

UNITED KINGDOM

ANALYSES OF HOUSEHOLD INCOME STATISTICS IN THE UNITED KINGDOM

by

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for presentation at

**Seminar on Poverty Statistics
Santiago
7-9 May 1997**

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Introduction

- 1 The paper describes the main analyses of household income data undertaken by the Government Statistical Service in the United Kingdom. The analyses are *The Effects of Taxes and Benefits on Household Income* produced by the Office for National Statistics and *Households Below Average Income (HBAI)* produced by the Department of Social Security.
- 2 The Effects of Taxes and Benefits on Household Income estimates the distributional impact of taxation and government expenditure on household income. The series, which has been produced annually since the early 1960s, takes original or market income as its starting point and then estimates how government intervention in the form of tax raising and spending redistributes income between households. For this reason, the analysis is also known as the redistribution of income (ROI).
- 3 Households Below Average Income provides estimates of patterns of personal disposable income and of changes over time. It attempts to measure people's potential living standards derived from goods and services financed from disposable income. The series, which uses 1979 as a base year, is now produced annually. The latest report, the seventh in the series, covers the years 1979 to 1993/94. As the title would suggest, HBAI concentrates on the lower part of the income distribution, but provides comparisons with the upper part where appropriate.
- 4 The main data source for both these analyses has been the Family Expenditure Survey. This is a continuous household survey carried out each year with an achieved sample of about 7,000 households (about 1 in every 3,000 households). The response rate is around 70 per cent although it has fallen slightly in recent years. The survey covers private households only, people living in hotels, lodging houses, and in institutions such as old peoples' homes are excluded. Each person aged 16 and over keeps a full record of purchases made during 14 consecutive days and answers questions about hire purchase and other payments. The respondents also give detailed information, where appropriate, about income (including cash benefits received from the state) and payments of income tax. Information on age, occupation, education received, family composition and housing tenure is also obtained.
- 5 HBAI is in the process of moving its base to the Family Resources Survey, a new survey of household income sponsored by the Department of Social Security (DSS). This survey provides detailed information about the characteristics and finances of households. The questionnaire covers primarily income, but also other areas of interest to the DSS such as informal care of the elderly and disabled, occupational pensions, childcare and savings. The survey is much larger than the FES with an achieved sample of 25,000 households. The ROI cannot make use of the survey as it does not collect data on expenditure.

Redistribution of Income

- 6 ROI examines the impact of government taxation and expenditure on the distribution of income by allocating the revenue to those households which paid the taxes and the expenditure to those households which benefited from it, wherever this is possible. Some outlays and revenue cannot be allocated to households, for example there is no clear conceptual basis for determining the benefit to each household of defense expenditure. In practice, between 55 and 60 per cent of both revenue and expenditure are allocated to households. ROI illustrates the redistributive effects of taxes and benefits through a sequence of income concepts, namely:

original income	income from employment, investment, occupational pensions, etc.
gross income	original income plus government cash benefits
disposable income	gross income less direct taxation
post-tax income	disposable income less indirect taxes
final income	post-tax income plus imputed income from government non-cash benefits such as education, health, etc.

- 7 Original income is the annualized market income of all members of the household, where annualized wages, for example, are calculated as the annual rate based on the respondent's normal wage abated from time lost through unemployment, sickness, etc. Income in kind from company cars and subsidized loans are included as part of original income. Income from cash benefits is based on information from the respondents as are direct taxes, that is income tax, local taxes and National Insurance contributions. Indirect taxes (value added tax, excise duties, custom duties, etc.) are assigned to households on the basis of their expenditure on goods and services. The assumption is adopted that indirect taxes levied on and paid by businesses are fully passed on to households in the prices they pay for goods and services. The national benefits of government expenditure on state education, health, housing and travel subsidies are allocated to households. The Allocation of health expenditure is on an "at risk" or insurance principle whereas the allocation for the other expenditure is based on usage.
- 8 The basic unit of analysis is the household, as spending on many items, particularly on food, housing, fuel and light, is joint spending by members of the household. Households are ranked according to disposable income after allowing for differences in household composition. The equivalence scale used to adjust for household composition is known as the McClements scale. It was developed in the mid-seventies based on expenditure data from the FES. At present the analysis is only for survey households. However, work is currently underway to test the feasibility of re-weighting the data to reflect the population of the UK.
- 9 The results show the different sources of income and the taxation paid by households by quantile groups and by household type. The analysis aims to present the most meaningful results for the year, figures cannot be easily compared over time as the tax-benefit system and the FES change. However, shares of income and Gini coefficients are sufficiently robust to

shed light on broad trends in income distribution and are shown from 1977 onwards. The latest article, for 1995-96, was published in the March 1997 edition of Economic Trends.

Households below average income (HBAI)

- 10 HBAI reports on the income distribution in the current period and on the particular types of people to be found at various points in the income distribution as well as describing how the distribution has changed over time and how different socio-economic groups have fared. In addition, the latest report makes use of information from the British Household Panel Survey to analyze the income mobility of individuals, particularly those at the lower end of the distribution, over time. The report is based upon individuals, not households.
- 11 Income in HBAI refers to disposable household income: that is income after the deduction of income tax, National Insurance contributions and local government taxes. Each person's income is aggregated across the household and adjusted to reflect the composition of the household by using the McClements equivalence scale. The data used is for current income: that is the income reported at the time of the survey interview.
- 12 HBAI uses two measures of income, one before housing costs have been deducted (BHC), the other after (AHC). The two income measures are seen as complementary indicators of changes and differences in living standards over time. The need for two measures arises from the variation in housing costs: in part this reflects variations in the quality of housing, but there are also significant costs variations which do not reflect quality variations.
- 13 Research has shown that current income as reported in a household survey may not necessarily be the best indicator of living standards for some households. This is particularly true of households with members who are self-employed. In view of this, a comparison between income and expenditure distributions is shown and some results are presented both excluding and including households with self employed members.
- 14 Comparison of real income levels over time are made using price index deflators: the Retail Prices Index (RPI) net of local taxation for the Before Housing Cost (BHC) incomes and the RPI net of all housing costs for After Housing Cost (AHC) income.
- 15 The survey results are grossed up so that population totals reflect the whole household population of the UK. Different grossing factors are applied to different types of benefit unit in order to correct for the over -and under- representation of these groups.
- 16 An adjustment is made to the FES and the FRS data to compensate for the haphazard variation in the numbers of very rich households in each year's survey, which results from the limited sample size and the relatively poor response rate of such households. This adjustment is made using information from anonymised tax records supplied by the Inland Revenue.
- 17 The latest report, Households Below Average Income 1979 - 1993/94, was published by the Stationery Office in November 1996. The analysis in this edition covers the calendar years: 1979; 1992 and 1993 combined; and the financial years 1993/4 and 1994/5 combined.