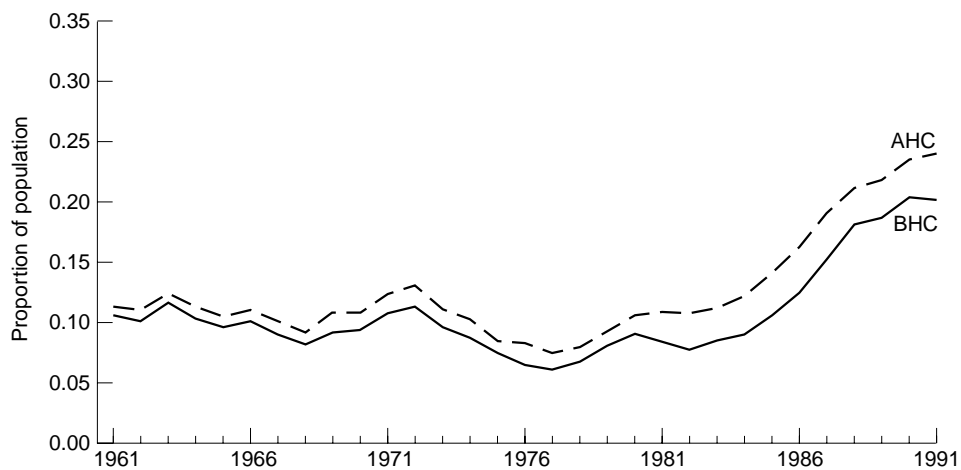
[6] For example, see Strobel (1993).

FIGURE 5(a)

The Proportion of the Population Below 40 Per Cent, 50 Per Cent and 60 Per Cent of Mean BHC Income
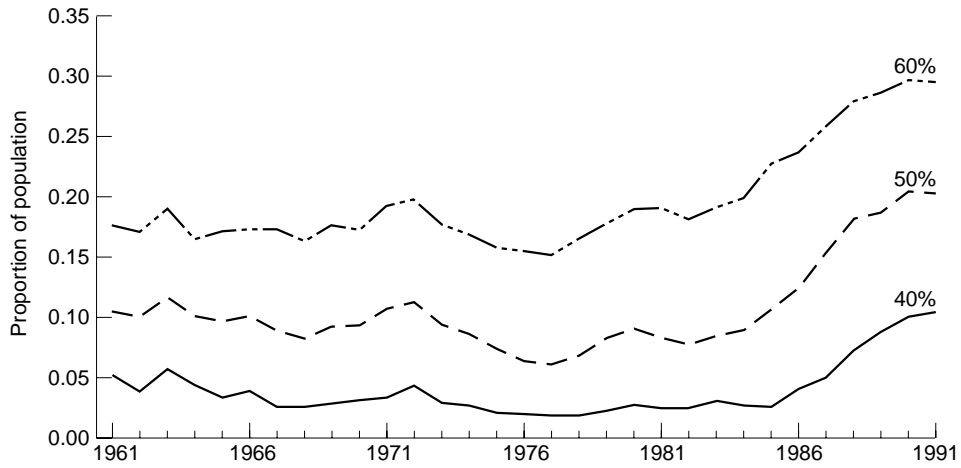

FIGURE 5(b)

The Proportion of the Population Below 40 Per Cent, 50 Per Cent and 60 Per Cent of Mean AHC Income
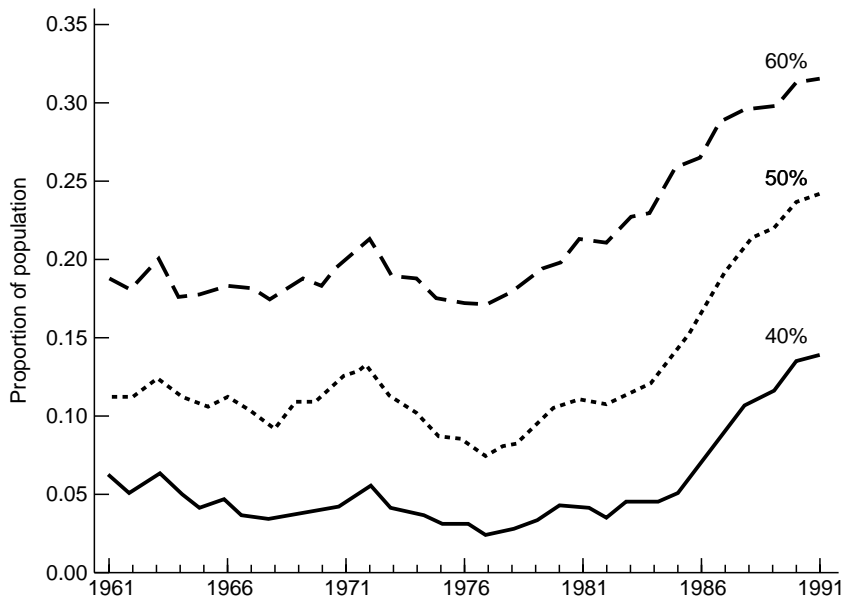
TABLE 2

Total Number of Individuals Below 40 Per Cent, 50 Per Cent and 60 Per Cent of National Average Income (BHC), 1961-91

Millions

	1961	*1962*	*1963*	*1964*	*1965*	*1966*	*1967*	*1968*	*1969*	*1970*	
40%	2.6	2.0	2.9	2.4	1.8	2.0	1.4	1.3	1.5	1.7	
50%	5.3	5.1	6.0	5.4	5.0	5.3	4.8	4.4	4.9	5.1	
60%	8.9	8.7	9.8	8.5	8.9	9.2	9.2	8.6	9.4	9.3	
	1971	*1972*	*1973*	*1974*	*1975*	*1976*	*1977*	*1978*	*1979*	*1980*	
40%	1.8	2.3	1.6	1.5	1.2	1.1	1.0	1.0	1.3	1.6	
50%	5.7	6.1	5.2	4.7	4.0	3.5	3.3	3.7	4.5	4.9	
60%	10.2	10.6	9.5	9.1	8.5	8.4	8.3	8.9	9.6	10.3	
	1981	*1982*	*1983*	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*
40%	1.4	1.4	1.6	1.5	1.5	2.3	2.8	4.1	4.9	5.7	5.9
50%	4.6	4.3	4.7	4.9	5.9	6.9	8.5	10.2	11.5	11.5	11.4
60%	10.5	10.0	10.5	10.9	12.6	13.1	14.4	15.6	16.1	16.7	16.6

In 1961, about 10 per cent of the population (5.3 million people), i.e. the whole of the bottom decile, were receiving incomes below half the mean BHC income. By 1991, this proportion had risen to 20 per cent (11.4 million people). The number of people below half the mean AHC income is higher than this, rising from 11 per cent in 1961 to 24 per cent in 1991, almost a quarter of the whole population. The pattern of rising and falling numbers of people below half average income follows the same broad trend as the Gini coefficients.

The problem with choosing any one line by which to measure poverty is that it says nothing about how incomes are distributed beneath the line. In particular, if incomes are clustered just below (or indeed just above) the line, for example because of the level at which a particular benefit has been set, then even small shifts in the line may move large sections of the population from one side of it to the other. For this reason, we also show the proportion of the population below 40 per cent, 50 per cent and 60 per cent of the mean, on the basis of BHC income in Figure 5(a) and AHC income in Figure 5(b). Table 2 shows the number of individuals these proportions represent for the BHC measure only.

The most striking rise in the number of people below each of these thresholds has taken place since 1982. As was pointed out in the section on real living standards (Section II(2)), this is also the point from which we began to see meteoric rises in the incomes of those at the very top, while the incomes of those

at the very bottom were rising only slowly. It is interesting to note that since their lowest point in 1977, the numbers of people in 'poverty' have doubled if the threshold used is 60 per cent of mean income, grown over threefold if the 50 per cent line is used, and grown almost sevenfold if 40 per cent of mean income is taken as the poverty line.

III. HOUSEHOLD INCOMES OF DIFFERENT GROUPS

In this section, we examine which sorts of households are to be found at different parts of the distribution over our period, and what has happened to the real living standards of these different groups.

In the analysis that follows, we classify individuals in two different ways, by family type and by economic status. These classifications are described in Box 2.[7] Note that the classifications are based on the characteristics of the *benefit unit* of which the individual is a member, whilst all household members are ascribed the overall income of the *household* into which they fall.

BOX 2

Classifications Used in Section III

By *family type*:

Each individual is classified according to whether the benefit unit of which he/she is a member is headed by a single or married/cohabiting person, whether there are dependent children in the benefit unit, and whether the head is under or over state pension age. Following DSS definitions, where there are two adults in a benefit unit, the head is taken to be the man. This classification produces six categories: pensioner couple, single pensioner, couple with children, couple without children, single person with children and single person without children.

By *economic status*:

Eight different economic status classifications are used. Any benefit unit containing an individual working full-time (i.e. 30 hours per week or more) self-employed falls into the first category. Next comes a group of categories for those benefit units with no one in full-time self-employment but with someone in full-time employment. The first is either for couples where both are working full-time or for single people working full-time. The next is for couples where one partner works full-time and the other part-time. Finally come couples where one partner works full-time and the other is not in paid employment.

Having exhausted benefit units containing a full-time worker, next come those containing any part-time worker, followed by those containing someone aged 60 or over. The final two categories are for those unemployed and seeking work, and a residual 'other' category which includes groups such as lone parents not seeking work, the long-term sick and disabled aged under 60, and students.

1. Results by Family Type

Figure 6 classifies the total population by family type. The general trend since 1961 shows growing numbers of pensioners, and in particular single pensioners, declining numbers of couples with children and an increase in the number of lone parents.[8]

It is important to bear in mind the composition of the total population when interpreting trends in the composition of the various decile groups. For example, a larger number of couples with children than single people with children in the bottom decile group at least partly reflects the fact that there are many more couples with children in the total population than there are lone parents. Similarly, *changes* in the composition of various decile groups may or may not be related to more general demographic trends. For example, the growing number of lone parents in the population is reflected in their increasing presence in the bottom decile and quintile groups, while the growing number of pensioners as a proportion of the total population is in fact accompanied by a declining pensioner presence in the poorest tenth of the population.
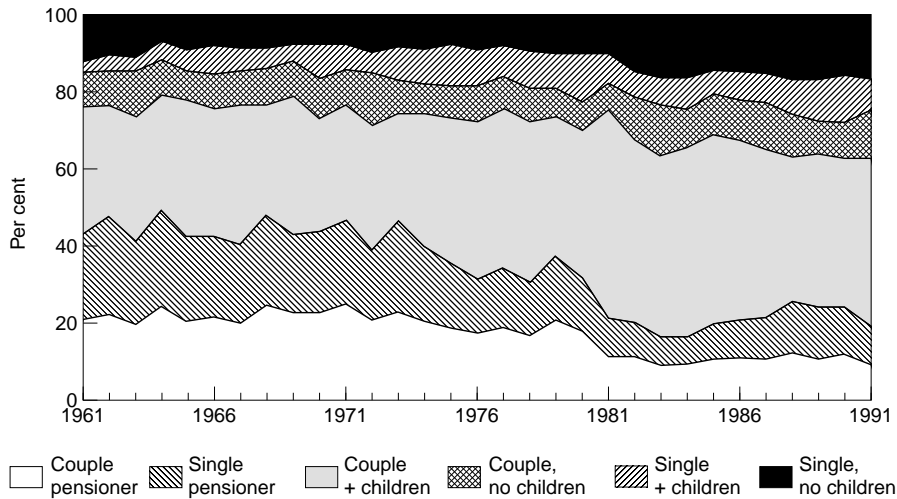
FIGURE 6

UK Population Classified by Family Type, 1961-91

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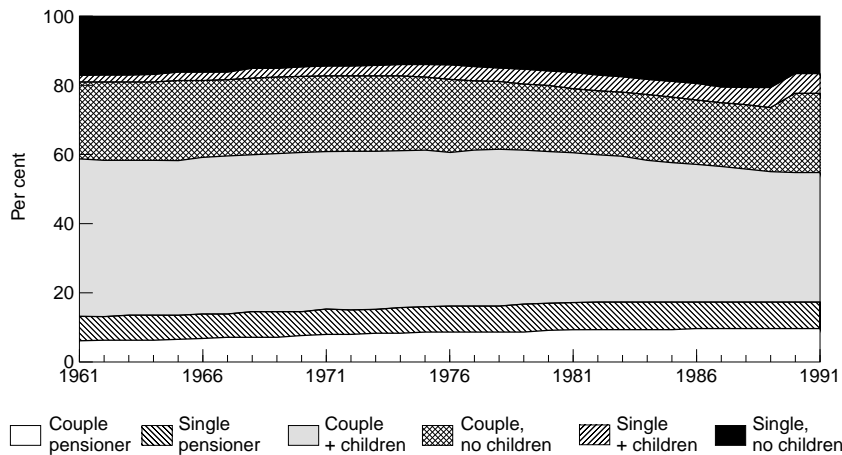
[7] Analysis by *region* can be found in Goodman and Webb (1994).

[8] The decomposition of the population into family types also reflects a regrettable discontinuity in the data, which mainly affects the 'couple, no children' and 'single, no children' categories. In 1990, we suddenly see an apparent decline in the number of single childless people and a rise in the number of childless couples. This is because from 1990 onwards, the FES has allowed us to identify cohabiting couples, so that both married couples and cohabitees are classified as 'couples'. Prior to 1990, respondents to the FES had to choose between 'single' and 'married' and cohabitees were generally classified as single. Analysis suggests that this discontinuity does not significantly affect the main results; see Department of Social Security (1993, Appendix 10).
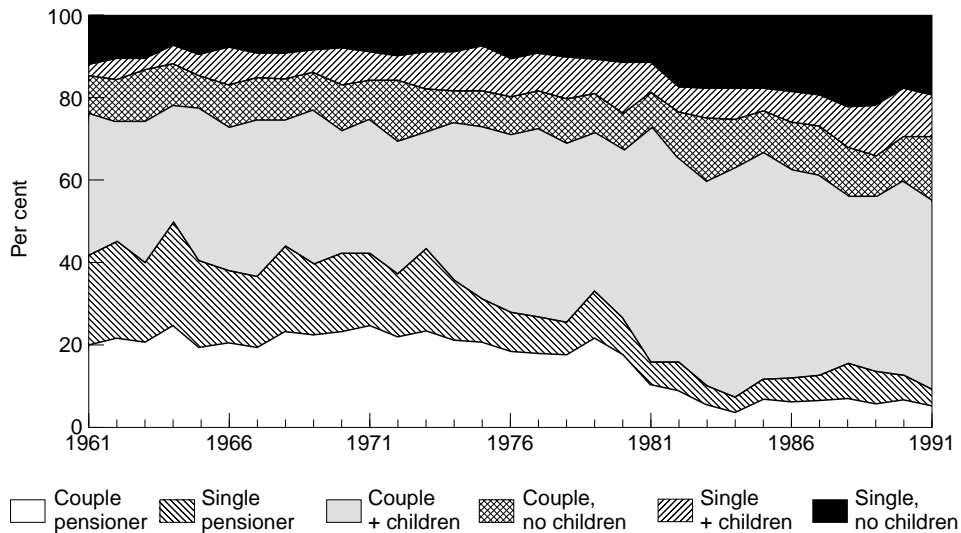
FIGURE 7

Bottom Decile Group (BHC) Classified by Family Type, 1961-91

We start by examining the composition by family type of the poorest decile group. Considering first the results for BHC income, perhaps the most dramatic feature of Figure 7 is the decline in the proportion of pensioners in this poorest group. In 1961, more than 40 per cent of the bottom decile group were single or married pensioners, whereas by 1991, this proportion had fallen to barely 20 per cent, and this at a time when the proportion of pensioners in the population as a whole had risen by more than a quarter. However, the pattern of decline has been far from uniform over the three decades. From the early 1960s to the mid-1970s, the composition of the poorest tenth remained fairly stable, but thereafter there was a sharp fall in the number of pensioners, and this accelerated in the recession of the early 1980s. Despite a slight increase since 1984, the number of pensioners in this poorest group is still at historically low levels.

The single largest reason for the dramatic decline in the number of pensioners in the bottom decile group is the rise in unemployment from around 1.3 million in 1979 to 2.8 million in late 1981. This is one of the main factors behind the growth in the number of couples with children in this bottom decile group, and also largely explains the growth in the number of single childless people. This latter group includes the young unemployed and also many older single men close to retirement age who were made redundant in the early 1980s.

FIGURE 8

Bottom Decile Group (AHC) Classified by Family Type, 1961-91

    Looking at the AHC picture, an even more striking trend emerges in Figure 8. Measuring income 'after housing costs' tends to improve the relative position of those who own their home outright or who have paid off most of their mortgage. As the period progresses, increasing numbers of pensioners fit this description and so are lifted out of the poorest group. Conversely, those with mortgages are particularly hit when, as in the early 1990s, nominal interest rates are very high. These two trends reinforce the effects of unemployment shown in the BHC picture and lead to an even more dramatic decline in the number of pensioners in the bottom decile group on this measure.

    It is important, however, not to understate the extent to which pensioners are still one of the poor*er* groups in society. Whilst they are much less likely to be found in the poorest tenth, an examination of the poorest fifth (or quintile group) tells a somewhat different story. Figure 9 shows, for BHC income only, the composition of the poorest quintile group.

    This chart reveals a much less dramatic shift in the relative position of those above and below pension age. Whilst the major economic changes of the early 1980s are still visible in the figure, the results for the period as a whole show only a modest improvement in the relative position of pensioners. Perhaps more in line with expectations, Figure 9 shows the impact of the growing numbers of lone parents ('single with children'). Whilst Figures 7 and 8 showed that the benefit system is, in general, keeping lone parents out of the very poorest group, their representation amongst the relatively poor has increased markedly,

FIGURE 9

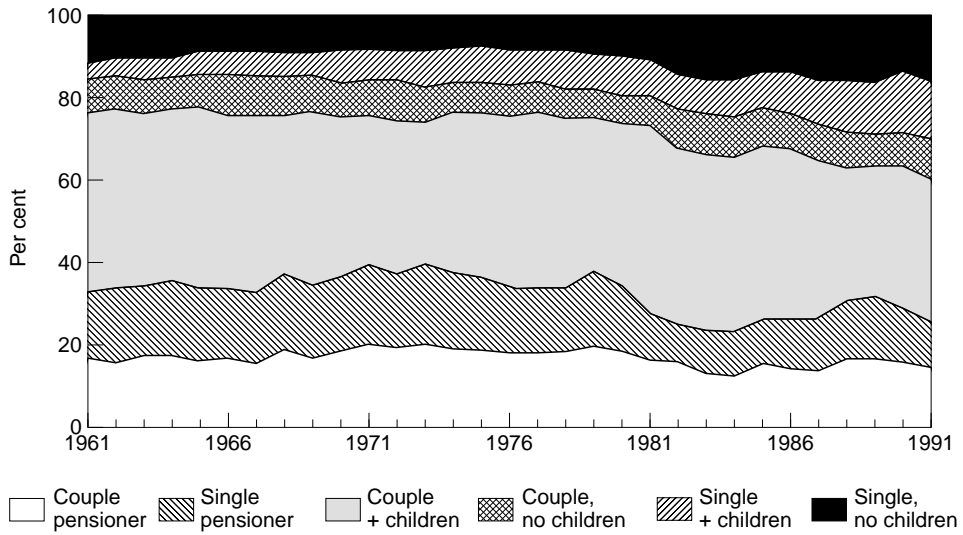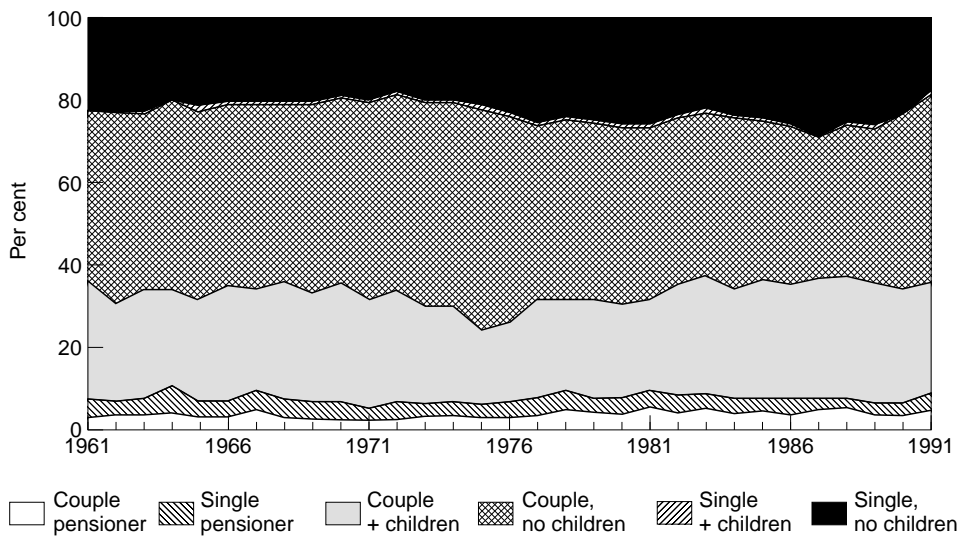**Bottom Quintile Group (BHC) Classified by Family Type, 1961-91**

	Couple pensioner		Single pensioner		Couple + children		Couple, no children		Single + children		Single, no children

FIGURE 10

Top Decile Group (BHC) Classified by Family Type, 1961-91

|	Couple pensioner		Single pensioner		Couple + children		Couple, no children		Single + children		Single, no children

especially given that lone parents and their children only account for around 6 per cent of the UK population.

Figure 10 shows the composition by family type of the richest decile group, again based on BHC income. What is striking about this graph is the relative stability of the composition of this richest group in contrast to that of the poorest groups. Couples with and without children and single people account for around 90 per cent of the richest tenth, with pensioners more or less steady at around 10 per cent and lone parents nowhere to be seen. In the corresponding picture AHC (not shown), pensioners fare only slightly better. Relative to their respective weight in the population as a whole, it is childless couples who are particularly over- represented in this richest group.

As well as being concerned with the composition of the richest and poorest groups, we are also concerned with the *distribution* of income of various family types and trends in their real income *levels*.

FIGURE 11

Pensioner Income Distribution (BHC): 1961, 1971, 1981 and 1991
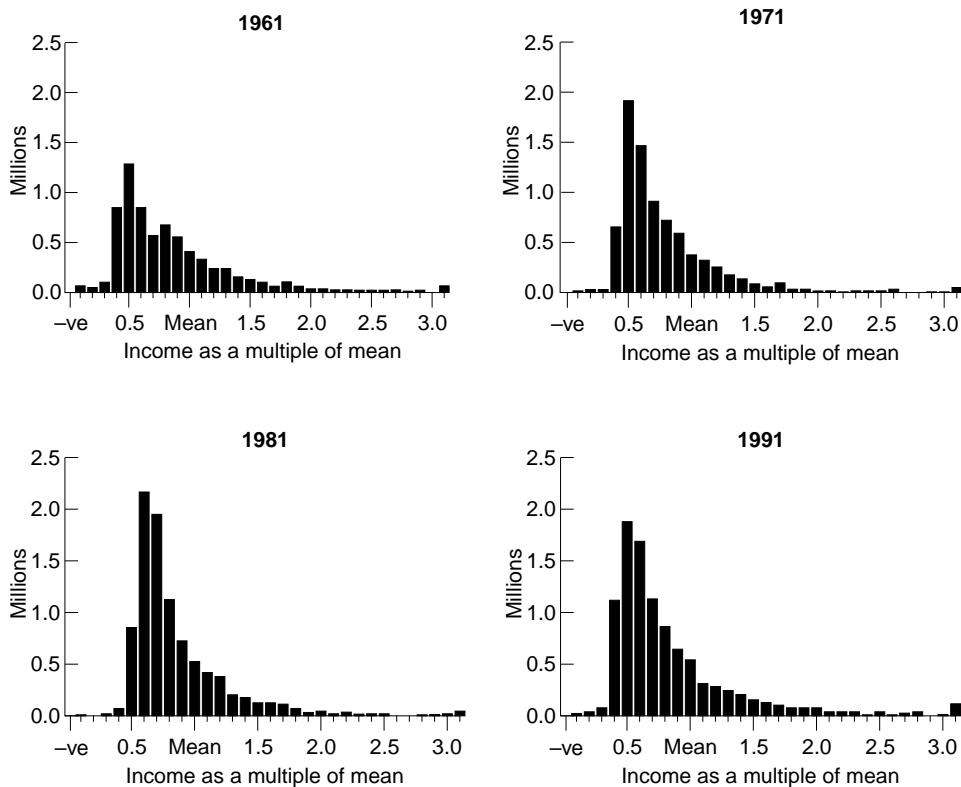
The shape of the distribution of pensioner incomes in selected years over the three decades is illustrated in Figure 11, which follows the approach used in Figure 3, showing the number of people falling into income bands expressed as a multiple of that year's national average income.

The shape of the pensioner income distribution in 1961 is relatively flat (i.e. dispersed) compared with the shape of the 1971 and 1981 distributions, with only a small cluster of about one-and-a-quarter million pensioners falling into the income band between 0.4 and 0.5 times the mean. By contrast, in both 1971 and 1981, pensioners were heavily concentrated in just a couple of income bands. In 1971, there were 3.4 million, or over 40 per cent of all pensioners, falling into the income range between 0.4 and 0.6 of the average, while in 1981, pensioners were similarly heavily bunched, but at slightly higher relative income levels. By 1991, the distribution shows a more dispersed shape again, with fewer individual pensioners clustered at around half the mean, and more pensioners falling into the very high income bands.

The explanation for the observed pattern lies in two separate trends. The relatively high inequality at the start of the 1960s reflects the gap between a substantial minority of those over state pension age receiving income from employment and the poorer majority without such income. The falling inequality over the 1960s and 1970s reflects a swift fall in the numbers of pensioners receiving substantial incomes from this source, along with real increases in benefit levels. The rising inequality since then has been associated with a growing minority of pensioners receiving substantial incomes from occupational pensions, and benefit levels rising only in line with prices.

While the pensioner income distribution displays a pattern quite distinct from the pattern of aggregate inequality, the distribution of non-pensioner incomes follows a shape very similar to that of the overall distribution described in Section II. This is because non-pensioners make up a far larger proportion of the total population than do pensioners, and so their income patterns tend to drive the shape of the overall distribution.

Turning to income levels, Figure 12 plots mean BHC income, in January 1994 prices, separately for pensioners and non-pensioners. Pensioners have experienced a number of periods during the 1970s when their real incomes were at best flat, particularly in the late 1970s, while in each year from 1974 to 1977 the real disposable income of non-pensioners actually fell back. This had the effect of compressing the overall distribution of income and of reducing the gap between pensioners and non-pensioners. That gap also fell back during the early 1980s as pensioners were largely protected from the effects of recession, but thereafter the gap became much wider as pensioners also missed out on the benefits of the boom of the late 1980s.

Figure 13 provides the same information but solely for those below pension age split according to whether or not they have dependent children. The pattern that emerges is that families with children are systematically worse off on

average than families without children. This reflects, amongst other things, the loss of earnings often caused by child-care responsibilities, particularly for single parents.

FIGURE 12

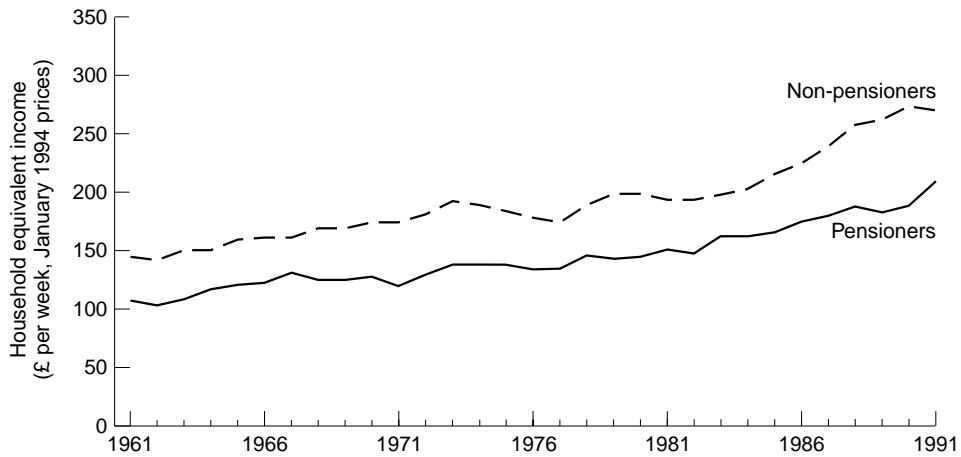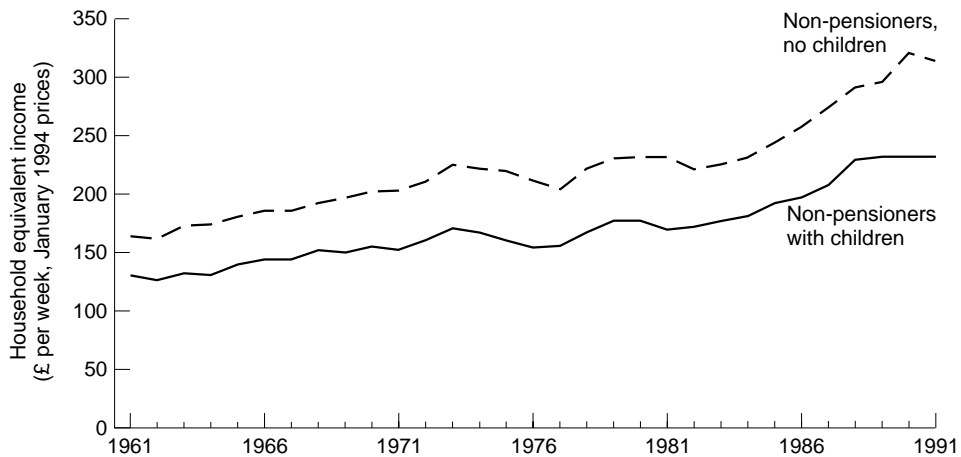**Real Incomes of Pensioners v. Non-Pensioners, 1961-91**

FIGURE 13

Real Incomes of Non-Pensioners with Children v. Non-Pensioners without Children, 1961-91

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2. Results by Economic Status

We turn now to selected analyses based on disaggregation by *economic activity*. Figure 14 shows the total population broken down according to the economic status classification as outlined in Box 2.

The most marked trend to emerge is that couples with one full-time worker have become an increasingly rare breed over the last three decades. A number of factors have contributed to this trend:

The decline in (male) full-time employment. Between 1971 and 1991, the proportion of working-age men in full-time employment fell by almost a fifth.

The rise in female part-time employment. Whilst over the last two decades the proportion of working-age women in full-time employment has barely changed, the proportion in part-time work has risen from around one in five in 1971 to around one in three in 1991.

The rising number of divorced and never-married mothers. Whereas at the start of our period the majority of single women with children were widows, the growth in divorce and in births to never-married women has meant that around one in six children is now in a lone-parent family.

The combined effect of these social and economic changes has been that the number of individuals covered by the 'one full-time, one unwaged' category has declined markedly over the period. In part, this is reflected in the recent growth of the 'other' category which includes lone parents not seeking employment.

FIGURE 14

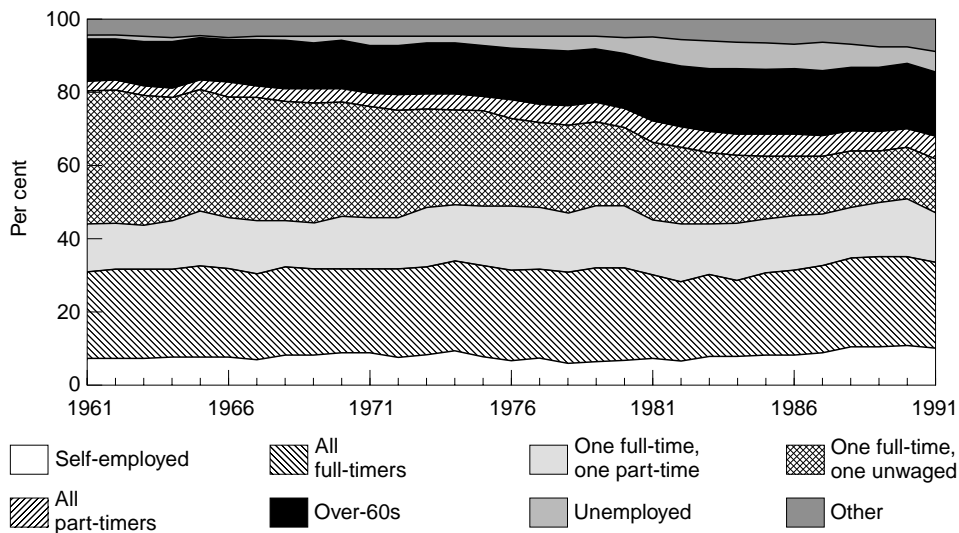**UK Population Classified by Economic Activity, 1961-91**

FIGURE 15

Bottom Decile Group (BHC) Classified by Economic Status, 1961-91
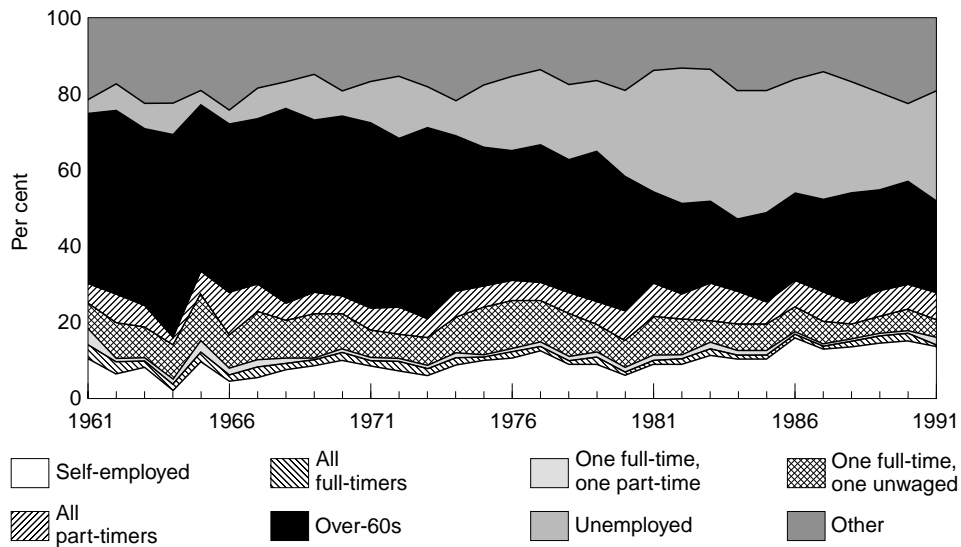

Figure 15 shows the composition of the bottom decile group (BHC) according to economic status. It indicates very clearly the emergence of mass unemployment as a cause of low income. This trend is most marked during the 1980s and late 1970s, but it is clear that the unemployed were starting to become a more important part of the poorest group as early as the late 1960s. As well as a corresponding fall in the representation of the over-60s which we have already discussed, Figure 15 shows a growing preponderance of the full-time self-employed amongst the bottom decile group. Many of these are recorded in our data as having zero or negative incomes (i.e. losses). Determining the living standard of this group is particularly difficult, and there is some reason to believe that these very low incomes may understate their true living standards.[9]

The results for the bottom quintile group, shown in Figure 16, are in some respects quite different from those for the bottom decile group. Whilst the graph again shows the rise in unemployment, another marked trend is the decline in the incidence of relatively low incomes amongst families containing a full-time employee. The category including couples with one full-time employee and an unwaged partner accounted for almost a quarter of the bottom quintile group in

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[9] This issue is discussed more fully in Department of Social Security (1993, Appendix 9).

1961 and less than a tenth in 1991. In part, this is because families with a full-
time employee would typically be some of the best-off amongst the bottom

FIGURE 16

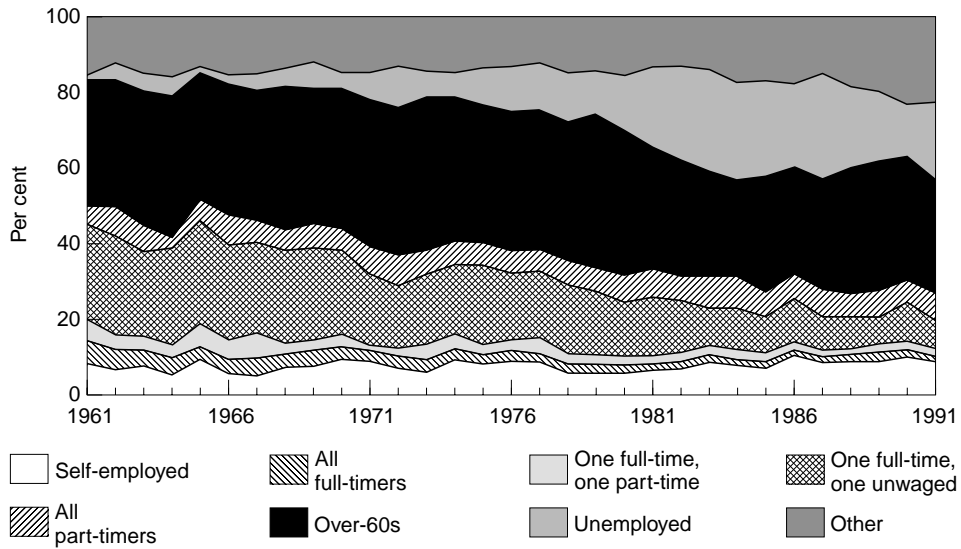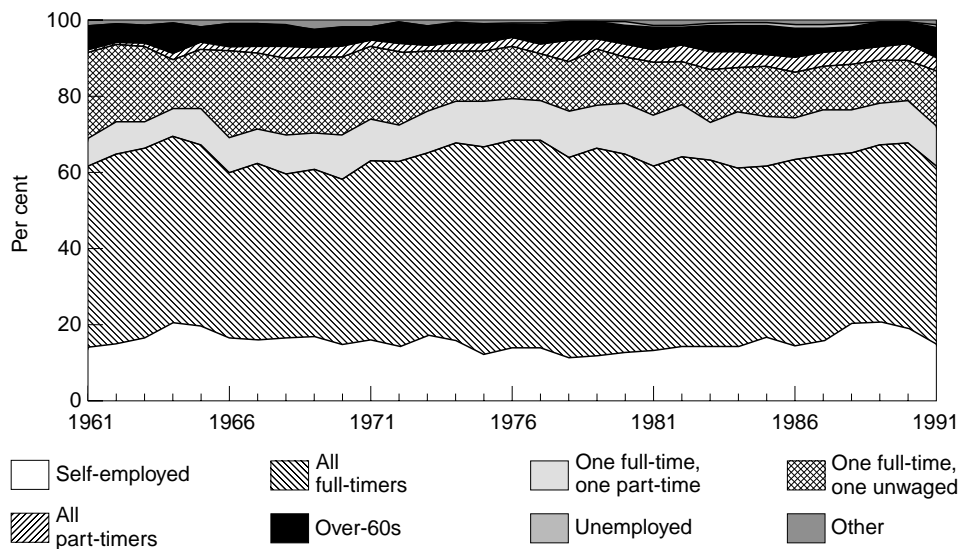**Bottom Quintile Group (BHC) Classified by Economic Status, 1961-91**

FIGURE 17

Top Decile Group (BHC) Classified by Economic Status, 1961-91

quintile and so when unemployment rose, this group was pushed up the distribution.

Figure 17 shows the economic status of those at the top end of the BHC income scale. Those benefit units most heavily over-represented in the top decile group are those consisting wholly of full-time employees and the full-time self-employed. This pattern has been relatively stable over much of the period, with the main change being the decline in the 'one full-time, one unwaged' category, again reflecting the decline in the representation of this family situation in the population as a whole. It is also interesting to note that the self-employed are the one group to be over-represented both at the bottom and at the top of the income distribution.

Turning again to the distribution of incomes within groups, Figure 18 shows the income distribution of those classed as full-time self-employed. Again following the format of Figure 3, we express all incomes as a proportion of the national average.

FIGURE 18

Full-Time Self-Employed Income Distribution (BHC): 1961, 1971, 1981 and 1991
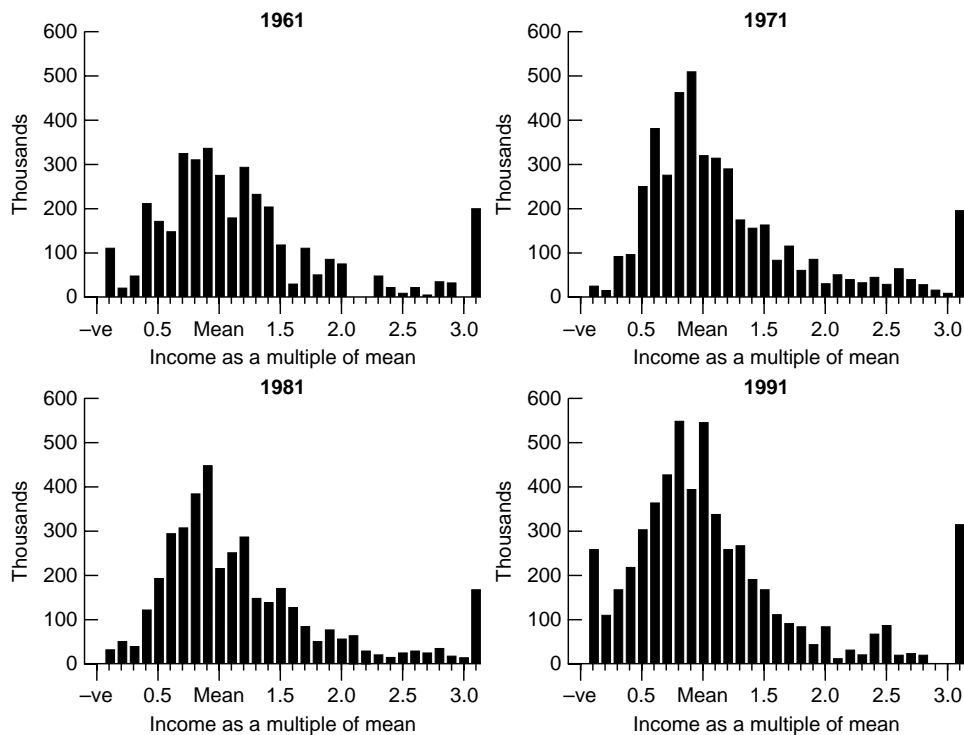
FIGURE 19

Full-Time Empoyees' Income Distribution (BHC): 1961, 1971, 1981 and 1991
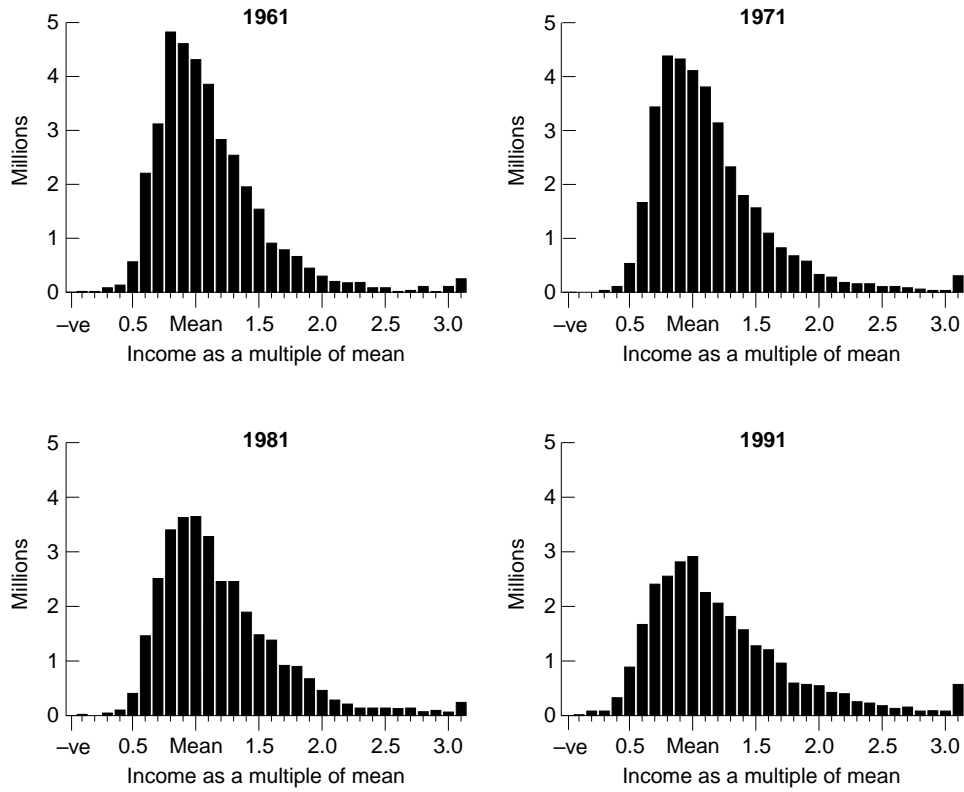

Figure 18 shows that throughout our period, the incomes of the self-employed are quite diverse. The self-employed are one of the few groups to report very high incomes (i.e. profits) as early as 1971. It is also clear that between 1981 and 1991, there was a big change in the nature of self-employment, with a marked increase in the number of self-employed reporting nil profits.

Figure 19 shows the corresponding pictures for benefit units containing any full- time employee (i.e. an amalgamation of 'all full-time', 'one full-time, one part-time' and 'one full-time, one unwaged') and Figure 20 shows the results for the 'unemployed' and 'other' categories.

Figure 19 shows that the group of benefit units containing at least one full-time employee has declined markedly in size, but has generally performed well relative to the national average. A much greater proportion of this group have incomes well in excess of the national average than in earlier years.

FIGURE 20

'Unemployed/Other' Income Distribution
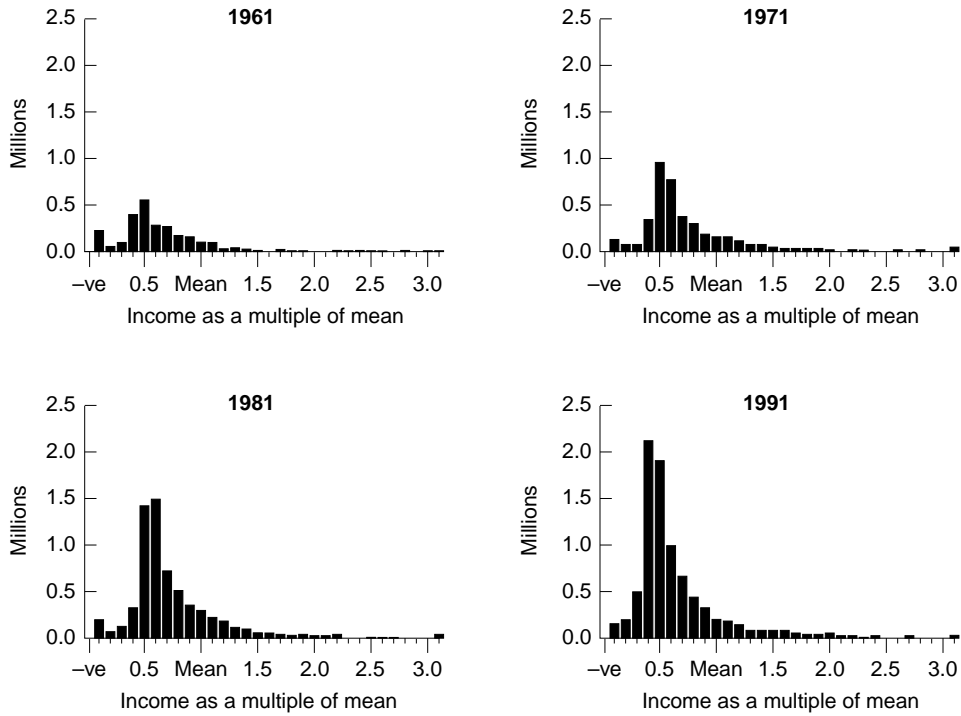
The unemployed/other category, shown in Figure 20, is a smaller one, with the vertical axis ranging only up to 2.6 million rather than the 5 million for full-time employees. The incomes of the unemployed/others are more concentrated than those of full-time employees because benefits play such an important part in the income of this group. It is also clear that the unemployed have enjoyed much less in the way of real income increases than have those in work. By 1991, more than 2 million unemployed people had household incomes in the range 30–40 per cent of the national average.

IV. THE SOURCES OF HOUSEHOLD INCOME

In this section, we describe the sources of household income for different groups and show how these have changed over the last three decades.

1. Results for All Household Types

We concentrate in this section on income 'before housing costs' and examine the key components of that income measure. We divide total household income into six main sources: earnings, self-employment, private pensions, investments, social security benefits and other.

Figure 21 shows the composition of total household income before housing costs in each of the years 1961 to 1991.

Perhaps the most striking feature of Figure 21 is the declining contribution of **earnings** to household income. Three decades ago, almost 80 per cent of total household income came from employment, whilst in 1991, the figure is only slightly more than 60 per cent. Whilst the fall was particularly rapid during the recession of 1979–81, it is clear that there has been a much longer-term trend towards less reliance on employment income. This may in part reflect the substantial decline in male full-time employment over the period and its replacement with typically lower-paid female part-time employment.

FIGURE 21

Shares of Total Household Income by Source, 1961-91
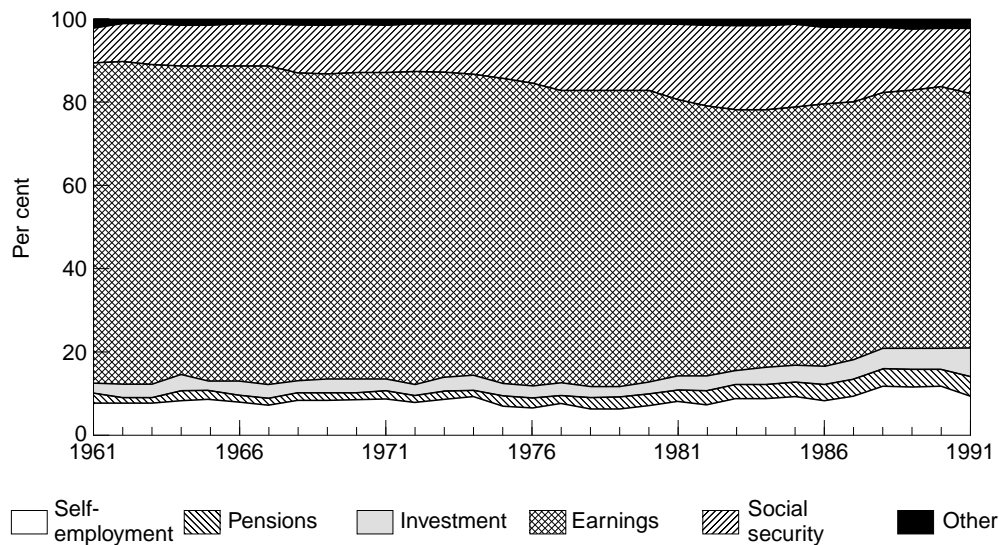
A small part of the decline in the role of earnings is attributable to the rise in **self-employment**, which has been particularly marked during the 1980s. However, whilst the number of people with self-employment income has risen sharply, Figure 21 shows that total self-employment income has not risen nearly

so rapidly. This suggests that the nature of self-employment may itself be changing, with the 'new' self-employment covering many lower-income activities. Thus, for the purposes of this chart, the profits of those starting in business under the government's Enterprise Allowance scheme would be counted as self-employment income. There are also signs from Figure 21 that the recession of the early 1990s may have reined in the growth in self-employment income.

Income from **private pensions** remained a fairly constant 2–3 per cent of total household income during much of the 1960s and 1970s, but has gradually increased to around 5 per cent over the course of the 1980s. The main reason for this trend is the pattern of membership of occupational pension schemes since the Second World War. Membership of company schemes amongst those of working age actually peaked in the late 1960s, but this would not show through in the form of household income until those employees retired a decade or two later. Furthermore, the rules governing the occupational pension entitlements of those who change jobs, and the rules on post-retirement indexation of pensions, have gradually been made more generous during the 1970s and 1980s. These changes mean that the contribution of private pension income is likely to go on growing steadily for the foreseeable future.

The contribution of **investment income** actually declined slightly from the early 1960s to the mid-1970s, but since then has gradually risen to form around 6 per cent of household income in 1991. Two of the main determinants of this trend are interest rate movements and the effects of inflation on the real value of savings. During 1990–91, interest rates reached 15 per cent, and whilst this greatly reduced the AHC income of net borrowers, it also boosted the income of savers. However, where high interest rates go alongside high inflation, the longer-term effect on investment income may be less clear cut. During much of the 1970s, high nominal interest rates were accompanied by even higher inflation which eroded the real value of savings. As a result, the capital on which interest was being earned was being gradually eroded.

The source of income which has shown the most dramatic growth over the period is clearly **social security**. The general trend shown in Figure 21 is a steady growth during the 1960s and the first half of the 1970s, and then two more rapid periods of growth in the late 1970s and early 1980s, before a marked fall-back in the mid- to late 1980s. The reasons for these trends have been the subject of much debate, but a number of factors can be clearly identified:

Rising numbers entitled to benefits. Almost all of the main groups covered by the benefit system have risen greatly in number over the last three decades. These include the unemployed, pensioners, the long-term sick and disabled, and lone parents.

Rising real housing costs. Included in this definition of income are benefits that go directly to pay the housing costs of low-income households. In part, therefore, this trend is somewhat artificial since a move from 'bricks-and-

mortar subsidy' (e.g. low council rents) to a person-based subsidy (e.g. housing benefit) will raise measured social security income without producing any net increase in living standards.

The introduction of new benefits. At the start of the period, the main items included under social security were the National Insurance benefits and family allowance. During the 1960s, the various discretionary local systems of rent rebates were gradually extended and unified, and a national system of rates rebates was introduced in the early 1970s. The early 1970s also saw the introduction of family income supplement (FIS), a completely new benefit for low-waged families with children, and of invalidity benefit (at a higher rate than the existing sickness benefit). Other benefits for the long-term sick and disabled, such as attendance allowance, were added during the late 1970s.

Figure 21 also reflects the move in 1977–78 from child tax allowances to child benefit, which produced a rise in measured social security income and a fall in after- tax earnings.

Changes in benefit levels. There have been many changes over the period but two are particularly noteworthy. The first is the growth of state earnings-related pensions, particularly under SERPS which was introduced in the late 1970s. Pension schemes inevitably take a long time to reach maturity, but the 1980s have brought growing numbers of pensioners receiving significant amounts of earnings- related pension to supplement their basic state pension.

The other important factor is government policy on benefit indexation. Figure 21 shows benefits as a share of total household income. Since, in almost all years, average household income rises faster than prices, benefits would also have to rise faster than prices to maintain their share of total income, other things being equal. In fact, since 1980, the main social security benefits (such as the National Insurance retirement pension and child benefit) have been increased only in line with prices. As a result, when unemployment is more or less stable (such as between 1983 and 1986), the share of income coming from social security will actually fall.

2. Contributions to Total Inequality

This section answers the question, 'to which source(s) of income can the growth in inequality of total household income be attributed?'.

In order to answer this question, we need to employ a different measure of inequality from the ones that we have been using so far. Following the methodology of Jenkins (1994), we use half the squared coefficient of variation, which is additively decomposable, i.e. can be broken down into its constituent parts.[10]

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[10] Half the squared coefficient of variation is defined as $\sigma^2/2\mu^2$ where σ is the standard deviation of the distribution and μ is the mean of the distribution.

FIGURE 22

Two Measures of Inequality, 1961-91
(three-year moving average)
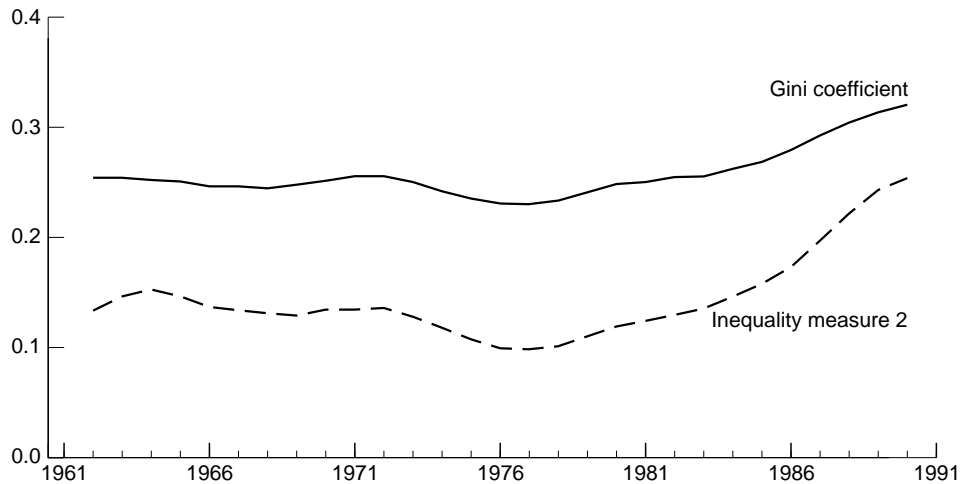
A comparison between half the squared coefficient of variation ('inequality measure 2') and the Gini coefficient is presented in Figure 22. In order to restrict our decomposition analysis to the six categories of income that we have been using so far, we have used a slightly different definition of BHC income in the analysis that follows. Specifically, we use BHC income before the deduction of local tax payments. This does not change the broad picture but does slightly alter the pattern of year-to-year fluctuations.

As Figure 22 shows, in terms of the main results for aggregate inequality, the Gini coefficient and half the squared coefficient of variation tell broadly the same story, with the main exceptions being that the latter indicates a much faster rise in inequality during the 1980s and that it provides less evidence of a rise in inequality in the late 1960s and early 1970s.[11]

In Figure 23, we show how the trend in half the squared coefficient of variation breaks down into its component parts.

The first message of this figure is that of all the components of household income, only social security has an equalising effect. In other words (and hardly surprisingly), if the social security system were to be abolished, the immediate effect would be to make the income distribution even more unequal than it already is! More interestingly, the equalising properties of the benefit system are shown to have increased slightly up to the early 1980s and to have levelled off

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[11] The interested reader is referred to Morris and Preston (1986) or Jenkins (1991) for a discussion of the properties of different measures of inequality.

thereafter. The reason for the former trend is that the additional benefits paid out in respect of rising unemployment are mainly means-tested benefits, paid exclusively to those on low incomes. As a result, they have more of an equalising effect than a benefit such as child benefit which is paid regardless of income.

FIGURE 23

Contribution to Inequality of Different Income Sources, 1961-91
(three-year moving average)
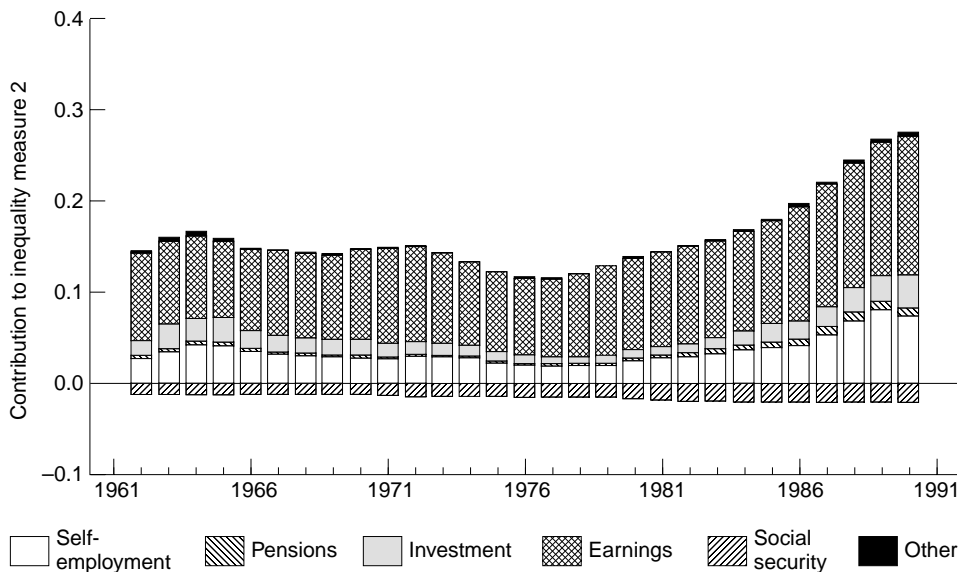
Amongst the remaining sources of income, all of which contribute to overall inequality, clearly earnings inequality is the most important. Again, this is hardly surprising, since earnings are such an important part of total household income. What is more unexpected is that whilst earnings inequality more or less explained the trend in overall inequality for much of the 1960s and 1970s, it is far from being the whole story of the 1980s. This is particularly surprising given that we are dealing here with post-tax earnings and that rates of direct tax fell sharply in the second half of the 1980s.

In the second half of the 1980s in particular, the inequality of self-employment incomes has greatly increased and has contributed to the rise in overall inequality. This growing differentiation in the incomes of the self-employed has been referred to earlier when explaining the fact that the role of self-employment income had not risen as rapidly as the growth in the numbers of

self-employed might suggest. It appears that there are increasingly 'two nations' amongst the self-employed.

The other major contributor to the growth in overall income inequality has been investment income. The growth of income from dividends and property, particularly amongst the richest households, has contributed markedly to growing inequality.

V. SUMMARY

In this paper, we have presented a consistently defined picture of living standards in the UK over the last three decades, allowing longer-term trends to be identified.

The key results from this study are as follows:

- The increase in income inequality during the 1980s dwarfed the fluctuations in inequality seen in previous decades. Whilst inequality declined gradually during much of the 1960s, rose slightly to the early 1970s and then fell back to its lowest point in around 1977, these fluctuations were very modest compared with the changes seen in the 1980s.
- Whilst real incomes (before housing costs) have grown by around 84 per cent on average over the last three decades, the incomes of the richest tenth have risen twice as fast (up 113 per cent) as those of the poorest tenth (58 per cent).
- Taking into account the effects of housing costs can greatly affect assessment of changes in real living standards. The real incomes of the poorest tenth ranked by income after housing costs were at a peak in 1979 at £73 per week, but by 1991 the real incomes of the poorest tenth were much lower than this, at just over £61 per week (both in January 1994 prices). This represented a return to the living standards of a quarter of a century earlier, although the most recent figures have been strongly affected by a growth in low-income self-employment and should be treated with some caution.
- In terms of the composition of the poorest groups, a major change has been the relative improvement of the position of pensioners. Pensioners formed almost half of the poorest decile group in 1961 compared with less than a quarter in 1991, and this despite a significant growth in the number of pensioners in the population. However, pensioners are still among the poorer groups, with their representation in the poorest quintile down much less sharply.
- The emergence of mass unemployment has had a major effect on the income distribution. Families with children now make up more than half of the poorest decile group compared with only around a third three

decades ago, with the main reason for this change being the more than eightfold increase in unemployment between the early 1960s and the mid-1980s.

- The self-employed have become an increasingly important group in the last 10 to 15 years, and the incomes of the self-employed have become more diverse. The self-employed are the only economic group in the 1980s to be systematically over-represented both at the very bottom *and* at the very top of the income distribution.
- Earnings from employment, while still the major source of household income, have declined from almost 80 per cent of total income to just over 60 per cent.
- The growth in income inequality over the 1980s is accounted for in part by growing earnings inequality but increasingly by inequality of income from self- employment and investments.

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