10.1 Introduction: Reviewing a Century

This chapter reviews the distribution of income and wealth in Britain over the twentieth century. Material circumstances - earnings, savings, taxes and benefits - are only part of the human story of the century, as Milton reminds us. It is not enough to know how much people earn or what is their family income. There are other dimensions. The typical manual worker in 1900 worked longer hours than today, in less pleasant and more dangerous conditions; he would have left school earlier than his great-great-grandchildren today; if he or his family fell sick there was nothing comparable to modern medicine. Money income - on which attention is focused in this chapter - is an imperfect indicator of the quality of life. At the same time, it is an important ingredient. Over the century, national output of goods and services has risen markedly, and the implications of this growth depend crucially on how rising prosperity has been shared.

A century is a long span of years, and to do justice to the distributional record requires a historian's skills, which I do not possess, and a perspective which will only become possible with the passage of time. The more modest aim of this chapter is to
assemble the available statistical information. This evidence has serious limitations. Statistics collected at different dates are often not comparable and hence do not allow conclusions to be drawn about changes over time. Every effort is made here, as in other chapters, to warn the reader where data sources are not consistent, since this problem is not always recognised in the literature, series often being joined regardless of cautionary footnotes, creating the impression that more can be deduced than is safe. There are in fact major gaps in what we can say. Of the eight graphs that contain time series information, only four begin before the Second World War.

Consistency is the first theme of the chapter. The second is the relation between statistical data and real-life experiences. On looking at charts or tables, it is easy to lose sight of the fact that they are based on actual people, so I illustrate the figures with reference to individual circumstances, beginning with the survey of York by Seebohm Rowntree in 1899 and Violet Butler's account of Oxford in 1912. What was meant by a particular standard of living in 1900? What were the low paid jobs, and what are they now? Who were, and are, the wealthy?

In comparing earnings or incomes at different dates during the century, a crucial issue is the adjustment to be made for rising prices and standard of living. What does a shop porter's wage of 17 shillings (£0.85) a week before the First World War mean in 1999? What was the 26 shillings (£1.30) a week paid in unemployment insurance to a couple in 1936 worth in today's prices? The Central Statistical Office (now Office for National Statistics) has published in Retail Prices 1914-1990 (1991) cost of living indices covering this period, which we can link forwards with the All Items Retail Price Index. On this basis, £1.30 in 1936 had the purchasing power of some £37 in 1997. The use of these indices is, however, open to debate, since there are good reasons for believing that the official price index understated inflation during the Second World
War. Using an alternative price indicator for the period 1938 to 1948 (from Feinstein, 1972, Table 65) indicates that the unemployment insurance benefit of 1936 had the purchasing power of £48 in 1997, bringing it closer to that actually paid (£78 a week). As this illustrates, statistics are open to debate, and we have to make choices. In this chapter, I use the Feinstein index (see Appendix).

10.2 A Century of Rising Incomes

Material living standards in Britain as a whole have risen substantially over the century, as has been shown in Chapter 9. Most of the growth in national income took place after 1920, and in the subsequent 75 years the average growth rate of per capita disposable personal income was 1.75 per cent per year in real terms, or by a factor of 3.7. The magnitude of this increase should be emphasised. It would require a very considerable worsening of the distribution for this not to translate into an all-round improvement. Suppose, hypothetically, that the share of the bottom fifth in total income had halved over the period. The bottom 20 per cent would still be nearly twice as well off today in purchasing power as their counterparts at the start of the century.

The rise in living standards is evident from qualitative evidence about life-styles. To make the link between statistics and people, I have drawn in Table 10.1 on the work of Rowntree: first the 1899 survey of York (Rowntree, 1901), and, second, the report of the Joseph Rowntree Foundation Inquiry into Income and Wealth (Hills, 1995). The upper part of Table 10.1 summarises three biographies of families in Rowntree's study of York in 1899. They are drawn from his class D, which is the top working class category. Average total earnings for families in this class were 41 shillings ninepence farthing, or in 1997 prices some £125 a week. The living standard is most obvious from the housing conditions, which, even for this relatively comfortably-off group, were
crowded (in family 29, four adults and five children live in 5 rooms) or had poor amenities (family 46 shared a water tap).

The lower part of Table 10.1 shows three biographies of families constructed from the Family Expenditure Survey for 1990/1 by the Rowntree Inquiry (they are fictional but are based on statistical data). The families are drawn from the middle fifth of the 1990 income distribution (40th to 60th percentiles). Little reference is made to housing quality, plumbed bathrooms and kitchens being taken for granted by the great majority of today's population. These biographies illustrate some of the social and economic changes which have taken place over the century. Owner occupation is now widespread. It is much rarer for young adults to live at home with their parents or as lodgers. People live independently to a much greater degree than in 1900, with many more single person households. Family size has fallen. Married women are typically in paid work. There are state and occupational pensions. These changes are important both substantively and because they may influence the interpretation of the statistics. As Titmuss (1962) warned, changing forms of remuneration, of fiscal policies, of family composition, all affect the significance of the recorded income distribution.

10.3 Economic Forces and Personal Incomes

National income per head has risen, but the step from the national income accounts of Chapter 9 to household incomes is not a straightforward one. We cannot read directly from one to the other. Figure 10.1 shows the main elements of GNP and of Household Income, with their magnitudes in 1996. Two elements are broadly the same: employment income and self-employment income are received directly by individuals (although people would not regard as part of their income the contributions paid by
employers for social security and other schemes, and these have been deducted in moving from GNP to Household Income).

Profit income, on the other hand, is received by companies or by public corporations or by government. Where it is received by shareholder-owned companies, then it ultimately accrues to individuals, but Household Income records only the dividends and interest paid currently, not that part of profit retained within companies for re-investment. Part of the profit is paid abroad; conversely, property income is received from abroad. Rent is paid to individuals or accrues to companies or the public sector. A large part of dividend, interest income and rent goes to pension funds and other financial intermediaries. Again these ultimately benefit individuals, but the payments which appear in Household Income are in the form of occupational pensions and other benefits (shown as "Private pensions in Figure 10.1). When we come to look at the distribution among individuals, the statistics only record the amounts actually received, so that a sizeable amount of total income remains unallocated. Conversely, state transfers form a major element of Household Income which has no counterpart in Gross National Product, and are substantial, amounting in total to the same as income from self-employment plus rent, dividends and interest.

Earnings from employment are the single largest source of income. Changes over the century in the share of employment income are shown in Figure 10.2. Part of self-employment income also represents reward to labour, and the figure has been calculated on the assumption that it is split in the same way as the rest of national output. (There is a break in continuity in 1920, since the earlier figures include Southern Ireland.) At first sight, Figure 10.2 suggests a remarkable degree of distributional stability. The share of employment income has varied between 70 and 80 per cent since 1920. However, this is quite a wide range. When viewed in terms of the
share of non-employment income, it means that this share has varied between 20 and 30 per cent. Within the period we can detect periods of increase and decrease. The share of employment income cycled around a downward tendency in the inter-war period, was higher after the Second World War, and, after a rise in the mid-1970s, fell again. The macro-economic distribution of income is not an unchanging constant.

10.4 Earnings Differentials: the End of Stability?

Information about earnings can be obtained from household surveys, such as the regular Family Expenditure Survey (FES), used, for example, by Gosling et al (1994) to measure the trends over time in the distribution of earnings. The main source since 1968 has however been the employer-based survey of earnings, the New Earnings Survey (NES), which provides a rich source of information about individual earnings (although, unlike the FES, it does not allow information to be combined for different members of the same household). The NES is based on a sample defined in the same way each year (all workers whose National Insurance number ends in 14). It has a significant element of non-response, but has the advantage of a large sample size: the 1997 figures, for example, are based on some 110,000 returns.

Figure 10.3 shows the changes in earnings dispersion over the period 1968-1997. The figures relate to all full-time workers, male and female, and includes both those paid at adult rates and those on other rates, thus avoiding the discontinuity in the published figures in 1983 (when the definition was changed from "adult" to "those paid on adult rates"). Dispersion is represented in terms of the bottom decile (10th percentile) and top decile (90th percentile) expressed as a percentage of the median. The ratio of these two (top decile over bottom decile) is typically referred to as the "decile ratio".
Conventional wisdom is that the distribution of earnings in Britain was stable for the first 75 years of this century and then in the Thatcher years began to show widening dispersion. In fact, Figure 10.3 suggests that over the 1970s the bottom decile was rising relative to the median, and the top decile falling. These changes may have been associated with high rates of inflation or with government measures, such as income policies which included at one time a restriction of increases to £6 a week (see references in Atkinson, 1997). From the late 1970s the distribution began to widen steadily. The bottom decile fell as a percentage of the median, losing some but not all of the ground gained in the 1970s. The deterioration in the position of the bottom decile appears to have stopped in the 1990s. More marked, and continuing in the 1990s, is the rise in the top decile, which increased from 167 per cent of the median to 187 per cent in the 15 years after the election of Mrs Thatcher. Overall, the decile ratio increased from 2.87 in 1977 to 3.41 twenty years later.

Within the overall distribution there have been changes. The Equal Pay Act was passed in 1970, requiring full compliance in equal pay for men and women by 1975, and the Sex Discrimination Act was also introduced in 1975. The median earnings of adult women working full-time rose from 54 per cent of the male median in 1970 to 66 per cent in 1983 (Atkinson and Micklewright, 1992, Table BE3), and continued subsequently, median earnings for those paid on adult rates rising from 67 per cent in 1983 to 75 per cent in 1997 (New Earnings Survey, 1993, Table 15 and 1997, Table A36). However, the picture is more complicated than these headline figures suggest. Over the 1980s, the dispersion of earnings was widening, so that the earnings of the bottom decile of women in fact ceased to gain on those of the median male - see Figure 10.4. The top decile of women continued to move ahead, so that they rose from the male median (in 1980) to a third higher (in 1997). These figures relate to full-time workers.
Harkness et al (1995) using data from the General Household Survey show that the gains for part-time women workers have been much less, so that the wife in Family 29 in Table 10.1 may not have enjoyed the same rise relative to her male counterpart.

Returning to the overall distribution, we have seen that the period post-1968 cannot be characterised as one of stability. What of the earlier part of the century? There is no evidence comparable with the New Earnings Survey, but the Board of Trade in 1906 and Ministry of Labour in 1938 and 1960 had undertaken earnings surveys. For full-time male manual workers, in the sectors covered, the lowest decile was 66.5 per cent of the median in 1906, 67.7 per cent in 1938, and 70.6 per cent in 1960, according to the figures of A.R. Thatcher, who comments that

"in a period when the level of adult male manual earnings increased [tenfold], it appears that their dispersion ... changed very little" (1968, page 163), although he goes on to add that

"This appears to conflict with the widely held view that there has been a narrowing of the differentials between skilled and unskilled workers". Moreover, the figures for the top decile show more volatility: 156.8 per cent in 1906, 139.9 per cent in 1938, and 145.2 per cent in 1960. So that, between 1906 and 1938 there appears to have been a significant narrowing, although less than the change which took place in the opposite direction in the shorter period of the 1980s.

There are several reasons why we should be cautious in drawing conclusions about stability. First, considering a few years can be misleading. For instance, looking only at 1970 and 1981 one might conclude from Figure 10.3 that the top decile had not changed relative to the median, missing the fall and then rise in the 1970s. Secondly, the sources are not comparable. The pre-1968 surveys did not provide complete coverage of
manual workers: the 1938 enquiry did not cover agriculture, coalmining, dock labour, shipping, distributive trades, catering trades, entertainment industries, commerce and banking, and domestic service (Ainsworth, 1949, page 35). Male manual workers are only part of the labour force and, as is shown in Chapter 8, they have declined to not much more than a third of the total.

The pattern of earnings by occupational group has been studied by Routh (1980), whose estimates for men are summarised in Figure 10.5. In 1913-14, higher professional (including self-employed) earned on average 3½ times the overall male average, by 1978 this had fallen to 1.7 times. Skilled manual were 13 per cent higher than the average in 1913-14, but by 1978 had fallen to 91 per cent. The overall average has been increased by the substantial shift from lower paid to higher paid occupational groups, but the inter-group ratio of higher professional average earnings relative to those of unskilled workers has fallen from 5.2 in 1913-14 to 2.4 in 1978, and of skilled workers to unskilled workers from 1.68 times in 1913-14 to 1.28 in 1978. Evidence for the last part of the period shown is drawn from the New Earnings Survey. Using the same source, Elliott and Murphy conclude that

"the period 1970-1982 has witnessed a general reduction in skill differentials" (1990, page 89).

Who are in these groups? The mean for all male workers in 1913-14 was around £1.80, or 36 shillings (Routh, 1980, page 120). According to C. Violet Butler, writing about social conditions in Oxford in 1912, 30 shillings was then the minimum-time standard wage for printers, who were the largest group of skilled trades in the town, and a "prosperous" carpenter could make around 36 shillings at the busiest time, as could plumbers. The counterparts of these people in York were in Rowntree's top working class category. Journeyman bakers earned between 20 and 26 shillings; and overall, in
Oxford in 1912, men's weekly wages ran between 17 and 40 shillings, with the lower figure being received by carters, milkmen and shop-porters. Around the same date, Maud Pember Reeves and members of the Fabian Women's Group reported that in Lambeth "some of the more enviable and settled inhabitants" had wages ranging from 18 to 30 shillings a week. As recorded in *Round About a Pound a Week*, these people, with between 50 and 80 per cent of the male average

"generally are somebody's labourer, mate, or handyman. ... they may be fish-fryers, tailors' pressers, feather-cleaners' assistants, railway-carriage washers, employees of dust contractors, carmen for Borough Council contractors, or packers of various descriptions" (Reeves, 1913, pages 2-3).

Moving up the scale, and drawing on literary rather than factual evidence, Freddy Eynsford Hill in *Pygmalion* (1912) regarded a clerkship on 30 shillings a week as below his dignity, Lupin Pooter in *The Diary of a Nobody* started a new job at £200 a year, and the chef in Arnold Bennett's *Grand Babylon Hotel* (1902) had a salary of £2,000 a year raised by the new owner to £3,000 (or around £180,000 in 1997 prices).

In April 1997, the mean earnings of men working full-time paid on adult rates was £408.70 a week (New Earnings Survey, 1997, Table A28). Groups with average earnings close to this amount include sales representatives, computer engineers, and printers (New Earnings Survey, 1997, Table A13). Male carpenters and joiners on average earned £294.30, bakers earned £273.10, farm workers £249.10, and hospital porters £198.50 (i.e. less than half the mean). Those in non-manual occupations earnings above the average include secondary teachers averaging £489.90, chartered accountants £565.30, and personnel managers £668.60.
Changes in occupational differentials are only part of the story, and may be consistent with stable or increasing overall dispersion. Dispersion within the non-manual group is greater than that within the manual group, and a narrowing differential between the groups could have been offset by the rising importance of non-manual employment, as well as, in recent years, widening within-group dispersion. It should be stressed that there is very considerable dispersion within occupations. The 1997 decile ratio for carpenters, for example, is 2.07: i.e., the top tenth of carpenters earn at least twice more a week than the bottom tenth. The decile ratio for chartered and certified accountants is 2.16; that for engineers and technologists 2.40. Even if we were to turn ourselves into a nation solely of engineers and technologists, we would have no less earnings dispersion than the whole of Czechoslovakia prior to 1990 (Atkinson and Micklewright, 1992, Table CSE1).

**10.5 Spreading Popular Wealth?**

Capital income is the smaller part of total national income (see Figure 10.1), but it is more unequally distributed than earned income. Rather surprisingly, it is also the case that information is more readily available, since estimates have been made of the shares in total wealth owned by the richest 1 per cent, 5 per cent and 10 per cent for much of the whole century. These estimates are obtained from the data on estates left at death which are collected by the Inland Revenue as part of the operation of Inheritance Tax/Capital Transfer Tax, or previously Estate Duty. By applying age and sex related multipliers (to allow for differential mortality by age and sex), we obtain the estimates shown in Figure 10.6 of the share in total personal wealth of the top 5 per cent of adults. This is not a continuous series, as is indicated by the breaks in the lines.
Overall, even taking account of the breaks in the series, it is evident that the share of the top wealth group has fallen over the century, particularly in the period 1950-1980. A major factor has been the spread of "popular wealth". As described by Tawney (1931, page 81), the majority of people before the First World War were "almost propertyless". Of the eight working class weekly budgets in Oxford in 1909 itemised by Butler (1912), only one refers to putting money by for clothing, one to paying off debts, and one to a parish savings card. Few at that time were owner-occupiers, and only a small minority had deposits in savings banks. In 1900, there were only 585,000 share accounts in building societies (Boléat, 1982, Table 1.1), compared with over 30 million accounts in the 1990s (Annual Abstract of Statistics, 1996, Table 17.17). In 1900 there were 1.6 million depositors in Trustee Savings Banks (Horne, 1947, Appendix II), or considerably fewer than 10 per cent of the adult population. The households in York in 1899 described by Rowntree had little in the way of consumer durables.

By the 1930s, as is shown in Chapter 14, more people owned their own houses. Personal savings were also more widespread, although Figure 10.6 shows that wealth was still heavily concentrated. In 1938, newspapers made a great deal of the fact that "working class savings" had reached £3 billion, or £300 per family, equivalent to £11,000 in 1997 prices. The composition of this sum was examined by Hilton in his book Rich Man, Poor Man (1944), where he shows how misleading averages can be. There were 11 million people with accounts in the Post Office Savings Bank, but in 70 per cent of the cases in 1934 the balance was less than £25, the average being £4.05. Holdings were heavily skewed towards small amounts.

As may be seen from Figure 10.6, when, at the 1963 Royal Variety Show, John Lennon asked people in the cheaper seats to clap and the rest to "rattle your jewellery", there had already been a substantial decline in the share of the top wealth groups, and
this continued for the next 20 years. By the 1990s, two thirds of households had become owner-occupiers, and a quarter owned their houses outright (Social Trends, 1998, Table 10.6). Personal savings have continued to grow, and many people have significant wealth in the form of personal possessions, even if we net off the hire purchase and credit card debt. Of course, the relative price of personal property, notably consumer durables, has fallen. In 1922 William Morris cut the price of a four seater Cowley car from £525 (equivalent to around £15,750 in 1997 prices) to £341 (Adeney, 1993, page 76). Personal computers are a contemporary example.

A sizeable part of personal wealth now takes the form of prospective pensions, and an innovation in official statistics has been the extension of the wealth estimates to include the value of state and occupational pension rights. In 1993 these represented some £1,600 billion, or not far short of total marketable wealth of £1,863 billion (Inland Revenue Statistics 1997, Table 13.4). The impact of including pension wealth on the share of the top 5 per cent is shown in Figure 10.6. The share of the bottom 50 per cent rises from 7 per cent of marketable wealth to 17 per cent of total wealth when the estimated value of pension rights is included (Inland Revenue Statistics 1997, Tables 13.5 and 13.7). It is interesting to note how the value of state pension rights has been scaled down following the move in the Social Security Act 1980 to price rather than earnings indexation, and the reduction in the value of the State Earnings Related Pension following the Social Security Act 1986 (Stewart, 1991, pages 103-104).

What is perhaps surprising in Figure 10.6 is that the downward trend in wealth concentration so evident up to 1980 then became less marked; after 1980 the shares of the top wealth groups scarcely changed, despite the avowed intention of the Conservative Governments to encourage popular capitalism. One explanation is that
privatisation and the sales of council houses have been slow to have effect. According to Good, writing in 1990,

"the sale of houses ... can, as yet, have had only a small effect on the distribution of wealth. ... Although large discounts were available, most houses were subject to mortgage ... There has been an increase of about 6 million shareholders [but] most shareholders have only a small holding ... and the new share owners will not necessarily be concentrated among the least wealthy" (1990, pages 145-146).

Working in the opposite direction has been the substantial rise in share prices. Atkinson and Harrison (1978) found a strong positive association between the level of share prices and the share of top wealth groups.

Who indeed are the wealthy? In his pioneering study of inheritance, Josiah Wedgwood (1939) listed those leaving estates over £200,000 in 1924/25 (this date being virtually the beginning of the series in Figure 10.6), based on the *The Times* list of wills. Top of his list was Sir Everard Hambro, former Director of the Bank of England, who left the equivalent in 1997 prices of £72 million, followed by Sir Edward Hulton, newspaper proprietor with a similar sum, and the third Baron Masham leaving nearly £50 million, chief shareholder in Manningham Mills and owning about 24,000 acres, together with "some first-class pictures - Gainsborough, Sir Joshua, Romney, etc" (source *Who Was Who, 1916-1928*). Rubinstein (1981 and 1986) listed large estates left at death in the post-Second World War period (up to 1979). The largest was that of Sir John Ellerman, of the shipping line, who left £52 million in 1973, or some £350 million in 1997 prices. In the early 1980s, large estates included £28 million left by Sir Charles Clore, the financier, and £18 million left by the 6th Earl of Bradford (Rubinstein, 1986, page 153). *The Times* list of wills in the 6 months February-July 1998 contained
relatively few estates in excess of the £6 million corresponding to Wedgwood's 1924/5 cut-off. It included Mr R W Diggens, company director, with a net estate of £77 million, Mr C Sanders with £22 million, and the 9th Earl of Dartmouth with £8 million.

10.6 Fall and Rise of Overall Inequality?

We have discussed individual earnings and the wealth which generates capital income in the form of rent, dividends, and interest, or indirectly in the form of pensions, payments from life assurance, etc. To these forms of income we have to add transfers paid by the state, and deduct the amounts paid in income tax and National insurance contributions, in order to arrive at disposable income, which is the subject of this section. Taxes and transfers are examined in greater detail in the next section.

Earnings and wealth have been considered in individual terms, but in assessing economic circumstances we have to look at the income of the family or household as a unit. In the case of Family 29 in Table 10.1, since both are working they both appeared separately in New Earnings Survey (although she was not in fact in the figures cited earlier since she works part-time). We now add together their joint earnings, so that the resulting distribution of family income depends on who is married to whom. We have to resort to other sources of information, since the New Earnings Survey and the estate returns do not "marry" up people. The main sources are the income tax returns and household surveys, such as the Family Expenditure Survey (FES). The official estimates of income inequality made up to the mid-1980s, the "Blue Book" estimates, shown in Figure 10.7, were based on the Survey of Personal Incomes (SPI) drawn from the income tax records of a sample of taxpayers, carried out originally at 5 year intervals, but now annually (see Inland Revenue Statistics 1997, page 30). The SPI was supplemented by information from other sources, particularly about non-taxpayers, in
order to arrive at the Blue Book estimates (see Ramprakash, 1975). The information available in the tax records is now less than in the past, and the Blue Book series has not been published for years later than 1984/5. Official distributional statistics now rely largely on the FES, which is the basis for the other series shown in Figure 10.7.\textsuperscript{ix} The FES has several limitations which must qualify conclusions drawn with respect to the distribution of income. It is undoubtedly the case that certain forms of income, such as from self-employment and capital income, are under-stated in the survey. The survey covers only the household population. Nonetheless, it is a very fruitful source of information, and public access to these data has greatly enriched the analysis of income distribution.

Combining the incomes of those living together means that we have to address two important questions. What should be the unit of analysis? How should we allow for different-sized families or households? Most current statistical analysis of income inequality takes the household as the unit: ie the incomes are added of all those living in a particular household. This differs from the unit used when assessing entitlement for social security benefits, which takes account of other members of the household but is essentially based on the nuclear family, including only dependent children. Non-dependent children, or others living in the same household, are treated as separate units. The Blue Book estimates use the income tax unit, which is close to the nuclear family, and this is the basis for the Microsimulation Unit series. The more recent official estimates, the \textit{Households Below Average Income} (HBAI) series produced by the Department of Social Security are, as the name indicates, based on the household. The same practice is applied in the "IFS" series, due to Goodman and Webb (1994), which is constructed in a similar way to the HBAI estimates. It is open to debate whether grown-up children, or elderly parents, living at home, can be assumed to be have exactly the
same level of living as the core family, which is the assumption underlying choice of the household as the unit of analysis. On the other hand, even if we adopt the family unit, this leaves unaddressed the distribution between family members.

Differences in family or household size could be ignored. This was the practice adopted in the Blue Book series, the same total income received by single people and couples being regarded as equivalent. The other estimates in Figure 10.7 apply an "adult equivalence scale", which divides total income by a scale based on household size and composition. For Family 23 in Table 10.1, for example, the scale applied in the HBAI estimates is 2.8 compared to 1 for a single person, so that their total net income of £333 a week, divided by 2.8, is equivalent to £119 a week for a single person, which puts them in the same position as the single pensioner in Family 21. (Although one could argue that the elderly have greater needs than younger single people.) The Microsimulation Unit estimates apply the equivalence scale implicit in the Supplementary Benefit scale.

The distribution of disposable income is depicted in Figure 10.7 in the form of the Gini coefficient, which is a summary measure ranging from 0 if all incomes are equal to 100 per cent if all income is concentrated in the hands of one single person. One interpretation is in terms of drawing two families at random from the population and asking what difference you would expect to find between them. A Gini coefficient of 30 per cent implies that the expected difference is 60 per cent of the mean (ie twice the Gini coefficient). A better known interpretation is in terms of the Lorenz curve, which shows on the horizontal axis the population lined up in order of income, and on the vertical axis the cumulative share in total income of the bottom x per cent of the population. Where incomes are unequal, this curve lies below the 45° line (the bottom x per cent have less than x per cent of total income until we reach 100 per cent). The Gini
coefficient is the ratio of the area between the Lorenz curve and the $45^\circ$ line to the maximum such area.

This interpretation of the Gini coefficient makes clear that a single statistic cannot capture the complete distributional story. A stable Gini coefficient may correspond to no change in the Lorenz curve or to the combination of an inward shift at one point and an outward shift elsewhere. While useful, the Gini is not a complete substitute for looking at the whole distribution. In order to emphasise this, I show in the "double doughnut" diagram (Figure 10.8) the shares in total disposable income (outer ring) in 1991 of four income groups, compared with their population shares (inner ring), the data being those underlying the IFS series in Figure 10.7. The bottom 40 per cent have about half their proportionate share in total income; the "middle 40%", from the 40th to the 80th percentile, broadly hold their own; and the "next to top 10%" and top 10% have more than their proportionate shares (a quarter in the case of the top 10%).

The estimates of income distribution in Figure 10.7 have many shortcomings. Although some of the criticisms made by Titmuss (1962) have been addressed in more recent research, a number of serious problems remain. As elsewhere in this chapter, I am considering only a snapshot picture, taking no account of the variation of incomes over people's lifetimes. Income retained by the corporate sector, and that not paid out by institutions such as pension funds, is not allocated in the distribution (no adequate allowance is made for capital gains). Various fringe benefits are not included. The figures refer to money incomes without regard to the fact that prices may rise at different rates for different income groups.

Bearing in mind the reservations, what conclusions can be drawn from Figure 10.7? The single estimate from before the Second World War suggests that inequality was then considerably greater; the Gini coefficient was 8 percentage points higher than
in the 1950s. Some commentators have argued that much of the levelling of pre-tax income could be attributed to the omission of undistributed profits (Brittain, 1960), but extensive analysis of different adjustments left Lydall concluding in 1959 that

"the trend in income distribution over the past two decades has been much more strongly egalitarian than in any previous period of our history" (1959, page 33).

Behind the fall in the Gini coefficient lay a large decline in the share of the top 1 per cent (from 12.1 per cent to 6.4 per cent), but a much smaller change in the share of the next 9 per cent (from 22.3 per cent to 20.7 per cent, Royal Commission on the Distribution of Income, 1979, Table 2.4). As noted by Paish (1957), the levelling concerned primarily the top incomes. This pattern continued, and Seers (1956) observed that the Lorenz curves for 1949 and 1954 crossed: there was no shift in the distribution between the top 30 per cent and the bottom 70 per cent. Between 1954 and 1964 the estimated share of the bottom 40 per cent fell from 18.0 per cent to 17.2 per cent in 1964 (Atkinson and Micklewright, 1992, Table B12). From 1964 to 1976/7, the bottom groups did gain, but the decline at the top was limited to the top 10 per cent whose total income was reduced from 25.9 per cent to 22.4 per cent (Atkinson and Micklewright, 1992, Table B12). It was a limited form of redistribution. On the other hand, when inequality rose after 1977, both the "next to top 10%" and the top 10% gained (Goodman and Webb, 1994, page A3).

The changes after 1977 were large. Between 1977 and 1990, according to the IFS estimates, the Gini coefficient increased by 10 percentage points, and the sharp rise is paralleled in the other series. The post-1979 period in fact consisted of distinct phases. Up to 1985 a major cause of the widening inequality was the decline in the proportion of families with incomes from work (see Atkinson, 1993), resulting from the rise in
unemployment, ageing of the population and decline in labour force participation, together with the increased earnings dispersion evidenced in Figure 10.3. From 1985 to 1990 income inequality increased more sharply, reflecting the reduced redistributional contribution of the government budget, discussed below, together with continued increases in earnings dispersion. After 1990 inequality fell slightly. These forces affected not only the overall degree of inequality, but also the shape of the distribution. Cowell et al (1996) have argued that the distribution of income moved over the 1980s from having a single peak to having a second peak in the middle income ranges. They explain this in terms of a shift to more dispersion among working households, combined with a rise in the proportion of households receiving Income Support (a heavily concentrated distribution).

What about the years before 1938 for which there is no evidence comparable with that in Figure 10.7. The period prior to the First World War has been much debated by economic historians as part of the larger question as to whether income inequality first rose and then fell during the British Industrial Revolution (for two different views, see Williamson, 1985, and Feinstein, 1988). The impact of the 1905 Liberal Government and the First World War is less controversial. According to contemporary commentators, there was significant equalisation. Writing in 1922, Seebohm Rowntree compared the situation before and after the First World War:

"It cannot be denied that the war greatly raised the standard of living among the workers, especially the low-paid workers" (1922, page xv).

A more extensive, quantitative, account is provided by Sir Arthur Bowley in his study *Some Economic Consequences of the Great War* (1930). He notes that there were 4,100 people with disposable income of at least £10,000 a year in 1914, compared with only 1,300 people with the equivalent income in 1925 (£18,000). He attributes this to
"the combined effect of the rise of prices, of income-tax, super-tax, and death duties, and the stationariness of income from land" (1930, page 139).

He notes the narrowing of skill differentials, as shown in Figure 10.5, and the contribution made by unemployment insurance, noting

"the general improvement in the economic position of the poorer of the manual labourers" (1930, pages 161-162).

He concludes that

"The general result of the whole system of taxation, wage-adjustments, and social expenditure has been a very marked redistribution of the National Income" (1930, page 160).

If this assessment of the first quarter century is correct, then the twentieth century began with an epoch of equalisation and ended with a major reversal. (Although the sharp-eyed reader will note that the equalisation began 5 years into the century and that my statistics end 5 years before the Millennium.)

How does this leave Britain compared with other industrialised countries? International comparisons of income inequality are fraught with difficulty, but the scope for such comparisons has increased in recent years with the development of sets of micro-data for this purpose, notably the Luxembourg Income Study (LIS). Complete comparability can never be attained, and statistics for different countries will always need to be interpreted in the light of differing social and economic circumstances, but the LIS data used in Figure 10.9 represent a major advance. The graph shows the Gini coefficient in the United Kingdom in 1995 compared with those in other European countries, and the United States, at about the same date. Lower inequality is to be found
in Scandinavia and the Benelux countries, with the UK having the highest recorded inequality apart from the United States.

10.7 Rise and Fall of the Redistributive State?

The only social security system to which the York families in Rowntree's study of 1899 had access was the Poor Law. On 1 January 1901, 492 people were in York Workhouse and 1,049 received outdoor relief, making, with those in asylums, 2.1 per cent of the population, a figure close to the average for England and Wales (Rowntree, 1922, pages 424-425). In 1908, the Liberal Government introduced Old Age Pensions, and in 1911 there was the National Insurance Act. The state had begun to play a much greater role in cash transfers. On the financing side, the Budget of 1909 introduced Supertax.

The measures just described undoubtedly had a redistributive effect in terms of the distribution of income. Whether other forms of public spending, such as that on goods and services, and other increases in taxation, have had progressive distributional consequences is more open to debate. The precise redistributive impact of the increased size of the state budget has long been the subject of interest by economists, from the calculations of W.S. Jevons in 1869, through Lord Samuel's address (1919) on "The Taxation of the Various Classes of the People", to the study of redistribution by Barna (1937), and, in the postwar period, the Economic Trends series produced regularly since 1961 by the Office for National Statistics. These studies are based on a specific set of assumptions about the reaction of firms and households: for instance, the Economic Trends figures assume that indirect taxes are fully reflected in consumer prices. They are also limited in their coverage: the Economic Trends studies do not cover all taxes, omitting for example Corporation Tax, nor all of public spending, excluding for example
defence. Despite these qualifications, the estimates represent a valuable first step in understanding the impact of the government budget.

The *Economic Trends* studies are built up from calculations for each household which follow the lines set out in Figure 10.10. Households have incomes from market sources, referred to as "Original" income, although it should be stressed that this is not necessarily the income that they would have in the absence of the government budget. If there were no state old age pension, then more people would stay on at work, and their original income would be higher. Arithmetically, we add cash benefits and subtract direct taxes to arrive at Disposable income, analysed in the previous section. If we further subtract indirect taxes, this gives Post-tax income. Finally, the official estimates add benefits from government spending on health, education and housing, and transport subsidies to give Final income. Figure 10.10 shows at each stage the value of the Gini coefficient in 1995/6, The addition of cash benefits to original income reduces recorded inequality substantially, but direct taxes had only a modest effect. The reduction in the Gini coefficient associated with direct taxation was more than offset by the indirect taxes.

The development over time of Original and Post-tax, or Final, income since 1961 is shown in Figure 10.11. Since the Office for National Statistics has been improving the methodology of these calculations, and it has not been possible to reproduce earlier estimates on the same basis, there is not a fully consistent series. Figure 10.11 shows two long runs of data, from 1961 to 1986 and from 1977 to 1990, but there are several breaks in the 1990s which are sufficiently important to affect conclusions drawn about the Major years. Some idea of the effect of changes in method can be deduced where there are overlapping years: the inclusion of company car benefit in 1990 caused the

Inequality of original income has varied cyclically, but the predominant impression from Figure 10.11 is of a long-run steady rise in the Gini coefficient for original income since the mid-1960s. In the twenty years from 1965 to 1984, the coefficient increased from 40 per cent to 50 per cent. Even more striking is the fact that the coefficient for final income showed scarcely any rise over this period. The redistributive impact of cash transfers and taxation increased by enough to offset the more unequal market incomes.

After 1984, the story is quite different. Inequality in original income continued to rise, but between 1984 and 1990 the Gini coefficient for post-tax income increased much more sharply. Measured in terms of the difference between the two coefficients, the redistributive contribution of transfers and taxes fell from 19 percentage points (the difference between the two Gini coefficients in 1984) to 11 percentage points: see Table 10.2. The reduction in redistributive impact was attributable to a smaller impact of cash transfers (minus 5 percentage points), less progressive direct taxes (minus 1 percentage point) and more regressive indirect taxes (minus 2 percentage points).

The interpretation of these calculations raises a number of major issues, such as the incidence of taxation, the separation of life-cycle from other redistribution, and the valuation of public spending on goods and services. But, taken at face value, the *Economic Trends* estimates suggest that the state budget has ceased to offset the rising inequality of market incomes, and that the rise in inequality from 1984 to 1990 was attributable to the reduced redistributive ambitions of the government.xi

10.8 Has Poverty Persisted?
The last decades of the nineteenth century saw growing concern about poverty in Britain, notably on account of the surveys of London carried out by Charles Booth, which had considerable impact:

"Recent revelations as to the misery of the abject poor have profoundly touched the heart of the nation" (Illustrated London News, quoted by Fraser, 1984, page 132).

The survey by Seebohm Rowntree in 1899 of all working-class households in York was stimulated by a desire to see

"how far the general conclusions arrived at by Mr. Booth in respect of the metropolis would be found applicable to smaller urban populations" (1922, page xvii),

but he went further in seeking to estimate the income of all individual households in the survey and to compare these with a poverty line intended to capture the "minimum necessaries for the maintenance of merely physical efficiency", based on rent, a minimum diet and an allowance for clothing, light, and fuel. For a couple with 3 children, the "primary" poverty line, including rent of 4 shillings a week, was 21 shillings and 8 pence, or £65 a week in 1997 prices (Rowntree, 1922, page 143).

Rowntree emphasised the severity of the standard he was applying:

"the diet is even less generous than that allowed to able-bodied paupers in the York Workhouse, and ... no allowance is made for any expenditure other than that absolutely required" (1922, page 167).

He spells out what the latter means:

"A family living upon the scale ... must never spend penny on railway fares or omnibus. ... They must never purchase a halfpenny newspaper ... they must write no letters ... They must never contribute anything to their
church or chapel ... The children must have no pocket money" (1922, page 167).

Applying this severe criterion, Rowntree found that 9.9 per cent of the total non-institutional population of York were in primary poverty and that a further 3.2 per cent were within 2 shillings of the line (Rowntree, 1922, page 144). The most important "immediate" cause of poverty (52 per cent of those living in families below the primary poverty line) was that the chief wage-earner was

"in regular work, but at wages insufficient to maintain a moderate family (i.e. not more than four children) in a state of physical efficiency" (1922, page 153).

The subsequent "Five Towns" surveys carried out by Bowley and Burnett-Hurst (1915) developed Rowntree's approach by the introduction of sampling (every twentieth house or building being selected rather than a complete census). They applied both Rowntree's poverty standard and their own modified "New Standard", and concluded that

"It can hardly be too emphatically stated that of all the causes of primary poverty ... low wages are by far the most important" (Bowley and Burnett-Hurst, 1915, page 42).

The Five Towns study was repeated by Bowley and Hogg in 1923-24 in an attempt to answer the question posed in their title Has Poverty Diminished? (1925). The findings were summarised by Bowley as follows:

"in 1913 in a considerable number of cases the wages of unskilled labour were below [the standard] for a family including three children, while in 1924 wages under [the equivalent level] were extremely rare for a full week's work for an able-bodied man ... in families where a man is
normally at work, the proportion in poverty in 1924 was only one-fifth of
the proportion in 1913" (1930, pages 162-164).

However, he goes on to qualify this conclusion by saying that
"two-thirds of the improvement due to wages was lost ... owing to
unemployment" (1930, page 164),

but even allowing for this
"the proportion in poverty in 1924 was little more than half that in 1913"
(Bowley and Hogg, 1925, page 16),

although the reduction did not apply to Stanley, in the coalfields of Durham.

The 1930s saw a variety of local studies of poverty, including the New Survey of
London Life and Labour, the Social Survey of Merseyside, surveys of Bristol and
Southampton, and Rowntree's second survey of York in 1936. These studies were cited
by Beveridge as the basis for the "diagnosis of want" which underlay his plan for social
security:

"The plan ... starts from facts, from the condition of the people as
revealed by social surveys between the two wars" (1942, page 8).

It was the same method which was used to assess the impact of the post-war
welfare state. In 1950, Rowntree carried out his third survey of York. He found a
"remarkable decrease in poverty between 1936 and 1950" (Rowntree and
Lavers, 1951, p 32).

This finding was seized upon by contemporary commentators. According to The Times
at the time, there had been a
"remarkable improvement - no less than the virtual abolition of the
sheerest want" (quoted in Coates and Silburn, 1970, p 14).
As we now know, the euphoria was misplaced. The Beveridge plan was not implemented with respect to the level of National Insurance benefits, thus undermining his central principle that the national minimum should be provided by social insurance, with social assistance playing a residual and diminishing role. Dependence on means-testing remained. The Attlee Government did not accept Beveridge's proposal of unlimited duration for Unemployment Benefit (with condition of attendance at work or training centre after 6 months). The success claimed for the postwar Welfare State was in fact questioned by Townsend (Political and Economic Planning, 1952). Rowntree's own 1950 survey could have been used to show that there was sizeable non take-up of National Assistance and that many people were living below this level (re-analysis of the Rowntree schedules by Atkinson et al, 1981).

It was not in fact until the early 1960s that poverty in Britain was re-discovered by the British public. The early studies by Townsend (1962) and Wedderburn (1962) were followed by Abel-Smith and Townsend's *The Poor and the Poorest* (1965). This study broke new ground in two respects. It used secondary analysis of already existing survey material (the FES), hence providing national coverage, and it applied as a poverty criterion the level of eligibility for National Assistance. They were asking how far the government was providing an effective safety net at the level set by Parliament.

*The Poor and the Poorest* revealed that about 2 million people (3.8% of the population) were in fact living below the National Assistance scale. For about a quarter of the poor, the problem was inadequate earnings and family allowances - exposing the existence of the "working poor". For nearly half the poor, the problem was that of inadequate social insurance benefits coupled with unwillingness to apply for National Assistance. The existence of these problems was confirmed in official inquiries into *Financial and other circumstances of Retirement Pensioners* (Ministry of Pensions and
National Insurance, 1966) and Circumstances of Families (Ministry of Social Security, 1967). These investigations in turn were followed by the Townsend survey of poverty (Townsend, 1979), which was important first as a purpose-designed national survey of poverty and second in its attempt to develop a new deprivation standard.

The application of the administrative standard to secondary analysis of the FES data was taken up in the official Low Income Families (LIF) series shown in Figure 10.12, later continued by IFS. These demonstrate that a small, but significant, proportion of the proportion of the population - around 3 per cent - were living in families with incomes below the Supplementary Benefit (SB) (later Income Support) scale and not receiving SB. These families were either not claiming the SB to which they were entitled or were not eligible (for example because they were in full-time work).

Viewed as a performance target, the SB benefit standard makes sense, but as a measure of low income it has the disadvantage that the recorded extent of poverty is increased if benefits are made more generous, and vice versa. This point is addressed by Piachaud (1988) who compares the results with those obtained by adopting a relative poverty standard which is fixed proportionately with per capita disposable income. This alternative series shows a distinct dip in the mid-1970s, and he comments that

"the policy of substantially increasing social security benefits for pensioners, as occurred in 1974, did have a clear impact on the extent of poverty" (Piachaud, 1988, page 349).

(The dip is visible, but to a lesser extent, in the LIF series in Figure 10.12.)

A relative income approach has been adopted in the Households Below Average Income (HBAI) series which replaced the LIF statistics. This series records the equivalent disposable income of individuals according to the position, relative to the mean, of the household in which they live. In European analyses of low incomes, it
has become conventional to take a cut-off of 50% of the mean; although essentially arbitrary, it is easily described in public debate. The HBAI series in Figure 10.12 relates to this threshold. It shows that there has been a sharp rise in the proportion below 50% of the mean: from 8 per cent of the population in 1979 to around 20 per cent. The rise took place after 1985 and the divergence between the HBAI and the LIF (IFS) series illustrates dramatically the difference between the two approaches to measuring low income.

There are problems with all of the studies of low income reviewed here. They typically ignore those sleeping rough or in institutions. They may tell us little about the duration of poverty. Use of national surveys does not fully reveal the local dimension of poverty. Moreover, it is clearly difficult to compare findings at different dates. The poverty studied by Rowntree in 1899 was obviously different from that recorded in the official low income statistics of the 1970s. How far the rise in the poverty standard can be measured by applying price indices has been the subject of controversy. Comparison with per capita disposable income provides a benchmark, but the structure as well as the level of the scale changed over time.

In view of these complications, no attempt is made here to summarise the changes over the century. Simply I note that, despite the improvements which were considered to have taken place when we compare before and after two world wars, we are ending the century just as we began with a widespread concern about poverty.

Nor is this concern limited to Britain. The European Commission has taken an active role in the development of measures of poverty in Europe. Its statistics have been based on the half average income criterion described above, this being the concrete implementation of the definition adopted by the Council of Ministers of
"persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the Member State in which they live." (Council Decision, 19 December 1984).

Application of the European Community standard for the 1980s showed that 50 million people in the then 12 members of the Community were living in poverty, or 15% of the total population.

Solid basis for the 50 million figure is provided by the study carried out by Hagenaars et al (1994) using data for the late 1980s from national household surveys. Their results are reproduced in Figure 10.13, showing the proportion of the population in each Member State below 50% of the mean income for the country in which they live. As with overall income inequality, lower figures are to be found in Denmark and the Benelux countries, now joined by West Germany with a below-average percentage with low incomes. The UK at that time (1988) was around the European average.

10.9 Concluding Reflections

What can be learned about the future prospects for the distribution of income from this review of the twentieth century? The main lesson that I draw is that it is unwise to look for broad trends or critical watersheds. The advent of the Thatcher Government might be seen as such a turning point, but the two decades post-1979 themselves consisted of distinct phases: widening inequality arising from earnings and an increased proportion of families without work up to the mid-1980s, followed by a more rapid rise in inequality associated with a reduction in redistribution. Underlying the distribution of income are many forces, and what we observe is their resultant. It is not therefore surprising that at times one force dominates but that at a later date another
force takes us in a different direction. Understanding these mechanisms requires more space than possible here, but it seems safe to conclude that some at least of the forces are subject to the influence of our elected representatives. To that extent, the distribution of income in the twenty-first century is in our own hands.

It is therefore of great importance that public debate should be informed about the empirical features of the distribution of income and wealth. Empirical evidence has played a significant role in the past. Statistical investigations of taxable capacity influenced political discussion of progressive taxation a hundred years ago. Writing 50 years ago, Mark Abrams stated that

"the social survey in the hands of Booth, Rowntree and Bowley provided the State with an analysis of poverty which possibly saved Britain from violence and revolution and set her on the road to economic democracy" (1951, pages 142-143).

The publication on Christmas Eve 1964 of *The Poor and the Poorest* re-awakened concern in postwar Britain about the persistence of poverty. Statistical evidence can be very powerful.

### Notes on Sources

**Table 10.1:** 1899 from Rowntree, 1922, Chapter III; 1990/91 from Hills, 1995, Volume 2, UK Income Parade.

**Figure 1.1** Central Statistical Office, *United Kingdom National Accounts*, 1997 edition, Tables 1.4 and 4.9. Income in kind in the household sector has been added to employment income.
Figure 1.2  Share of employment income is Income from Employment expressed as a proportion of Gross Domestic Product (income based) at factor cost after allowing for stock appreciation minus income from self-employment (before allowing for stock appreciation). Prior to 1950 from Feinstein, 1972, Table 1 (column 1 divided by (column 9 -column 2)); 1950-1959 from Central Statistical Office, National Income and Expenditure 1972, Table 1 (row 13 divided by (row 22 - row 21 - row 14); 1960-1974 from Central Statistical Office, National Income and Expenditure 1982 Edition, Table 1.2 (Income from Employment divided by (Gross Domestic Product (income based) - Income from self-employment)); 1975-1996 from Central Statistical Office, United Kingdom National Accounts, 1997 edition, Table 1.4 (DJAO - (CAOM - GIXQ - CFAN)). Income from self-employment is not shown separately for 1914-1919, so that these years are missing; figures prior to 1920 include Southern Ireland.

Figure 10.3  Earnings of all workers, male and female, working full-time whose pay was not affected by absence. Prior to 1983 from Atkinson and Micklewright, 1992, Table BE1; 1983-1986 from New Earnings Survey, 1993, Table A17; from 1987 from New Earnings Survey, 1997, Table A30.2.

Figure 10.4  Earnings of workers paid on adult rates (adult workers prior to 1983) working full-time whose pay was not affected by absence. Prior to 1991 from Atkinson and Micklewright, 1992, Table BE3; from 1991 from New Earnings Survey, 1997, Tables A28.1 and A28.2.

Figure 10.5  Routh, 1980, Table 2.29.

Figure 10.6  Share of top 5 per cent of adult population in total personal wealth. Sources: 1923-1972 from Atkinson and Harrison, 1978, Table 6.5 (note that there are breaks in the series between 1938 and 1950 and 1959 and 1960, and that the estimates before 1950 relate to England and Wales, those after relate to Great Britain. These estimates are continued to 1982 from Atkinson, Gordon and Harrison, 1989, Table 1. The estimates from 1976 shown with crosses are produced on a different basis by the Inland Revenue, as is the series including state and occupational pension rights. These series relate to the United Kingdom. Sources: Inland Revenue Statistics, 1972, Tables 11.5 and 11.7 (latest valuation), and 1997, Tables 13.5 and 13.7 (latest valuation).

Figure 10.7  1938 from Royal Commission on the Distribution of Income and Wealth, 1979, Table 2.4; 1949-1984/5 from Atkinson and Micklewright, 1992, Table B11; there is a break in the series in 1975/6 (two overlapping years); IFS series 1961-1991 from Goodman and Webb, 1994, page A2 and further figures supplied by IFS; Microsimulation Unit series supplied by Holly Sutherland.

Figure 10.8  Goodman and Webb, 1994, Figure 2.3.
Figures relate to 1987 (Ireland), 1989 (France), 1990 (Spain), 1991 (Finland, Netherlands, Italy), 1992 (Belgium, Denmark, Sweden), 1994 (Germany, Luxembourg, US), 1995 (Norway, UK). The estimates relate to household disposable income per equivalent adult using an equivalence scale of the square root of household size and using individual weights.

**Figure 10.10** *Economic Trends*, March 1997, page 26 and Table C.


**Figure 10.12** Low Income Families (LIF) series relates to persons living in benefit units below the level of income of eligibility for Income Support/Supplementary Benefit and not in receipt of this benefit. Estimates for 1972-1976 (LIF (1)) end-year estimates; estimates for 1977-1985 (LIF (2)) annual averages.


Households Below Average Income (HBAI) series shows proportion of population living in households with equivalent disposable income (before housing costs) below half the mean. New series adopts changes in methodology and relates to UK. Source: Department of Social Security, *Households Below Average Income*, 1992, 1993, 1994, 1995, 1996, and 1997 (years of publication), Table F1. The estimates are based on Family Expenditure Survey (information for the most recent years is also available from the Family Resources Survey) and include the self-employed.

**Figure 10.13** Hagenaars et al, 1994, Table 3.2. Figures relate to 1988, except Denmark, Ireland and Luxembourg (1987) and France and Portugal (1989).
References


Reeves, M.P. *Round About a Pound a Week.* (London: G. Bell and Sons, 1913.)


**Further Reading** (in addition to the starred references)

The chapter has concentrated on the distribution of economic advantage (earnings, income and wealth); for references to the related, but distinct, literature on social stratification, see


The ethical principles underlying choice of variables on which to focus ("equality of what?") are set out in

A great deal of material is published in the official studies of the distribution of income and redistribution:


<table>
<thead>
<tr>
<th>Class &quot;D&quot; in 1899 (Broadly 40th to 70th percentile)</th>
<th>Family 2</th>
<th>Family 29</th>
<th>Family 46</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couple aged 70. Own house, 5 rooms. Home clean and comfortable. Man worked from age 7 to age 70. Had large family, one son now clergyman.</td>
<td>Couple, man works as joiner. Tenant, 5 rooms. Son (18) stonemason; son (16) apprentice joiner; and 5 children school age or under. House clean and comfortable.</td>
<td>Couple aged 41, man works as sawyer. Tenant, 5 rooms, shares one water tap with 8 other houses. Son (18) apprentice sawyer; son (15) apprentice moulder; daughter day domestic; and 4 children school age or under.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle Fifth in 1990/91 (amounts at April 1993 prices)</th>
<th>Family 21</th>
<th>Family 23</th>
<th>Family 29</th>
</tr>
</thead>
</table>
Table 10.2  Gini coefficient and Impact of Government Budget

<table>
<thead>
<tr>
<th>Income Type</th>
<th>1984</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original income</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>Gross Income</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>Disposable Income</td>
<td>28</td>
<td>36</td>
</tr>
<tr>
<td>Post-Tax Income</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

1. I am most grateful to Jo Webb for her help with this chapter. In particular, I have made extensive use in Section 10.8 of material contained in a paper she has prepared on "Poverty surveys 1900-2000". I thank Chris Giles of IFS for supplying more recent income distribution data, and Essie Linton for very helpful research assistance. Janet Mandeville has kindly supplied me with literary evidence on earnings to supplement more conventional sources. More generally, I have drawn heavily on work that I have done over the years jointly with Alan Harrison, John Micklewright, and Holly Sutherland.

Helpful comments were made at a seminar at Nuffield College in the Summer of 1997. I am grateful to Andrea Brandolini for useful discussions during his visit to Nuffield in 1998, and to Chelly Halsey, Holly Sutherland and Jo Webb for their most helpful comments on the July 1998 draft.

Finally, I thank Chelly Halsey for being a source of inspiration and encouragement, and for suggesting the opening quotation.

1. There were 20 shillings in a pre-decimal pound, twelve pennies in each shilling, and four farthings in a penny. Decimal currency was introduced in February 1971.

1. This is based on personal disposable income per capita given by Feinstein (1972, Table 17), extended from 1966 to 1996 using National Income and Expenditure. I have also extended the series back to 1900-1913 making use of other tables in Feinstein (1972) and the assumption that net payments from the corporate sector to the personal sector were the same proportion of gross trading profit as in the period 1922-1929. Details can be obtained from the author.

1. As explained in the notes on sources, the calculation is slightly asymmetric in that, to generate a consistent series over time, stock appreciation is not allowed for in the self-employment element.

1. There had been a Wage Census in 1886, used in Thatcher's table and by others, such as Gosling et al., 1994, Table 1, but, according to Bowley, "though it purports to show the distribution of wages of individuals, it was often assumed that operatives doing the same kind of work were paid at the same rate, or more exactly that the variation of wages from the average in each occupation in the district observed was insignificant." (1937, page 41).

According to the Department of Employment, in the 1888 survey

"Employers were asked to state the numbers of wage-earners in each category (men, women, etc.), in each separate occupation, in each establishment, and to give average rates of wages which were paid to each such group ... In many cases the groups, which were mostly very small, were further sub-divided to show the numbers on each separate wage rate." (1971, page 92).

They go on to say that

"Although the wages of an individual might differ slightly from the average of his group, the groups were so numerous, small and homogeneous that "the variation from the true numbers thus arising cannot be material"" (1971, page 92).

Despite this assertion, it seems clear that the 1886 survey was conducted on a different
basis from that in 1906, where
"the main consideration was to ascertain the actual earnings of each
individual" (Department of Employment, 1971, page 94).

1. I have not considered explicitly the role of self-employment income, the
importance of which has varied over the century. On the distribution of income among
the self-employed, see Meager et al (1996) and Parker (1997).

1. So called since they were first published in the National Income Blue Book (for
example, *National Income and Expenditure 1958*, Table 31).

1. The timing is complicated. The figure for "1938" in the Blue Book series is
based on the 1937-38 Survey of Personal Incomes (*National Income and Expenditure
1958*, page 74), but according to Stark (1978, page 48) most of the income related to
1936-7. This survey is used by Barna (1945), who refers to it as "1937".

1. The data relate to the United Kingdom. No adjustment is made for regional
differences in price levels across the country; on this, see Johnston et al (1996).

1. Expressed as a proportion of per capita disposable income, this threshold is
equivalent to some £2 million in 1996, whereas the 1995/6 SPI shows 12,000 people
with after tax incomes above £200,000 (this is the top range identified).

1. The data used are similar to those in Figure 10.7, but there are differences in
method, including the equivalence scale and the adjustments for differential non-
response.

1. For a detailed comparison of the tax and benefit policy in 1978/9 with that in

1. For a summary of qualitative information about life on a low income, see
Kempson (1996); for an imaginative approach by the media, see the Channel 4
Commission on Poverty (Townsend, 1996).

1. See, for example, the account by Hennock (1991) of Bowley's attempt to arrive
at a standard for the New Survey of London Life and Labour comparable with the
original data of Booth.
Figure 10.1 Gross National Product and Household Income

1996

Figure 10.2 Share of Employment Income in Gross Domestic Product
Figure 10.3  Earnings Dispersion 1968-1997

TOP DECILE
Right Hand Axis

BOTTOM DECILE
Left Hand Axis
Figure 10.4  Earnings of Women Relative to Male Median  1968-1997

Figure 10.5  Average Earnings of Occupational Groups Men  1913-14 to 1990
Figure 10.6  Share of Top 5% in Total Personal Wealth 1923-1994

Atkinson-Harrison series

Inland Revenue series

Including state and occupational pension wealth

Figure 10.7  Overall Income Inequality 1938-1995/6

Microsimulation Unit series

Blue Book series

IFS series
Figure 10.8 Shares in Total Income in UK 1991

Figure 10.9 United Kingdom Income Inequality Relative to Europe (and US)
Figure 10.10  Stages of Redistribution

1995/6
Gini coefficient 52%

Gini coefficient 36%

Gini coefficient 33%

Gini coefficient 37%

Figure 10.11  Economic Trends Studies of Redistribution
1961-1996/7
Figure 10.12  Low Income Families (LIF) and Households Below Half Average Income (HBAI) 1972-1994/5

Figure 10.13  Low Incomes in the UK Compared with European Community
I am most grateful to Jo Webb for her help with this chapter. In particular, I have made extensive use in Section 10.8 of material contained in a paper she has prepared on "Poverty surveys 1900-2000". I thank Chris Giles of IFS for supplying more recent income distribution data, and Essie Linton for very helpful research assistance. Janet Mandeville has kindly supplied me with literary evidence on earnings to supplement more conventional sources. More generally, I have drawn heavily on work that I have done over the years jointly with Alan Harrison, John Micklewright, and Holly Sutherland.

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There were 20 shillings in a pre-decimal pound, twelve pennies in each shilling, and four farthings in a penny. Decimal currency was introduced in February 1971.

This is based on personal disposable income per capita given by Feinstein (1972, Table 17), extended from 1966 to 1996 using National Income and Expenditure. I have also extended the series back to 1900-1913 making use of other tables in Feinstein (1972) and the assumption that net payments from the corporate sector to the personal sector were the same proportion of gross trading profit as in the period 1922-1929. Details can be obtained from the author.

As explained in the notes on sources, the calculation is slightly asymmetric in that, to generate a consistent series over time, stock appreciation is not allowed for in the self-employment element.

There had been a Wage Census in 1886, used in Thatcher's table and by others, such as Gosling et al., 1994, Table 1, but, according to Bowley,

"though it purports to show the distribution of wages of individuals, it was often assumed that operatives doing the same kind of work were paid at the same rate, or more exactly that the variation of wages from the average in each occupation in the district observed was insignificant." (1937, page 41).

According to the Department of Employment, in the 1888 survey

"Employers were asked to state the numbers of wage-earners in each category (men, women, etc.), in each separate occupation, in each establishment, and to give average rates of wages which were paid to each such group ... In many cases the groups, which were mostly very small, were further sub-divided to show the numbers on each separate wage rate." (1971, page 92).

They go on to say that

"Although the wages of an individual might differ slightly from the average of his group, the groups were so numerous, small and homogeneous that "the variation from the true numbers thus arising cannot be material"" (1971, page 92).

Despite this assertion, it seems clear that the 1886 survey was conducted on a different
basis from that in 1906, where
"the main consideration was to ascertain the actual earnings of each individual" (Department of Employment, 1971, page 94).

vi. I have not considered explicitly the role of self-employment income, the importance of which has varied over the century. On the distribution of income among the self-employed, see Meager et al (1996) and Parker (1997).

vii. So called since they were first published in the National Income Blue Book (for example, National Income and Expenditure 1958, Table 31).

viii. The timing is complicated. The figure for "1938" in the Blue Book series is based on the 1937-38 Survey of Personal Incomes (National Income and Expenditure 1958, page 74), but according to Stark (1978, page 48) most of the income related to 1936-7. This survey is used by Barna (1945), who refers to it as "1937".

ix. The data relate to the United Kingdom. No adjustment is made for regional differences in price levels across the country; on this, see Johnston et al (1996).

x. Expressed as a proportion of per capita disposable income, this threshold is equivalent to some £2 million in 1996, whereas the 1995/6 SPI shows 12,000 people with after tax incomes above £200,000 (this is the top range identified).

xi. The data used are similar to those in Figure 10.7, but there are differences in method, including the equivalence scale and the adjustments for differential non-response.


xiii. For a summary of qualitative information about life on a low income, see Kempson (1996); for an imaginative approach by the media, see the Channel 4 Commission on Poverty (Townsend, 1996).

xiv. See, for example, the account by Hennock (1991) of Bowley's attempt to arrive at a standard for the New Survey of London Life and Labour comparable with the original data of Booth.