Introduction

Background

This is the fourteenth edition of the Households Below Average Income (HBAI) series. This report presents information on potential living standards as determined by disposable income in 2001/02, changes in income patterns over time and income mobility.

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.

Changes to the publication

Following discussion with HBAI users, a number of changes have been made to the analysis within the publication this year.

- All analysis now includes the self-employed (see below and Appendix 2 for further details).
- Pensioners are now defined as all those adults above state pension age. This is in contrast to previous publications in which pensioners were defined as all adults living in families where the head of the family was over state pension age. Working age are now defined as all those adults below state retirement age, compared to previous publications where they were defined by the head of the family.

- Family type breakdowns have changed. Pensioner couples now include all benefit units where one or more of the adults are over state pension age. This is in contrast to previous publications where pensioner couples were those where the male in the benefit unit was of state pension age or over. This means that working age couples are now defined as those where both adults are below state retirement age.

- The supplementary tables have now been expanded to show trends over time, between 1994/5 and 2001/02. The HBAI review recommendation was to remove the supplementary tables - however there was no clear consensus from users in favour of this. We have, therefore, adopted a compromise whereby we retain the tables but they have been reviewed and updated to include trends over time. If you require an update of any of the figures in last year’s supplementary tables, that are no longer included, please contact the HBAI team.

- New analysis has been added into chapters three to six showing savings, tenure and pension contributions.

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).
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The adjustment also incorporates assumptions about the extent to 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 better 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 (for a given quality of accommodation) 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.

Self-employed

As considered in the recent National Statistics review of HBAI, analyses in this volume are presented including the full-time self-employed. However, as a significant proportion of this group report incomes that do not reflect their living standards and there are recognised difficulties in obtaining timely and accurate income information from this group, reference is made to those including the self-employed.

Definition of ‘low income’

Traditionally, HBAI has defined low-income households in terms of thresholds of mean income. In November 1998, the Statistical Program Committee of the European Union agreed that thresholds 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, although this will be included in the FRS from 2002/03. The area of Scotland north of the Caledonian Canal was included in the FRS for the first time in 2001/02.

National Statistics Quality Review of Income Statistics

In 2001, as part of the National Statistics Quality Review of Income Statistics, the DWP launched a joint review of the Households Below Average Income (HBAI) and Pensioners’ Incomes (PI) statistical reports. Its purpose was to establish whether the HBAI and PI series continue to meet the needs of their users and, where they did not, how best to address those needs. It considered the definitions and methodology used and also the timeliness and accessibility of the statistics. Recommendations and consultation conclusions arising from the consideration of these issues will be published in a report in 2003. Further details of the review 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 to non-response by households selected for interview in the
FRS. In an attempt to correct for this, estimates are weighted using population totals in an attempt to correct for differential non-response. Department for Work and Pensions statisticians, in consultation with other departments, have been reviewing the grossing methodology for the DWP Family Resources Survey (FRS). As a temporary measure, an alternative grossing regime was produced to allow Scottish Executive statisticians to publish more detailed estimates for Scotland. Population estimates for children have also been placed on a more consistent basis. The effects of these changes on estimates for Great Britain are very small. Illustrative results showing the effect on HBAI headline results for the period 1994/5-2000/01 were released by DWP in November 2002. This alternative grossing regime has been used for all analyses in this edition of HBAI, and estimates for this time period have been revised accordingly.

- Recent investigations into differences between FRS estimates of worklessness and estimates from the Labour Force Survey, suggest that the FRS overstates the proportion of children in workless households. A report on findings is available at the URL: http://www.dwp.gov.uk - follow links statistics & research – statistics – Family Resources Survey - reports). If so, HBAI is likely to overstate the proportion of children in low-income households. This will be investigated further in 2003 with the start of comparisons between 2001 Census and FRS data. DWP statisticians will then devise a new grossing regime drawing on this exercise and other results from the census which will be used in future editions of HBAI.

- **Equivalence scales** - the results presented in HBAI are calculated using the McClements equivalence scales. Some results, particularly those relating to the composition of the low-income population, are susceptible to the choice of equivalence scales. In the past years, HBAI results presented in the Supplementary Tables section were compared against a range of alternative scales to assess their robustness. The process has temporarily been suspended in 2001/02 due to changes in the way these tables are produced. Our intention is to restore it in the next edition of HBAI and extend it to cover all results in chapters as well.

- **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 pensioners, although it is likely to be more important for those at the top of the income distribution.

- **High incomes** - comparisons with the Inland Revenues 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. The bottom 10 per cent of the income distribution should not, therefore, be interpreted as having the bottom 10 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**

- North East
- North West and Merseyside
- Yorkshire and the Humber
- East Midlands
- West Midlands
- Eastern
- London
- South East
- South West
- Wales
- Scotland
1 Introduction and summary of key findings

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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, Simon Lunn, by telephone on 020 7962 8232 or by e-mail at 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/hbai.html
Summary of key findings

The Income Distribution

- Overall, the income distribution in 2001/02 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 increased.

- There was income growth across the distribution as a whole from 1994/5-2001/02. Over this period, there was similar median income growth across the five quintiles.

- Benefits were the main source of income for the bottom quintile, whereas earnings were the main source for the other four quintiles.

- On one measure, the ratio of the incomes of the top quintile (fifth) of the population to the incomes of the bottom quintile showed little or no change, from 1994/5 or 1996/7 to 2001/02. On another measure, which is more sensitive to data that may be less reliable, the incomes of the top quintile increased relative to those at the bottom.

Whole Population

- Over the period 1996/7-2001/02, the percentage of the population below various low-income thresholds linked to contemporary median income showed only modest changes, with more consistent evidence of a reduction for income After Housing Costs (AHC) than for income Before Housing Costs (BHC). The picture for thresholds of contemporary mean income was less clear, with some evidence of a slight increase BHC and a fall AHC.

- The proportion of the population below low-income thresholds that remained fixed in real terms fell substantially 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, particularly those in lone-parent families.

- Single female pensioners had a higher risk of low-income than single male pensioners.

- 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.

- Around one in six individuals in low-income households did not have access to a bank account and seven in ten did not have access to the internet. Over half of individuals in low-income households lived in families with no savings.

- Individuals living in Inner London were most at risk of low income After Housing Costs; Wales and the Northern region of England also had a relatively high risk of low income Before Housing Costs. Those individuals living in the South East and Eastern regions and Outer London 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 2001/02 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 has been a large fall, particularly in later years, in the proportion of children below income thresholds held constant in real terms.

- 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. However, there has been a reduction in the risk of low income for those children in lone-parent families in recent years.

- Children in workless families were much more likely to live in low-income households than those with one or more adults in full-time work.

- Children in large families were much more likely to live in low-income households, although the risk of low income for this group has decreased substantially since 1998/9.

- 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.
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- 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 twenty-five were more likely to live in low-income households.
- Children in Inner London had a higher risk of low income than for any other region. Those in the South East and Eastern regions were least at risk.

Working-age adults

- Over the period 1994/5-2001/02 there was little change in the percentage of working-age adults below various low-income thresholds, linked to contemporary mean and median income. There was, however, a steady fall in the percentage of working-age adults below various low-income thresholds 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 and those families in which the head was aged under forty.
- 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 around one-third of those in households with below 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 approximately twice as likely to live in low-income households as those with a qualification.
- Working-age adults in Inner London had the greatest risk of low income After Housing Costs. Those in the South East and Eastern regions were least at risk of low income.
- Working-age adults in social rented accommodation had a particularly high risk of low income.
- Of those working-age adults in low-income households, almost three in five lived in families with no savings.

Pensioners

- Between 1994/5-2001/2, the proportion of pensioners living in households below thresholds of contemporary mean or median income Before Housing Costs tended to show little change or a slight rise. In general, for income After Housing Costs, the proportions tended to show a fall.
- From 1994/5-2001/02, there was a pronounced fall in the percentage of pensioners below low-income thresholds held constant in real terms, especially in later years.
- In 2001/02 pensioners were less likely to be in the top two quintiles of the income distribution than the population as a whole, and were more likely to be in the bottom two quintiles on a Before Housing Costs basis (or in the second quintile After Housing Costs).
- Single female pensioners were more likely to live in a low-income household than their male counterparts.
- The older the age of the head, the greater the likelihood of low income for pensioner couples. However, the differential between age groups was less marked for single pensioners, particularly After Housing Costs.
- Pensioner families living alone were more at risk of low income than those living with others, as were those living in a household headed by someone from an ethnic minority group.
- Pensioners living in families not in receipt of a personal or occupational pension had a much greater risk of low income than those families with one or more pensioners in receipt.
- Pensioners living in the East Midlands had a relatively high risk of low income on a Before Housing Costs basis. For income After Housing Costs those in Inner London had a risk of low income that was well above the national average for pensioners.
- The majority of pensioners in low-income households were owner-occupiers who owned their homes outright (just under three-quarters Before Housing Costs, falling to just over half AHC, of those below 60 per cent of contemporary median household income).
Of those pensioners living in low-income households, (where low income is defined as being below 60 per cent of contemporary median income) around one-third had no savings and around one in ten lived in families with total savings of £20,000 or more.

Low Income Dynamics

- Over the period 1991-2000, there was considerable movement around the income distribution. For example, less than 10 per cent of the population remained in the same quintile of the income distribution for the whole of the period.
- Around half of individuals who were in the bottom and top quintiles in 1991 spent six or more years in that particular quintile from 1991 to 2000. Individuals in any of the middle three quintiles were less likely to have spent the majority of their time in their original 1991 quintile.
- In 2000, individuals who were no longer in the same quintile as they had been in 1991 were most likely to be 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.
- Over any four-year period from 1991 to 2000, around a third of individuals spent at least one year, around 1 in 10 spent three or more years and 1 in 20 spent all four years in households with below 60 per cent of median household income.
- Over the ten year period 1991 to 2000, just under half of individuals spent at least one year, 15 per cent spent at least five years and 2 per cent spent all ten years in households with below 60 per cent of median household income.
- From 1991-2000, 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, either in the population as a whole, or working-age adults. Whilst over the period as a whole, there was a slight rise in persistent low income for pensioners and fall for children, there has been little or no change for either group since the period 1994-97.
- Single pensioners, those living in single parent families, workless households, the social rented sector or those with no qualifications were more likely to experience persistent low income, as defined above, than other groups. There is some evidence that, during the 1990s, the incidence of persistent low income fell for single-parent families and workless households.