

## The poor and the poorest, 50 years on: evidence from British Household Expenditure surveys of the 1950s and 1960s

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The Poor and the Poorest, fifty years on: Evidence from British Household Expenditure Surveys of the 1950s and 1960s

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**Abstract:** We re-explore Abel-Smith and Townsend's landmark study of poverty in early post WW2 Britain. They found a large increase in poverty between 1953-4 and 1960, a period of relatively strong economic growth. Our re-examination is a first exploitation of the data extracted from the recent digitisation of the Ministry of Labour's Enquiry into Household Expenditure in 1953-4. First we closely replicate their results. We find that Abel-Smith and Townsend's method generated a greater rise in poverty than other reasonable methods. Using contemporary standard poverty lines, we find that the relative poverty rate grew only a little at most, and the absolute poverty rate fell, between 1953-4 and 1961, as might be expected in a period of rising real incomes and steady inequality. We also extend the poverty rate time series of Goodman and Webb (1995) back to 1953-4.

**JEL classification:** N14, N34, O15

**Key words:** poverty, inequality 1950s, Britain

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## Introduction

In 1965 Brian Abel-Smith and Peter Townsend published *The Poor and the Poorest*, their seminal study of poverty in post-war Britain. The central finding of the book was that the Beveridge welfare state had not eliminated poverty. Indeed, the authors found a re-emergence of poverty over the latter part of the 1950s. Their key estimates, which they presented with circumspection due to various data issues, were that the proportion of households below the poverty line had increased from 10.1% in 1953/4 to 17.9% in 1960. Consequently, they estimated an increase in the number of people in poverty from about 4 million in 1953/4 to 7.5 million in 1960. These results were widely accepted, see Bruel (1966) and were influential, see Metcalf (1981). According to Abel-Smith and Townsend, poverty was disproportionately concentrated in one-person households (particularly among the retired) and also in large households with more than six persons. This last result led them to emphasise the novelty of their estimate of 2.25 million children in households below the poverty line in 1960.

Their findings cast a shadow of doubt over the contemporary perception of post-war prosperity. Since the end of the Second World War there had been good reason to be optimistic: the 1945-51 Labour Governments had introduced a 'cradle to grave' welfare state; Rowntree's third survey of poverty in York in 1950 had found the almost complete elimination of the type of deprivation he had documented in previous enquiries – an improvement that he largely assigned to the welfare state; real average earnings had increased by about 50% in the twenty years following the end of the war and unemployment had remained below even the most optimistic levels of Beveridge and Keynes' full employment benchmarks. In the *Poor and the Poorest* Abel-Smith and Townsend 'rediscovered poverty' (Viet-Wilson 1999) and their findings undermined the complacency surrounding the success of this post-war social democratic project. Their findings reinforced those of Townsend (1955) and Cole & Utting (1962). They had a major impact on the social policy agenda of the 1960s. They were, for example, instrumental in the formation of the Child Poverty Action Group, which still credits the book for this: see <http://www.cpag.org.uk/content/how-child-poverty-action-group-came-being>. The work also strengthened considerably contemporary concern for the plight of the elderly in society. The finding of increased relative poverty through the 1950s remains unchallenged, see, for instance, Piachaud and Webb (2004, p45).

The key to the great impact of the study was the weight of evidence offered. Never before had a poverty study been based upon large, nationally representative household surveys. Earlier and contemporary studies of income distribution mostly relied upon other, less direct, sources, see, for instance, the studies of earnings surveys: by Ainsworth, (1949), Lydall (1959) and Thatcher (1968) published in this Journal. Abel-Smith and Townsend's conclusions were based upon the analysis of a sample of the returns to the 1953/4 and 1960 Ministry of Labour household expenditure surveys. The surveys themselves, known collectively from 1957 to 2001 as the Family Expenditure Survey, were sufficiently innovative and novel to attract methodological scrutiny in this Journal: see, for instance, Kemsley (1965, 1966).

In *The Poor and the Poorest* Abel-Smith and Townsend employed a definition of poverty that was explicitly relative:

The approach which we have adopted follows from the principle that the minimum level of living regarded as acceptable by a society increases with rising national prosperity. (1965:19)

Their preferred poverty line was taken to be 140% of the current National Assistance level. Defining poverty in relation to benefit levels had its genesis in a series of academic enquiries emanating from the Department of Social Administration (now Social Policy) at The London School of Economics in the early 1960s. Such an approach marked a discrete break with the earlier English social scientific tradition of a physiological minimum needs based approach associated with late nineteenth century social investigations of poverty by Booth and Rowntree. The minimum needs approach was the basis of all the interwar poverty surveys and of the third and final investigation of poverty in York undertaken by Rowntree's and Laver in 1951, though these later studies acknowledged that minimum needs should also be socially determined. The move towards an explicitly relative definition of poverty in the 1960s gave a new impetus to investigations of the causes and nature of poverty in the United Kingdom as well as in other advanced industrialised countries (Fiegehen, Lansley and Smith, 1977:3).

This article is a re-investigation of Abel-Smith and Townsend's findings. The recent (Gazeley, Newell, Hawkins, Walker, and Scott, 2013) digitisation of the 1953-4 Enquiry into Household Expenditure (EHE) survey-records allows a study that utilises the full survey results from the 1953-4 (over 12,000 households). The data from the 1960 Family Expenditure Survey (FES) returns have not been digitised, but the data from the 1961 FES (3,467 households) are available at the UK Data Archive, so we use these for the comparison. Using 1961 rather than 1960 survey results should make little difference to our ability to re-work Abel-Smith and Townsend, as the surveys were of similar size and collected using identical sampling methods. ONS data give a rise of 2.8% in real household final consumption expenditure between 1960 and 1961. This is substantial growth, and should, other things being equal, lower absolute poverty. Also note that the same aggregate grew by 22.9% between 1954 and 1960, so that the change between 1960 and 1961 is relatively minor.

In our re-investigation we employ a number of measures of poverty and inequality to make comparison with earlier and later findings. Unlike Abel-Smith and Townsend, we are able to make a clean comparison between our surveys using both total household expenditure and household income (Abel-Smith and Townsend compared expenditures in 1953/4 with incomes in 1960). Research into differences between poverty measured by expenditure on the one hand and income on the other continues to the present. Brewer *et. al.* (2006) for Britain and Meyer and Sullivan (2012) for the USA, are both very useful introductions to the literature.

We find that Abel-Smith and Townsend's method generated a higher rise in poverty than alternative methods. We closely replicate their results but also find that relative poverty, using a widely-used standard line of 60% of median equivalised income/expenditure, rose much less and not at all on some measures. Absolute poverty fell, as might be expected, in a period of

rising real incomes and steady inequality. Section 1 discusses the data sources employed and Section 2 sets out the Abel-Smith and Townsend study. Section 3 re-estimates poverty using Able-Smith and Townsend's measure as well as others. Section 4 investigates some of Abel-Smith and Townsend's concerns, about how households of one and two people fared, the evolution of poverty among the elderly and on child poverty. Abel-Smith and Townsend were unable to estimate a child poverty rate, but their estimate of about two and a quarter million children living in households below their poverty line is confirmed by our study. However, the child poverty rates in these data sets are not especially high. For instance, the child poverty rate generated by applying the 60% of median income line to the 1961 data is 13.1 %, which is at the low end of identically-defined child poverty rates for OECD countries in the early 2000s. Section 5 concludes.

#### 1. The Ministry of Labour's Enquiry into Household Expenditure (EHE) in 1953-4 and the early Family Expenditure Surveys

The Ministry of Labour Enquiry into Household Expenditure in 1953-4 was commissioned to provide the information required to update the official cost of living index. The last household expenditure survey had been carried out in 1937/8 with 10,762 returns obtained, but these were restricted to working class households. A smaller enquiry of middle-class households was conducted at the same time (Ministry of Labour and National Service, 1957). The Cost of Living Advisory Committee was formed in 1946 and recommended adjustments to the official index, known as the Interim Cost of Living Index in 1947, because the official index was based upon a limited basket of goods that were inappropriately weighted. In 1951 the Committee made a recommendation for an entirely new survey of household expenditure, as soon as conditions allowed. By 1953/4 it was judged that this moment had arrived: price controls had been substantially reduced, the rationing of clothes and most household goods had already ended and food rationing was scheduled to end.

The new Cost of Living index was designed to be 'representative of the expenditures of practically all wage earners and moderate salary earners', with a target group where the head of household was earning between £150 and 1,000 per annum. It was recognised, however, that the expenditure survey had a value beyond the needs of Cost of Living index revision and, accordingly, it was designed to cover the whole population, not just the target group. To ensure this objective was met, the survey sample was a two-stage random sample selected from addresses from local rating lists (the nearest complete list of all private households). In the first stage, 378 regional rating lists were selected from approximately 1,800, which covered all larger urban areas and a random selection of smaller urban and rural areas. In total, these lists covered about 60 per cent of the UK population. In the second stage, households were randomly selected from these lists to give an objective sample size of 10,000 households. Given the likely response rate, it was considered necessary to select a gross sample of 20,000 households. The response rate in practice was better than anticipated and the gross sample produced 12,911 household returns (Ministry of Labour and National Service, 1957).

The survey was carried out by interview and £1 was paid for each completed return. Details of household structure and characteristics, income (including welfare payments) and household and individual expenditures were collected on a daily basis for a consecutive three-week period. The survey was organised into five sections (forms HB1-HB5): HB1 identified the household by name and address and provided summary information regarding household age and composition and employment details etc.; HB2 recorded details of household expenditure on housing and fuel; HB3 covered personal tax, licences and insurance; HB4 recorded individual daily expenditures and HB5 covered individual wages or salaries and benefits including benefits in kind. These forms were fixed format design except for HB4, which was free format. The data recorded was checked by a Ministry official at interview and subsequently a significant amount of re-ordering and checking was carried out by the Ministry, including assigning unique codes to expenditures recorded in HB4, 'HQ codes', and the regularisation of most recorded food quantities. In addition, the information recorded in HB1 was de-personalised and transferred to HB20. HB1 was subsequently destroyed. To capture the seasonality of expenditures, the survey took place through almost all of 1953, commencing on 26<sup>th</sup> January and ending in early 1954. Thus, the 1953-4 EHE is the largest British household expenditure survey of the twentieth century.

The Ministry of Labour inaugurated a smaller annual Family Expenditure Survey (FES) in 1957 that was repeated annually until 2001. Data from the FES surveys from 1961 to 2001 are available at the UK Data Archive. In the early 1960s the FES surveyed around 3,000-3,500 households, using simpler spending diaries filled out over two weeks.

## 2. Abel-Smith and Townsend: methods and results

Abel-Smith and Townsend (1965: 20-1) discussed concerns about the 1953-4 EHE and 1960 FES surveys. They noted that households headed by the sick and elderly were under-represented, especially in the 1953-4 EHE (see also Ministry of Labour and National Service, 1957: 15). We show in Section 4, Table 8 and the discussion surrounding it, that the under-representation of elderly households can only have had very minor effects on poverty estimation. Abel-Smith and Townsend were advised that the income figures for the 1953-4 EHE survey were unreliable and, in particular, were likely to be too low, especially among the poorer households. In a long discussion of this issue, (1965, 21-24) they cited an early study by Cole and Utting (1956) finding a similar phenomenon in a different data set and they showed this tendency in the 1963 FES. The problem was considered to be particularly bad for the 1953-4 EHE because the income section of the questionnaire did not make a clear distinction between regular and transitory income. This persuaded Abel-Smith and Townsend to use total household expenditure as their living standard measure (Abel-Smith and Townsend 1965:21). The phenomenon is illustrated in Table 1, where it is clear that many of the lower-income households report expenditures well above reported incomes, so that mean expenditures are above the upper bound of the income categories.

*<Insert Table 1 here>*

Abel-Smith and Townsend employed a full definition of expenditure, which encompassed recorded daily expenditures, plus all forms of non-discretionary regular expenditure recorded in the survey, such as spending on housing, fuel, insurance, and education but omitted income tax and national insurance contributions. Total household expenditure was not recorded in the survey and had to be summed from all individual and household expenditures. This was a major undertaking since there were many hundreds of expenditures recorded per household.

The difficulty of analysing a survey as large as EHE in the pre-digital era accounts for many of Abel-Smith and Townsend's methodological choices. They exploited the fact that the survey responses had been classified by household size and by family income, in order to separate potentially poor households from the rest. On the basis of these classifications they selected 5,633 likely to be poor. From this target group of low income and/or large households, Abel-Smith and Townsend took a 25 per cent random sample and thus analysed 1,408 households in detail. The precise nature of their sample is set out in Appendix 1, Table A1.

The decision to eliminate high income households does not sit well with their reservations about the income data in the survey. There were two offsetting sources of bias to poverty measurement in their strategy. First, low expenditure/high income households that would have been classified as poor were selected out by the income-based exclusion rule. Secondly, if income tended to be under-recorded, then some non-poor households would have been erroneously included.

Abel-Smith and Townsend applied two poverty lines. Their preferred measure was to take the current basic National Assistance scale and apply it to each household, add housing costs, then inflate the sum by 40%. Abel-Smith and Townsend also used Rowntree and Lavers' 1950 York poverty line adjusted for 1953 prices, but made less of those results in their conclusions. Full details are provided in Appendix 2. Under the National Assistance scheme, housing costs were usually paid in addition to the basic scale. Abel-Smith and Townsend's reasons for this 40% mark-up (1965, 17-18) are, firstly, that most National Assistance recipients would have received additional payments, for instance for occasional extra expenditures, or because of special circumstances. Secondly, small income sources, for instance in the form of some pensions or from casual work were not taken into account when entitlements were calculated.

Their main case for using the National Assistance scale was that, by taking an 'official' poverty line (op. cit. p17), they would avoid entering a debate about the choice of equivalence scale. They also clearly preferred, as the quotation in our introduction makes clear, to define poverty relative to the living standards of the day, rather than base it upon physiological minimum requirements. The relevant National Assistance scale rates, taken from Lynes (1961), are given in Table 2. We will discuss this in more detail below, but the rates were revised almost annually

through the 1950s roughly in line with the growth of income and expenditure. The underlying household equivalence scale changed very little.

*<Insert Table 2 about here>*

It is useful to locate Abel-Smith and Townsend's National Assistance poverty line in the range of possible lines. It contains an equivalence scale that barely changed between the two surveys. It is not a constant real line, sometimes referred to as an absolute poverty line, since it more than kept up with average nominal income, which itself grew faster than CPI inflation over the period. It is closer to a relative poverty line, but it differs from a contemporary standard, such as one set at 60% of the median equivalised income/expenditure, in that it is not written in terms of summary statistics of the distribution of equivalised income/expenditure. Thus despite it rising similarly to mean income, changes over time in the shape of the income distribution could drive differences in estimated changes in poverty rates between Abel-Smith and Townsend's measure and a 60% of median poverty line.

Abel-Smith and Townsend's results for 1953/4 are reproduced in Appendix 1, Table A2. For their sample, the table sets out the percentage and numbers of households by expenditure relative to the current National Assistance scale, along with estimates of the total number of persons in these categories for the UK as a whole. Their finding of 10.1% of households below 140 per cent of National Assistance is the cumulative percentage of the figures given in Column (3), up to and including 130-139 per cent of National Assistance plus housing costs. Abel-Smith and Townsend estimated that this represented almost 4 million persons in the UK in 1953/4 (3.948 million from Column (7)). They considered this a lower bound estimate of poverty, in recognition of the limitations of their empirical approach of working with a sub-sample with low recorded income. Also, and importantly for later discussion, they found the poor to be disproportionately concentrated in small households, as Table A3 shows.

For the 1960 FES, Abel-Smith and Townsend worked with the entire sample of 3,540 households because they considered it safe to employ the income data. To be consistent with their approach to the 1953-4 data set, they subtracted income tax payments and national insurance contributions. The 1960 questionnaire asked respondents to distinguish actual income in the reference period from regular income. Employing the income data saved a great deal of computational effort. They found that 17.9% of households in the 1960 FES had incomes below their poverty standard. The difference between these two findings, suggesting greater poverty in 1960 than in 1953-4, became the key result of their study, driving many of their conclusions, (1965: 63-7).

In summary, this landmark study employed, for reasons of feasibility, different aggregate household measures: expenditure in for 1953/4 and income for 1960. Also, the chosen method of sample-selection for 1953/4 generated potential biases to the expenditure-based poverty measures. Lastly, the chosen poverty line was not consistent with modern practice. It contained



an essentially arbitrary assumption of a 140% mark-up over the basic National Assistance scale and it was neither an absolute poverty line, nor a consistently relative one.

### 3. Re-estimating poverty in 1953-4 and 1961

As discussed above, we are able to re-estimate Abel-Smith and Townsend's calculations on the full 1953-4 survey. Weekly expenditure variables are the average of all daily individual expenditures recorded in HB4 over the three-week collection period - except income tax and National Insurance contributions-plus regular individual and household expenditures recorded in HB2 and HB3. Given the worries about the income data expressed by Abel-Smith and Townsend, it is worth explaining the approach to income in the questionnaire. There were two income questions. The first asked the respondent to give their current income, with a supplementary question, to be answered if income varied 'considerably from week to week,' requesting income for each of the last three weeks. In some cases this supplementary question was not answered. The second question required the household to be placed in one of nine income groups. To improve the reliability of the income data, we decided to exclude from the poverty analysis the 586 households for which either the answers to the two questions were inconsistent, or - and these were the majority - where there was no response to the first question.

We employ the scales in Table 2 and information on household structure to compute weekly basic National Assistance levels for all available households in both surveys, and then add actual weekly housing costs for each household. For the 1953/4 EHE, the information on household membership is not complete enough to apply the scales exactly, and so we followed Abel-Smith and Townsend's assumptions as closely as possible to achieve comparability with their results (1965: 68-9 and Appendix 3). Abel-Smith and Townsend did not define exactly what they included in housing costs. We chose to include the three big items: rent (or tax-adjusted mortgage repayments), rates and water charges. This is consistent with the approach of Goodman and Webb (1995).

The version of the 1961 FES data set available at the UK Data Archive (SN 3042) has all income information redacted, so we complement that data set with Goodman and Webb's (1995) estimates of household income, after tax and national insurance, from the 1961 FES. These are also available at the UK Data Archive (SN 3300). For the 1961 data set we calculate the National Assistance basic weekly rate for each household using the 1959 rates for households surveyed January to March and the rates that were introduced at the beginning of April 1961 for households surveyed thereafter.

Summary statistics for key measures are given in Table 3. Weekly household expenditure is just under 40% higher in the 1961 FES compared to the 1953/4 EHE. The expenditure increase is roughly in line with national accounts data on consumer expenditure, once adjustments are made for population increase the decline in average household size. Household weekly net income is 40% higher in the 1961 FES after-tax data compared to 1953-4 EHE pre-tax data. The average National Assistance basic entitlement is on average 50% higher among the households of the 1961 data set compared to those of 1953-4, even though there was a decline

in average household size. This is an important factor for us. The 1959 and 1961 revisions to the National Assistance scales, given in Table 2, grew more than mean nominal expenditure. As a consequence, Abel-Smith and Townsend's choice of poverty line is more likely than not to generate an increase in the poverty rate. Lastly, the OECD Modified equivalence scale index - which counts the first adult as one, additional adults as 0.5 and each child as 0.3 - falls a little more over time than household size, due to a shift in household composition towards younger children. The lower part of the table gives reference statistics showing the growth of wages, prices and consumers' expenditure over the period between the surveys.

For both data sets we construct poverty indices two ways. First we divide each of total household weekly expenditures and income by the Abel-Smith and Townsend National Assistance level and then use a poverty cut-off at 1.4, as described above. Secondly, we apply the OECD Modified equivalence scale to the household and use that to equivalise the weekly expenditure and income data. The poverty line is set at 60% of the median of these equivalised measures. Table 4 offers some descriptive statistics for these two measures applied to income and expenditure in both of our data sets. It is clear from the upper part of Table 4, as in Table 1 and discuss above, that expenditures are higher than income in the 1953-4 EHE data set, whereas the opposite is true in the 1961 FES. On average, weekly expenditure and income are around three times National Assistance plus housing in 1953-4, and about 20% lower for the 1961 data. This is mainly due to the greater growth of the National Assistance basic scale already discussed and notable in Table 3.

The OECD equivalised measures grow by 40-50%, in line with the summary income and expenditure statistics of Table 3, as would be expected. The variance indicators do not suggest much notable uniform movement, except for a rise in the Gini, the 90/50 percentile ratio and the gap between mean and median in the expenditure-based measures suggesting greater upper tail variance in the 1961 expenditure data. In summary, these statistics suggest that we might find higher Able-Smith and Townsend-type poverty in the 1961 data set compared to 1953/4, due to the rise in National Assistance payments relative to income. We might also expect the OECD scale equivalised measures will rise less than the Abel-Smith and Townsend measures, at least for expenditures-based poverty, because of the rising gap between mean and median expenditures.

*<Insert Table 4 about here>*

*<Insert Table 5 about here>*

Our poverty estimates are given in Table 5. Before discussing the results, bear in mind here and elsewhere that, before clustering, the standard errors of our estimated poverty rate are very close to 0.3 and 0.6 percentage points for the 1953-4 EHE and 1961 FES data sets respectively. This is true whether the standard errors are calculated using the analytical formula, calculated directly using all the existing data, weighted or unweighted, or bootstrapped: see Table 6 below,

for example. We can only take clustering into account for the 1953-4 EHE data set. When we do that we find the standard errors rise a little from close to 0.3 to close to 0.35. In our tables we do not add stars for significance but it is a safe rule of thumb to treat any poverty rate difference larger than 2.5 percentage points as statistically significant at the 5% level.

For 1953-4 we find an expenditure-based poverty rate of 9.8%. This is reassuringly close to Abel-Smith and Townsend's estimate of 10.1%. The difference may be due to their exclusion of households from their sample, using, partly, an income rule. Our income-based poverty rate in the 1961 FES data is 16.6%, just over one percentage point below Abel-Smith and Townsend's estimate for 1960. Thus we find a slightly smaller gap, of 6.8 percentage points, between 1953-4 expenditure-based poverty and 1961 income-based poverty, than the 7.8 percentage points Abel-Smith and Townsend found. However the results are close so we may proceed to investigate if this gap is robust to changes in method.

There are four other sets of estimates in the upper panel of Table 5. First, we give the results for 1961 of keeping the Abel-Smith and Townsend poverty line constant in real terms. To do this, we inflate the 1952 National Assistance scale by the growth in the Retail Price Index 1953-1961 and add actual housing costs. We then apply this new 'constant real' poverty line to the 1961 expenditure and income data. In both cases we find 1961 household poverty rates of 6.8 per cent. Thus we can say that, on the Abel-Smith and Townsend measure, absolute poverty incidence was lower in the 1961 FES than in 1953-4 EHE, by a substantial and significant margin.

Next, we report that if Abel-Smith and Townsend's National Assistance poverty line had risen in line with mean household incomes and expenditures rather than substantially more, then they would have estimated household poverty at 13.5%, for both income and expenditure poverty lines. Thus over 4 percentage points of the rise we find when re-applying Abel-Smith and Townsend's method is due to this movement of National Assistance relative to household expenditure. We further re-estimate poverty in 1961 with a scale inflated by the growth in median income/expenditure and find only minor rises between the two surveys. We also report estimates of the poverty rate among individuals using the Abel-Smith and Townsend approach and find similar results to the household-level poverty rates.

The final set of results in Table 5 is given in the lower panel. There we switch to defining households and individuals as poor if household income, equivalised by the OECD-modified scale, is below 60 percent of the median. This measure, defined in terms of the parameters of the relevant distribution, is a pure relative poverty measure very much in the spirit that Abel-Smith and Townsend advocated. For reference, if a poverty index, such as income *per capita*, were log-normally distributed with a standard deviation of 0.5 (as our samples have) then this criterion would generate a poverty rate of about 15.4 percent. In contrast to the National Assistance-based results, we find only slight differences between 1953-4 and 1961, with negligibly small falls in household measures and smaller rises in the numbers of people in poor households. On this last measure we find a very similar rate for 1961 to that given by Goodman and Webb (op. cit.), using the same data source and measure. It is, therefore, reasonable to

claim that our rates for individuals in poverty for 1953-4 extend their poverty rate time series back to the early 1950s.

In summary, using Abel-Smith and Townsend's methods, our results tally well with theirs. Part - around one-half - of their measured poverty rise was due to increases in National Assistance benefits over and above rises in household incomes. We estimate that if National Assistance had risen in line with average income, their estimate of the rise in poverty of the period would have almost halved. When the poverty line is inflated only by the rise in median expenditure/income we find minor rises, of just over 1 percentage point. Lastly, when relative poverty is defined as 60% of the median equivalised expenditure of income, there is no consistent evidence of poverty rate change between two surveys. It seems likely that expansion of the upper tail of the distribution of the expenditure-based measures is related to the difference between trends in mean- and median-based poverty rates. These last results, highlighting the difference in results between poverty lines that move with mean versus median income/expenditures, reflect the fragility of poverty measurement and the importance of robustness tests. Such tests were unaffordable luxuries for Abel-Smith and Townsend.

Having established that Abel-Smith and Townsend's estimates of a rise in poverty were not robust to variations in poverty line definition, we turn to enquire into the extent to which other aspects of Abel-Smith and Townsend's methods affected their results. Their mistrust of the 1953-4 income data led them to use expenditure data from that survey. We can see from Table 5 that comparing 1953-4 expenditure poverty with either expenditure or income poverty for 1960 would have led to very similar conclusions as to the scale of the rise in the poverty rate. To assess the impacts of their sampling strategy and their choice of poverty line, Table 6 reports two sensitivity analyses. In part A of the table we report household poverty rates estimated using poverty lines embodying different assumptions as to the mark-up over basic National Assistance entitlement, for 0% to 80%. It turns out that the 40% mark-up creates the largest gap between expenditure poverty in 1953-4 and income poverty in 1961, though the gaps are still substantial at mark-ups of 60 or 80 per cent. The second sensitivity analysis asks about the bias Abel-Smith and Townsend may have induced by restricting the 1953-4 data to a lower income/larger household subsample and then taking a 25% random sample. We bootstrap 1,000 random sub-samples from the lower income/larger household subsample. We find a mean poverty rate of 9.4%, with a very narrow confidence interval. This is 0.4 percentage points lower than our estimate for 9.8% for the whole survey. Thus the net bias of the Abel-Smith and Townsend's method of restricting the set of households is about -0.4 per cent. When a similar exercise is performed for the income-based measure, no bias is found, as expected. In conclusion, these tests suggest that Abel-Smith and Townsend's method induced a downward bias of perhaps one percentage point in their estimate of expenditure-based poverty in 1953-4. A further question is if differences in the collection method of expenditure data, over three weeks in the 1953-4 survey, but only two weeks in the 1961 survey, added anything to our understanding of the results. For both surveys we disaggregated the expenditures by week and inspected the results. Both surveys record somewhat greater expenditures for the first week of the surveys, 6% in 1953-4 and 9% in 1961, but no other notable differences were visible.

Finally, the major influences on Abel-Smith and Townsend's findings were the choice of a National Assistance-based poverty index and a mark-up of 1.4 above that index for a poverty line. Their National Assistance poverty line grew faster than average household incomes and expenditures, and faster still than median expenditures, over the period. Their choice of a 40% mark-up raised the change in poverty against that generated by other choices. The exclusion of households based on an income criterion, when the income data was considered to be biased downward, inevitably led to a small underestimation of expenditure-based poverty among the 1953-4 households. In contrast, their comparison of expenditure in the 1953-4 data with income in the 1960 data likely contributed little to their findings.

#### 4. Structural changes: by household size and for children and the elderly

Abel-Smith and Townsend studied changes in poverty by household size, and also among the elderly and children. They found that the proportion of small households, containing only one or two people, had increased in the population of the period (1965:60). They also noted that this growth was associated with an increase in the number of elderly heads of households and hypothesised this was part of the explanation of their finding of rising poverty.

This higher proportion of households containing only one or two people in the 1961 FES is notable, as can be seen in Table 7. The share of one and two person households grows from 38.5 % in 1953-4 EHE to 44.1 % in 1961 FES. The table also shows these households are especially likely to be poor and that the concentration of poor people into these small households rises from 43.3% to 68%. In the 1961 FES data, where we have age data, 65% of all one-person and 47% of all two-person households have heads of household aged over 60 years.

<Insert Table 7 about here>

Did this change in sample characteristics reflect a population change? Abel-Smith and Townsend were concerned that both the 1953/4 EHE and 1960 FES surveys under-sampled these households, but that under-sampling was probably greater for 1953-4 EHE. Fiegehen *et al.*'s analysis of the expenditure surveys 1953/4 – 1973, seems to support these concerns (1977: 22). If the under-sampling of smaller households was greater in 1953-4, then this would have exaggerated their finding of increased poverty in 1960. We investigated this by studying the reports of the 1951 and 1961 population censuses (General Register Office, 1956, 1966) to find the distributions of households by numbers of persons in the census. These are compared with the EHE and FES proportions in Table 10. It transpires that the differences between sample and census proportions are quite minor. Reweighting our expenditure-based poverty estimates to reflect the census distributions of household compositions changes the estimates only slightly.

Alongside the increase in smaller households is a very likely increase in households populated by the elderly. Age data were not collected for the 1953-4 EHE, but there were questions about

retirement status. In the 1961 FES there were questions about receipt of pensions. We group the replies to these questions to create a 'retired' group of households for 1953/4 and a 'pensioner' group of households for 1961. We find 11% of 1953/4 households were 'retired', via their response to HB20 question 10 on type of household, and 27.5% of 1961 households were 'pensioners', defined as those where no adults were employed and some adults were retirement pension recipients, Old Age Pension recipients, or both. This is suggestive of a large increase in the preponderance of pensioner households. This increase could have come about via: increasing longevity; an increased propensity of the elderly to live independently and/or an increased propensity of the elderly to retire from paid work. All three of these possibilities were at likely to have been in play. The measured poverty (using Abel-Smith and Townsend's expenditure measure) of these groups is striking. 36.3% of the retired in 1953/4 were in Abel-Smith and Townsend expenditure poverty, and 35.6% of the pensioner households of 1961 were poor on the same measure.

On longevity increases, census data confirm the growth in the number of people aged over 64 in the population. Between the 1951 and 1961 censuses, the proportion of over-64s grew from 11.0% to 11.9%, despite this being a baby-boom period of rapid population growth. Changes in the propensity of the elderly to live independently are harder to measure. Unfortunately, the Census Reports for 1951 and 1961 collate household information by age and by numbers of members quite differently, so we can make only an imperfect comparison. On age, the 1951 census report (General Register Office, 1952, Table V.1: 162) lists households by the age of the self-nominated head of household, while the 1961 Report (General Register Office, 1966, Table 1: 2) list households by the age of the 'Chief Economic Supporter'. On numbers of household members, the 1951 Report lists by number of persons, while the 1961 Report uses a much more complex categorisation, taking into account the presence of married couples, ancestors (of the Chief Economic Supporter), servants etc., but not giving the distribution of people in each of these categories, except, inevitably, for single-person households. Thus the only clean comparison is with respect to these single-person households. In 1951, 10.7% of households contained only one person, and 4.7% of all households contained a single person aged over 60 years. In 1961, 11.9% of households contained only one person, and 7.4% of all households were either a single man over 65 or a single woman over 60. This is a rise in the share of single, elderly households of well over 50%.

There were significant changes in labour force participation for those over the age of 65 between 1951 and 1961. At the earlier date, almost one half (47.2%) of men aged 65-69, and nearly one quarter (24.3%) aged 70-74 years were in paid work. Indeed, almost 10% were still working aged 75 and over. By 1961, these proportions had fallen to 43.5% of those men aged 65-69, 21.3% of those aged 70-74% and 8.3% of those aged over 75 years (Johnson 1994, Table 1:112). This change was part of a long-run trend of declining labour force participation among older men. In 1951, 31% of men over 65 years were in paid work compared with 48% in 1931 and 65% in 1901. By 1961, the figure had fallen to 23% and continued to fall thereafter, reaching 13% in 1981 (Thane 2000: 386). A similar trend is evident for women during the first half of the century. The percentage of women over 60 in paid work fell from 13% in 1901 to 5% in 1951 (Thane, 2000: 386).

According to Johnson (1994:124), the withdrawal of a significant proportion of older workers from the labour force between 1951 and 1961 is only partly explained by the growth of occupational pension entitlements and state old aged pensions. Attitudinal and structural factors played a part too (for example, the increasing adoption of mandatory retirement rules by employers). It is likely, however, that changes in labour force participation between the two household survey dates contribute to the underlying increase in the variance of retired person income noted above. The increase in owner-occupation since the 1930s would have provided additional financial assets for some better-off retired households and also freed them from housing costs in retirement if the mortgage had been re-paid. According to Scott (2008, Table 2: 104), citing a Ministry of Labour and National Service survey, on average just under 19% of working class households were buying their own homes in 1937/8, but this average concealed wide differences by income (expenditure group). Across all classes, the extent of owner-occupation was about 35% in 1938 (Swenarton and Taylor, 1984:377) and had increased to 50% by 1971. The increase in post-war social housing provision after the Second World War may have also enabled older households to remain independent, especially after the death of a spouse, though under these circumstances these single person households are likely to have been poor by the Abel-Smith and Townsend definition.

Abel-Smith and Townsend were unable to calculate a child poverty rate directly because they did not study non-poor households. Instead, from the 1960 FES, they estimated that about 30 percent of people in poor households were children. From that they could infer that about 17 percent of all children, around 2.25 million, lived in poor households (*op. cit.* p65). They considered their results on child poverty to be very important, and their findings had a large impact, as we mentioned in the introduction. From today's perspective, a rate of that size might have less impact. We mentioned above that a poverty rate of 15-16% is a very likely outcome of a applying a 60% of median poverty line. To get a view of the scale, recall that most poverty measures increase with the variance of income and thus with inequality. Across 28 OECD countries in the mid-2000s, the correlation coefficient between similarly constructed child poverty rates and the income Gini coefficient is 0.55. The child poverty rates range from just over 10 percent to over 30 percent, including 20.8% for the UK (UNICEF, 2012). Thus Abel-Smith and Townsend's 17% child poverty rate estimate for 1960 is in the lower part of today's distribution.

We are able to calculate directly the proportion of children aged below 16 who are living in households with OECD-equivalised expenditures below 60% of the median. We also calculate the poverty rates generated by the Abel-Smith and Townsend method. Results are in Table 9. The Abel-Smith and Townsend method produces child poverty rates of 4.5% for 1953-4 and 17.0% for 1961. This large difference is likely due to the set of reasons why overall poverty, measured this way, rises (see Section 3 above). We find a much more modest increase from 10.7% for 1953-4 to 13.1% for 1961 of children living in households with incomes below 60% of OECD-equivalised incomes. These rates for 1961 would lead to estimates of 2.2 million children in poverty on Abel-Smith and Townsend's measure, very close to their own estimate of 2.25 million, and 1.7 million on the OECD measure.

## 5. Conclusions

We conclude that Abel-Smith and Townsend's estimate of a large rise in poverty incidence between 1953-4 and 1960 came about mostly by the use of a cash poverty line that grew more than average *per capita* income or expenditure. Additionally, since mean expenditure itself grew faster than median expenditure over the period, it is not surprising that this method yielded a much larger rise in poverty than a median-based measure. Their choices of a mark-up of 140% of National Assistance and of investigating only a subset of low-income households both mildly accentuated this estimated poverty rise between the 1953-4 EHE data and the 1961 data.

We find a fall in absolute poverty using an adapted Abel-Smith and Townsend poverty line and, at most, a small rise in relative poverty as measured by a line at 60% of median income or expenditure. To judge representativeness, something Abel-Smith and Townsend were worried about, we find re-weighting with census weights has only a minor effect on estimates of poverty. There was a rise in the concentration of poverty into small, likely elderly, households, over the period, so the demographic profile of poverty was changing. This probably reflects increased longevity and reduced labour force participation among the elderly and, perhaps, changes in the propensity of generations to live together. Abel-Smith and Townsend's estimate of child poverty for 1960, the result that had the largest impact at the time, was accurate.

On reflection, the novelty of their data sources, household expenditure surveys with much wider coverage of the population than prior UK surveys, allowed Abel-Smith and Townsend to present a statistical portrait of British living standards offering unprecedented insights. Their revelations about the poverty rates among the elderly and children were important, original and enduring. In contrast, though, we find that their view that the distribution of household incomes was moving in ways that adversely affected the position of poorer households through the 1950s is not convincingly upheld by a re-examination of these household expenditure survey data sets.

This work described in this paper could be thought of as an historical replication study. It arises via the digitisation of the EHE 1953-4 data set. The replication of *The Poor and the Poorest* was the most obvious (to us) first use of these data. There are also other British data sets that may still exist in paper form in an archive and which would yield the possibility of re-investigation. One is the 1960 Family Expenditure Survey, but there were also a number of large scale household investigations during the 1919-1939 interwar period that have yet to be digitised.

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**Table 1: Average Weekly Household Expenditure, by Household Income, 1953-4 EHE**

Household weekly income (d.)	Average Weekly Household Expenditure (d.)	Standard Deviation (d)	Share of Sample (%)
0-719	869	596	5.9
720-1439	1386	628	9.9
1440-1919	2014	759	11.2
1920-2399	2473	1120	15.7
2400-3359	2973	1097	26.5
3360-4799	3856	1282	19.9
4800-7199	5175	1755	8.2
7200-11999	6993	2629	2.1
12000 and above	10817	11214	0.6

Notes: Income groups and expenditures are expressed in pre-decimalisation pence (240d.=£1).

**Table 2: Selected National Assistance non-rent scale rates.**

Effective from	16 <sup>th</sup> June 1952	7 <sup>th</sup> September 1959	3 <sup>rd</sup> April 1961
<i>Ordinary rate:</i>	<i>Pence (d.)</i>	<i>Pence (d.)</i>	<i>Pence (d.)</i>
Husband and wife	708	1020	1080
Single householder	420	600	642
<i>For other persons:</i>			
aged 21 or over	372	552	594
aged 18-20	312	432	486
aged 16-17	258	360	384
aged 11-15	192	276	288
aged 5-10	162	228	240
aged under 5	132	192	204

Source: Lynes, 1961, Appendix 1, page 50.

**Table 3: Summary Statistics**

Mean of:	1953-4 EHE	1961 FES	1961/1953-4
Weekly household net expenditure (d.)	2971	4098	1.38
Weekly household net income (d.)	2820	3945	1.40
National Assistance basic entitlement (d.)	914	1367	1.50
Household size	3.17	3.01	0.96
OECD Modified equivalence scale	1.91	1.84	0.95
<i>Reference statistics (1953=100):</i>			
Retail price index	100	129.3	
Average weekly earnings	100	158.5	
Consumer's expenditure at current prices	100	156.0	
Consumer's expenditure deflator	100	122.5	

Notes: Authors' calculations. The National Assistance entitlements are given in Table 2. For the 1961 FES households we apply the scale introduced in September 1959 for the households surveyed January to March 1961 and the April 1961 scale for those interviewed later in the year. The references statistics are taken from Feinstein (1972) pages T8, T14 and T65.

**Table 4: Descriptive statistics for total weekly household expenditures and incomes normalised by Abel-Smith and Townsend's National Assistance scale and OECD Modified Equivalence scale.**

	1953-4 EHE			
	Abel-Smith and Townsend index		OECD Equivalised	
	Expenditure	Income	Expenditure	Income
Mean	3.10	2.92	1438.6	1467.6
Median	2.81	2.66	1285.4	1314
SD of log	0.53	0.57	0.48	0.50
Gini	0.27	0.29	0.27	0.27
90/50	1.77	1.78	1.77	1.72
50/10	1.99	2.16	1.85	2.00
	1961 FES			
	Abel-Smith and Townsend index		OECD Equivalised	
	Expenditure	Income	Expenditure	Income
Mean	2.46	2.56	2130.2	2206.2
Median	2.09	2.32	1803.0	2012.4
SD of log	0.49	0.54	0.51	0.56
Gini	0.29	0.27	0.30	0.27
90/50	1.86	1.77	1.87	1.75
50/10	1.76	2.00	1.80	2.05

Notes. Abel-Smith and Townsend's index is total weekly expenditure or income divided by their estimate of basic National Assistance entitlement plus housing cost, see text. OECD equivalised means and medians are in pre-decimalisation pence (240d=£1) per equivalent adult.

**Table 5: Re-estimated Poverty rates**

	Percentage below 140% of Abel-Smith and Townsend's National Assistance level			
	1953-4 EHE		1961 FES	
	Expenditure	Income	Expenditure	Income
Household poverty rate	9.8	12.2	17.1	16.6
1961 with 1953/4 line inflated by:				
... rise in RPI			6.8	6.8
... rise in mean h'hold income			13.5	13.5
... rise in median h'hold income			11.2	13.5
Individuals in households	5.5	7.6	14.6	13.0
	Percentage below 60% of median OECD equivalised income/expenditure			
	1953-4 EHE		1961 FES	
	Expenditure	Income	Expenditure	Income
Household poverty rate	13.2	17.7	13.1	17.4
Individuals in households	9.8	10.6	10.7	13.4

Sources and notes: Authors' calculations. See text for a discussion of the Abel-Smith and Townsend poverty threshold. For the lower part of the table household incomes and expenditures were divided by the number of equivalent adults, using the OECD Modified Scale. The estimates for 1953/4 employ a restricted sample that contains only cases where the data set's two income indicators are mutually consistent. This restriction does not cause significant bias. See text for a discussion on the standard errors associated with this poverty rates. A rule of thumb is that any poverty rate gap of 2.5 percentage point or more is very likely to be significantly different from zero.

**Table 6: Sensitivity Analysis**

*A: Household Poverty rates varying with the mark-up on the basic National Assistance*

	1953-4 EHE expenditure	1961 FES income
Poverty line mark-up over the basic rate:		
0%	7.1	4.5
20%	9.7	11.0
40%	9.8	16.6
60%	17.1	22.5
80%	22.9	28.4

*B: Bootstrap analysis of 25% subsamples from low-income/larger households for 1953-4 EHE*

Poverty measure	Mean of 1000 replications	Standard Deviation
Abel-Smith and Townsend Exp.	9.4	0.011
Abel-Smith and Townsend Income	12.2	0.012

**Table 7: Expenditure-based Abel-Smith and Townsend poverty rates by size of household**

Number of persons in household	1953-4 EHE			1961 FES		
	poverty rate	share of sample	Share of poor people	poverty rate	share of sample	Share of poor people
1	50.8	10.2	16.7	36.0	14.1	38.7
2	14.6	28.3	26.7	12.7	30.2	29.3
3	4.7	24.8	11.4	5.4	22.3	9.2
4	4.9	19.7	12.5	6.5	18.6	9.2
5	8.4	9.9	13.4	10.2	8.3	6.5
6	10.4	3.9	7.9	8.1	3.6	2.2
7	14.0	1.8	5.7	18.4	1.4	2.0
8 or more	16.5	1.3	5.7	27.1	1.5	2.9

Source, Authors' calculations, see text.

**Table 8: Percentages of households by size in the EHE, FES and Censuses.**

Number of persons in household	GB 1951 Census	1953-4 EHE	GB 1961 Census	1961 FES
1	10.5	10.2	13.1	14.1
2	26.8	28.3	29.3	30.2
3	24.9	24.9	22.9	22.3
4	19.1	19.6	18.5	18.6
5	9.9	9.8	9.1	8.3
6	4.9	4.0	4.0	3.6
7	2.1	1.8	1.7	1.4
8 or more	1.7	1.4	1.4	1.5

Source, Authors' calculations, see text.

**Table 9: Percentages of children in poverty, 1953-4 EHE and 1961 FES**

Poverty line:	1953-4 EHE	1961 FES
Abel-Smith and Townsend, expenditure-based	4.5	13.3
Abel-Smith and Townsend, income-based	6.8	17.0
OECD Modified expenditure -based	10.7	13.1

Note: Children are taken to be all those under 16 years of age.

Appendix 1

**Table A1: Abel-Smith and Townsend's sample from the 1953/4 survey:**

		<i>Weekly Income of Household</i>					
<i>Household Size</i>		£14-20	£10-14	£8-10	£6-8	£3-6	Under £3
	1				151	337	635
	2				590	721	103
	3			566	388	131	8
	4			453	194	57	1
	5		360	183	73	27	
	6+	288	236	84	41	6	

Total: 5633

From these 5633 households they then took a 25% sample:

		<i>Weekly Income of Household</i>					
<i>Household Size</i>		£14-20	£10-14	£8-10	£6-8	£3-6	Under £3
	1				38	84	158
	2				147	180	26
	3			142	96	33	2
	4			113	48	15	
	5		90	46	18	7	
	6+	72	59	21	11	2	

Total: 1408

Source: *Poor and Poorest* Appendix 3, Tables 1 and 2, page 73.



**Table A2: Number and percentage of households and persons with low expenditures**

<i>Total expenditure as % of basic national assistance scale plus rent/housing</i>	<i>Households</i>			<i>Persons</i>		<i>Estimate of total number of persons in UK (thousands)</i>
	<i>No.</i>	<i>%</i>	<i>Average size</i>	<i>No.</i>	<i>%</i>	
Under 80	17	0.5	1.5	26	0.3	152
80-89	18	0.6	1.3	23	0.2	101
90-99	33	1	2.3	75	0.7	354
100-109	61	1.9	2.4	149	1.4	709
110-119	54	1.7	2.6	144	1.4	709
120-129	64	2	2.9	178	1.8	911
130-139	79	2.4	2.7	210	2	1012
140-159	162	5	3.2	525	5.1	2581
160 and over	2737	84.9	3.3	8940	87.1	44082

Source: *Poor and Poorest*, Table 3, page 28.

**Table A3: Number of households with low expenditure (and all households in subsample)**

		<i>Weekly Income of Household</i>					
		<i>Under £3</i>	<i>£3-6</i>	<i>£6-8</i>	<i>£8-10</i>	<i>£10-14</i>	<i>£14-20</i>
<i>Household Size</i>	1	108 (159)	17 (84)	1 (38)	- (23)	- (15)	- (5)
	2	13 (26)	70 (180)	5 (147)	- (163)	- (226)	-(122)
	3	0 (2)	16 (33)	14 (97)	9 (141)	- (260)	- (193)
	4	0 (0)	9 (14)	12 (49)	8 (113)	- (206)	- (155)
	5	0	5 (7)	6 (18)	5 (46)	1 (90)	- (96)
	6+	0	1 (1)	5 (10)	10 (21)	8 (59)	3 (72)
	All sizes		121 (187)	118 (319)	43 (359)	32 (507)	9 (856)

Source: *Poor and the Poorest*, Table 2, page 27.

## Appendix 2: Poverty Lines:

Abel Smith and Townsend constructed 2 different poverty lines. The first was to identify the number of households whose expenditure less income tax and national insurance totalled less than 140% of National Assistance rates plus weekly expenditure on housing (rent, repairs, mortgage, etc). They adapted the National Assistance rates to align with the age ranges used in the 1953-4 Enquiry:

### *Adapted National Assistance Rates*

	s	d
Husband and wife	59	0
Single householder	35	0
Others 21 or over	31	0
16-21	23	9
5-16	14	9
Under 5	11	0

The second poverty line they used was the 1950 Rowntree-Lavers line, recalculated at July 1953 prices:

<i>Composition of household</i>	<i>No. of persons in household</i>	<i>s.</i>	<i>d.</i>
<i>Adults only, one sex</i>			
1 man	1	47	5
1 woman	1	42	1
2 men	2	71	2
2 women	2	68	8
3 men	3	94	11
3 women	3	88	11
<i>Adults only, both sexes</i>			
1 man, 1 woman	2	70	2
2 men, 1 woman	3	94	0
1 man, 2 women	3	90	1
2 men, 2 women	4	113	10
3 men, 1 woman	4	117	8
1 man, 3 women	4	113	6
<i>One adult and children</i>			
1 man, 1 child	2	64	11
1 man, 2 children	3	82	5
1 man, 3 children	4	103	1

1 woman, 1 child	2	60	10
1 woman, 2 children	3	78	11
1 woman, 3 children	4	97	0
1 woman, 4 children	5	115	0
Two adults and children			
1 man, 1 woman, 1 child	3	88	8
1 man, 1 woman, 2 children	4	110	1
1 man, 1 woman, 3 children	5	127	11
1 man, 1 woman, 4 children	6	146	0
2 women, 1 child	3	87	10
2 women, 2 children	4	105	11
2 women, 3 children	5	123	11
Three adults and children			
2 men, 1 woman, 1 child	4	112	5
2 men, 1 woman, 2 children	5	130	5
2 men, 1 woman, 3 children	6	147	8
1 man, 2 women, 1 child	4	112	0
1 man, 2 women, 2 children	5	130	7
1 man, 2 women, 3 children	6	148	5
3 women, 1 child	4	108	4
3 women, 2 children	5	126	5
3 women, 3 children	6	144	6
Four adults and children			
1 man, 3 women, 1 child	5	132	7
1 man, 3 women, 2 children	6	151	2
2 men, 2 women, 1 child	5	132	3
2 men, 2 women, 2 children	6	150	4
2 men, 2 women, 1 children	7	173	0
3 men, 1 woman, 1 child	5	136	2
3 men, 1 woman, 2 children	6	154	2
Additional persons			
1 man		23	9
1 woman		20	3
1 child		18	1

### Appendix 3: Assumptions about Household Composition:

In the 1953/4 EHE the exact composition of each household is not available for all households. Householders recorded themselves as either single adults, married couples or 'other'. For all households the numbers of children under 16 years and of children under 5 years are recorded. For the 'other' category only the number of people over 16 years is known, that is, no breakdown is given of those over and under 21 years. Abel Smith and Townsend therefore made the following assumptions about households assigned to this category:

<i>Household Size</i>	<i>All children under 16</i>	<i>5-16</i>	<i>0-5</i>	<i>Assumptions about persons other than children</i>
2	0			Assumed both over 21
3	1			Assumed both over 21
	0			Couple plus 1 adult
4	0			Couple, one person over 21, one person 18-21
	1			Couple, one person over 21, one person 18-21
	2	2	0	One person over 21, one person 16-18
	2	1	1	Assumed both over 21
	2	0	2	Assumed both over 21
5	0			Couple, one person over 21, one person 18-21, one person 16-18
	1			Couple, one person over 21, one person 18-21
	2			Couple, one person over 21
	3			Assumed both over 21
6	1			Couple, one person over 21, one person 18-21, one person 16-18
	2	2		Couple, one person over 21, one person 18-21
	2	1	1	Couple, two persons over 21
	2		2	Couple, two persons over 21
	3			Couple, one person over 21
	4			Assumed both over 21
7	2	1	1	Couple, two persons over 21, one person 16-18
	3	3	0	Couple, one person over 21, one person 16-18
	3	0	3	Couple, two persons over 21
	4	3	1	Couple, one person over 21
8	5	3	2	Couple, one person over 21
9	4	4		Two couples, one person 16-18

However, with the full 1953 data set at our disposal, we have additional household types, so we make assumptions in line with those of Abel-Smith and Townsend in this 'other' category. Also since we have no way of distinguished 16-18 year olds from 18-21 years olds for any households, we follow Abel-Smith and Townsend and assign an average National Assistance rate for all in, or assumed to be in, the 16-21 age range.