

# Chapter 1

## Introduction

### Background

This is the thirteenth edition of the Households Below Average Income (HBAI) series. This report presents information on potential living standards as determined by disposable income in 2000/01, changes in income patterns over time and also income mobility in the 1990s.

### What does HBAI measure?

Households Below Average Income (HBAI) uses household disposable incomes, adjusted for household size and composition, as a proxy for material living standards or, more precisely, for the level of consumption of goods and services that people could attain given the disposable income of the household in which they live.

In order to allow comparisons of the living standards of different types of households, income is adjusted to take into account variations in the size and composition of the households in a process known as equivalisation, which is explained in more detail below.

A key assumption made in HBAI is that all individuals in the household benefit equally from the combined income of the household. This enables the total equivalised income of the household to be used as a proxy for the standard of living of each household member.

Average 'household' income referred to in this volume is thus in actual fact the average 'living standard' for individuals as determined by their net disposable equivalised household income.

See Appendix 1 for a detailed definition of net disposable household income and Appendix 2 for a more 'in depth' presentation of the methodology underpinning HBAI.

### Equivalisation

As explained above, income is adjusted, or equivalised, to take into account variations in both the size and composition of the household. This process reflects the common-sense notion that a family of several people needs a higher income than a single person in order for both households to enjoy a comparable standard of living.

Equivalence scales conventionally take a couple with no children as a reference point. The incomes of larger households are adjusted downwards and the incomes of smaller households adjusted upwards relative to this benchmark. Most income values quoted in this publication relate to the 'cash' income for a couple with no children, and the equivalisation process must be reversed in order for them to be converted to cash incomes for other family types (see HBAI Main Tables A2 for examples).

The adjustment also incorporates assumptions about the extent of which sharing allows individuals to attain a higher standard of living than they would if living independently with the same cash income. Appendix 2 gives more detail.

### Housing Costs

It could be argued that the costs of housing faced by different households at a given time do not always match the true value of the housing that they actually enjoy, and that housing costs should therefore be deducted from any definition of disposable income. However, any measure of income defined in this way would understate the relative standard of living of those individuals who were actually benefiting from a better quality of life by paying more for their accommodation. Income growth over time would also understate improvements in living standards where higher costs reflected improvements in the quality of housing.

Conversely, any income measure which does not deduct housing costs will overstate the living standards of individuals whose housing costs are high relative to the quality of their accommodation (some residents of London for example). Income growth over time is also likely to overstate improvements in living standards, for low-income groups, as a rise in Housing Benefit to offset higher rents would be counted as an income rise.

Therefore, HBAI presents analyses of disposable income on two bases: Before Housing Costs (BHC) and After Housing Costs (AHC). This is principally to take into account variations in housing costs that themselves do not correspond to comparable variations in the quality of housing. A definition of housing costs can be found in Appendix 1.

## 1 Introduction and summary of key findings

### Self-employed

As recommended in the 1996 HBAI Methodological review, analyses in this volume are presented excluding the full-time self-employed. This is because a significant proportion of this group reports incomes that do not reflect their living standards. There are also recognised difficulties in obtaining timely and accurate income information from this group. Reference is made to the whole population where results differ.

### Definition of 'low income'

Traditionally, HBAI has defined low-income households in terms of thresholds of *mean* income, focusing on half-mean income in particular. However, in November 1998, the Statistical Program Committee of the European Union agreed that thresholds of *median* income and in particular, 60 per cent of median income, should be used when making international comparisons of numbers of people on low incomes. HBAI now presents results on both bases.

### Data Sources

The main source of data used in this publication is the DWP Family Resources Survey of Great Britain (FRS), which is a continuous cross-sectional survey with a sample of some 24,000 households. As the FRS does not track individuals over time, analysis of incomes is supplemented by the use of longitudinal data from the British Household Panel Survey (BHPS), which is carried out by the Institute for Social and Economic Research (ISER) UK Longitudinal Studies Centre at the University of Essex.

### Population Coverage

Both the FRS and the BHPS are surveys of private households. This means that people in residential institutions, such as nursing homes or university halls of residence and also homeless people are excluded from the scope of the analysis presented here. Geographically, neither survey covers Northern Ireland and the area of Scotland north of the Caledonian Canal is excluded from the FRS.

### National Statistics Quality Review of Income Statistics

As part of the National Statistics Quality Review of Income Statistics, the DWP has launched a joint review of the Households Below Average Income (HBAI) and Pensioners' Incomes (PI) statistical reports. Its purpose is to establish whether the HBAI and PI series continue to meet the needs of their users and, where they do not, how best to meet them. It will consider the definitions and methodology used and also the timeliness and accessibility of the statistics. Recommendations and conclusions arising from the consideration of these issues will be published in a report in 2002. We welcome your views on any of the issues raised in the review, further details of which are available on the DWP website within the online documents section at the following URL: <http://www.dwp.gov.uk/asd/>

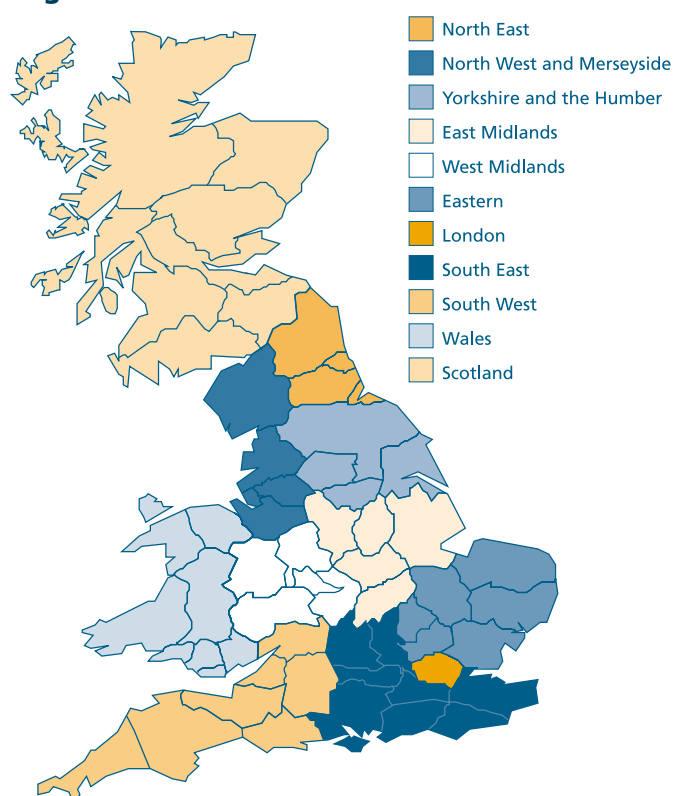
### Reliability of Results

All figures presented in HBAI are estimates taken from sample surveys and, as such, are subject to variation as a result of both sampling error and bias due to non-sampling errors. These areas are covered in detail in Appendix 2, as well as being outlined briefly below:

- **Sampling error** - as mentioned above, HBAI is derived from sample surveys and all results are subject to sampling error. This will vary to a greater or lesser extent depending on the level of disaggregation at which results are presented. Estimates of income growth between years are particularly vulnerable to sampling error.
- **Non-response** - as with any survey, HBAI results are also at risk from systematic bias due non-response by households selected for interview in the FRS. In attempt to correct for this, estimates are weighted using population totals in an attempt to correct for differential non-response.
- **Equivalence scales** - the results presented in HBAI are calculated using the McClement's equivalence scales. Some results, particularly those relating to the composition of the low-income population, are susceptible to the choice of equivalence scales. Results that are particularly sensitive to the choice of equivalence scale are highlighted in the HBAI Main Tables.
- **Income components** - as previously mentioned, there are particular problems with the collection and quality of data relating to the incomes of the *self-employed*. The FRS also records a shortfall in *investment income* when compared with National Accounts totals. This may lead to an understatement of total income for some groups for whom this is a major income component, such as single pensioners, although it is likely to be more important for those at the top of the income distribution.
- **High incomes** - comparisons with the Inland Revenue's Survey of Personal Incomes (SPI), which is drawn from tax records, suggests that the FRS both under-reports the number of individuals with very high incomes and also understates the magnitude of their incomes. As the estimate of mean income is very sensitive to fluctuations in incomes at the top of the distribution, an adjustment to correct for the above is made to 'very rich' households in FRS based results using SPI data.
- **Incomes as a guide to living standards** - comparisons of household income and expenditure suggest that those households reporting the lowest incomes may not have the lowest living standards. Results for the bottom ten per cent of the income distribution should not, therefore, be interpreted as having the bottom ten per cent of living standards.

- **Geographical disaggregation** - the sample size of the FRS is large enough to allow analysis at regional level for some results. **Figure 1.1** shows how Great Britain and England are subdivided into their constituent countries and regions respectively. Further work to establish what results, if any, at sub-regional level can be presented is ongoing as part of the National Statistics Quality Review of HBAI currently being carried out.

**Figure 1.1: Great Britain and Government Office Region**



## Acknowledgements

As in previous years, the DWP would like to thank the Institute of Fiscal Studies (IFS) for their help in checking and verifying the income data underlying the main results in this edition.

We are also grateful to the Inland Revenue for the provision of aggregated data from the Survey of Personal Incomes and to the staff at Corporate Document Services for their help in production of this publication.

The British Household Panel Survey data was made available through the UK Data Archive at the University of Essex. Responsibility for the accuracy and interpretation of the results lies solely with the DWP.

## Contact Points

We welcome feedback on our publications. If you have any comments or questions regarding this or previous editions of HBAI please contact the DWP statistician responsible for HBAI, Colin Wilkie-Jones, by telephone on 020 7962 8232 or by e-mail at [team.hbai@dwp.gsi.gov.uk](mailto:team.hbai@dwp.gsi.gov.uk).

This report is also available on the internet free of charge on the DWP website within the online documents, section at the following URL:

<http://www.dwp.gov.uk/asd/>

# Summary of key findings

## The Income Distribution

- Overall, the income distribution in 2000/01 was skewed towards the lower end, showing a relatively high concentration of individuals close to the 50 per cent of mean and 60 per cent of median low-income thresholds and a long 'tail' as incomes increase.
- Growth in incomes was spread evenly across the distribution from 1996/7-2000/01, whereas it was skewed heavily towards the top of the distribution over the period 1979-1995/96.
- The share of total income accounted for by the top quintile in 2000/01 was around six times that of the bottom.
- Benefits were the main source of income for the bottom quintile whereas earnings were the main source for the other four quintiles, increasingly so as you move up the distribution.

## Whole Population

- Over the period 1994/5-2000/01, the percentage of the population below various low-income thresholds, comprising fractions of mean and median income, showed no large or consistent changes, although there was evidence to suggest the figures rose slightly at the beginning of the period and then fell away again. The proportion of the population below low-income thresholds that remained fixed in real terms fell significantly over the same period.
- Individuals in workless families were much more likely to live in low-income households than those with one or more adults in full-time work.
- Families with children were more at risk of low incomes than their childless counterparts, with individuals in lone parent families being particularly at risk of low incomes.
- Single female pensioners had a higher risk of living in low-income families than single male pensioners or pensioner couples.
- Individuals living in households headed by a member of an ethnic minority community were more likely to live in low-income households. This was particularly the case for those households headed by someone of Pakistani/Bangladeshi ethnic origins.
- Individuals in families containing one or more disabled people were more likely to live in low-income households than those in families with no disabled person.

- Individuals living in Local Authority or Housing Association accommodation were more likely to live in low-income households than other tenure types.
- Just over one in five individuals in low-income households did not have access to a bank account.
- Individuals living in the North East and, on an After Housing Costs basis only, London were at particular risk of low incomes. Those individuals living in the South East and Eastern Regions were least likely to live in low-income households.

## Children

- Overall, whilst the proportion of children below various fractions of contemporary mean and median income in 2000/01 were broadly similar to those in 1994/5, the figures showed a rise in the earlier years of the period and fell away again in later years. There was a pronounced fall, particularly in later years, in the proportion of children below income thresholds held constant in real terms.
- Between 1996/7 and 2000/01, and between 1998/9 and 2000/01, there was a fall in both the percentage and number of children below 60 per cent of contemporary median income.
- Children were more likely to be in the bottom two quintiles, and less likely to be in the top two quintiles of the income distribution than the population as a whole.
- Children in single-parent families were much more likely to live in low-income households than those in families with two adults.
- Children in workless families were much more likely to live in low-income households than those with one or more adults in work.
- Children in large families were much more likely to live in low-income households.
- Children in families containing one or more disabled persons were more likely to live in low-income households than those in families with no disabled persons.
- Children living in households headed by someone from an ethnic minority were more likely to live in low-income households. This was particularly the case for those headed by someone of Pakistani or Bangladeshi origin.
- Children in families where the mother of the family was aged under thirty or over fifty-four were more likely to live in low-income households than those with mothers in other age-groups.

- Children living in families where the youngest child was aged under five were more likely to live in low-income households.
- Children in the North East (and London on an After Housing Costs basis only) had a high risk of low incomes. Those in the South East and Eastern regions were least at risk.

### Working-age Adults

- Over the period 1994/5-2000/01, there was little or no change in the percentage of working-age adults below various low-income thresholds, comprising fractions of contemporary mean and median income. There was, however, a steady fall in the percentage of working-age adults below various low-income thresholds, comprising fractions of mean and median income that were fixed in real terms.
- Working-age adults were more likely to be in the top two quintiles and less likely to be in the bottom two quintiles of the income distribution than the population as a whole.
- Working-age adults in workless households or families were much more likely to have low incomes than those in households or families with one or more adults in full-time work.
- Working-age adults with children were more likely to live in low-income households than their childless counterparts. This was particularly true for lone parents.
- Working-age adults living in families containing one or more persons who were disabled - in the sense of having a long-term illness, disability or infirmity that limited their activity in some way - were more likely to live in low-income households. Working-age adults who were disabled or had a disabled partner, accounted for one-third of those in households below 50 per cent of mean or 60 per cent of median income.
- Working-age adults living in households headed by someone from an ethnic minority community were more likely to live in low-income households. This was particularly the case for those headed by a member of the Pakistani/Bangladeshi communities.
- Working-age adults with no educational qualification were twice as likely to live in low-income households as those with a qualification.
- Working-age adults in the North East were most likely to live in low-income households and those in London also had a risk of low income on an After Housing Costs basis only. Those in the South East and Eastern regions had the lowest risk of low incomes.

### Pensioners

- Overall, from 1994/5-2000/01, there was little or no consistent change in the percentage of pensioners below thresholds of mean and median income, although there was evidence to suggest that figures for most thresholds rose slightly at the beginning of the period before falling away again in later years. This applied equally from 1996/7-2000/01, with the only difference being that the 60 and 70 per cent of median measures After Housing Costs showed a clear fall.
- From 1994/5-2000/01, there was a pronounced fall in the percentage of pensioners below thresholds of mean and median income held constant in real terms, especially in later years.
- Pensioners were more likely to be in the bottom two quintiles and less likely to be in the top two quintiles of the income distribution than the population as a whole, although less so on an After Housing Costs basis.
- Single female pensioners as a whole were more likely to live in a low-income household than their male counterparts.
- The older the age of the male, the greater the likelihood of low income for pensioner couples. However, the differential between age groups was less marked for single pensioners.
- Pensioner families living alone were more at risk of low income than those living with others.
- Pensioners in a household headed by someone from an ethnic minority were more likely to live in low-income households.
- Pensioners living in families not in receipt of a personal or occupational pension had a much greater risk of low incomes than those families with one or more pensioners in receipt, much more so for couples than singles.
- Pensioners living in the North East and both the West and East Midlands had a relatively high risk of low income, with those in the South East and London (the latter on a Before Housing Costs or BHC basis only) were least likely to experience low income. On an After Housing Costs basis, pensioners in Yorkshire and the Humberside also had a relatively high risk of low income and those in London were much worse of than on a BHC basis.

### Low Income Dynamics

- Less than ten per cent of the population remained in the same quintile of the income distribution for the whole of the period 1991-99.

## **1** Introduction and summary of key findings

- The majority of individuals who were in the bottom and top quintiles in 1991 spent five or more years in that quintile from 1991-99. In contrast, the majority of those individuals in any of the middle three quintiles at the start of the period spent five or more years in other quintiles.
- In 1999, the majority of individuals who were no longer in the same quintile as they had been in 1991 had finished up in an adjacent quintile. Those who had finished in a higher quintile had spent the majority of their time above their original quintile and vice versa for those finishing in a lower quintile.
- Individuals in the top and bottom quintiles in 1991 were more likely to be in the same quintile in 1999, and to have spent the majority of their time in that quintile over the period, than those in the middle three quintiles.
- Over any four year period from 1991-1999, around a third of individuals spent at least one year, 1 in 10 spent three or more years and 1 in 20 spent all four years below 60 per cent of median household income.
- Over the nine year period 1991-99, just under half of individuals spent at least one year, just over ten per cent spent at least five years and two per cent spent all nine years below 60 per cent of median household income.
- From 1991-99, there was little change in persistent low-income, as defined by spending three or more years out of any four year period in a household with below 60 per cent of median income, for working-age adults. There was a suggestion of a slight rise in persistent low-income for pensioners and a slight fall for children.
- Single pensioners, those living in single parent families, workless households, the social rented sector or with no qualifications were more likely to experience persistent low income, as defined above, than other groups. There is some evidence that, during the 1990's, the incidence of persistent low income fell for single parent families and workless households, with a slight rise for pensioners.