

## Chapter 2

### The income distribution

- Income distribution Overall, the income distribution in 2005/06 was skewed towards the lower end, showing a relatively high concentration of individuals close to the 60 per cent of median low-income threshold and – particularly for BHC – a long ‘tail’ for higher incomes.
- Sources of income Benefits together with tax credits were the main source of income for the bottom quintile whereas earnings were the principal source for the other four quintiles.
- Income growth There was income growth across the whole distribution from 1994/95 to 2005/06, with growth being the greatest in the second quintile on both Before Housing Costs and After Housing Costs measures.
- Income ratios The ratio of the incomes of the top quintile (fifth) of the population to the incomes of the bottom quintile has shown little change between 1994/95 and 2005/06.
- Inequality The Gini coefficient, a measure of inequality, has fluctuated slightly since 1994/95 on both BHC and AHC measures, but has shown evidence of a marginal rise since 2004/05.

## 2 The income distribution

### Introduction

This chapter looks at the overall income distribution and, in order to place the findings presented in this report in a wider context, it considers the prevailing social and economic conditions between 1994/95 and 2005/06.

### The economic climate

**Table 2.1** presents a time series of key economic indicators, which show over the period 1995 to 2005:

- Sustained growth in GDP.
- Rising employment rates (as a result of falling or generally stable unemployment during the period), though there has been little change since 2000.
- Low inflation and a general decline in interest rates, although years since 2003 have shown small successive rises in base interest rates.
- Growth in average earnings above the rate of inflation since 1996.

- Sustained growth in real disposable income.

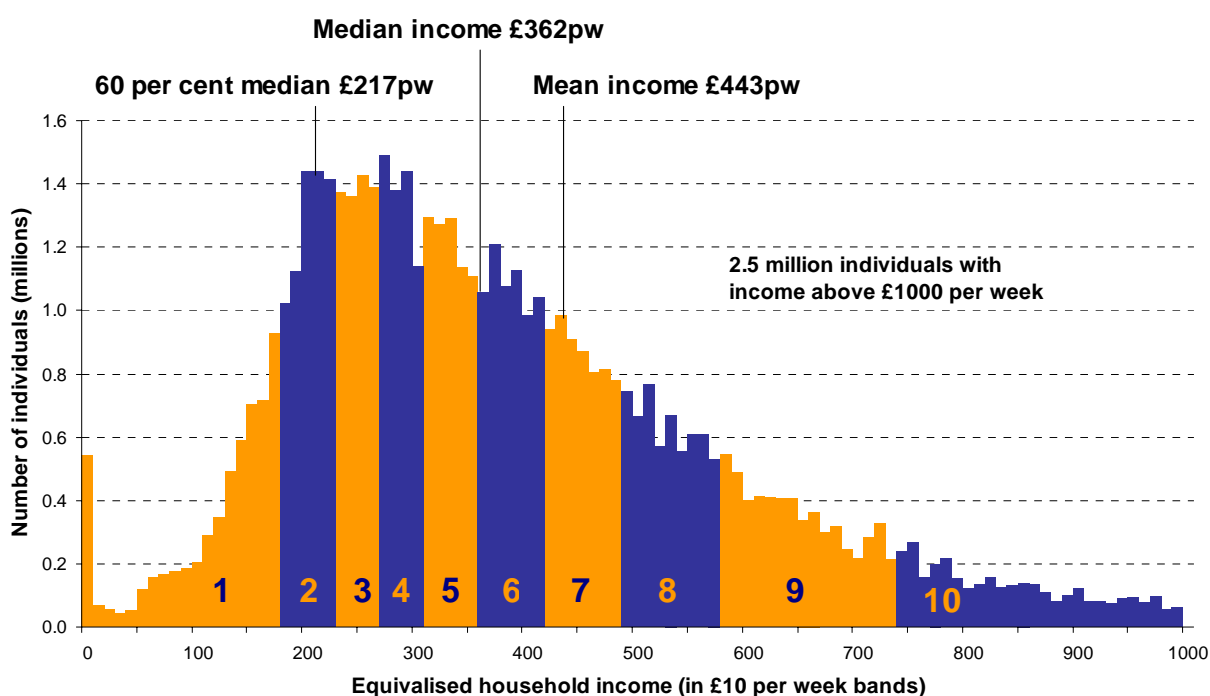
All of the above are indicators of a growing economy, although this growth appeared to have slowed somewhat around 2001. The implication for statistics on incomes and living standards as presented in HBAI is that average incomes in real terms (both mean and median) are likely to exhibit strong rises over the period as a whole, with slightly reduced growth for more recent years. This is supported by the HBAI figures appended to the table.

### The overall income distribution

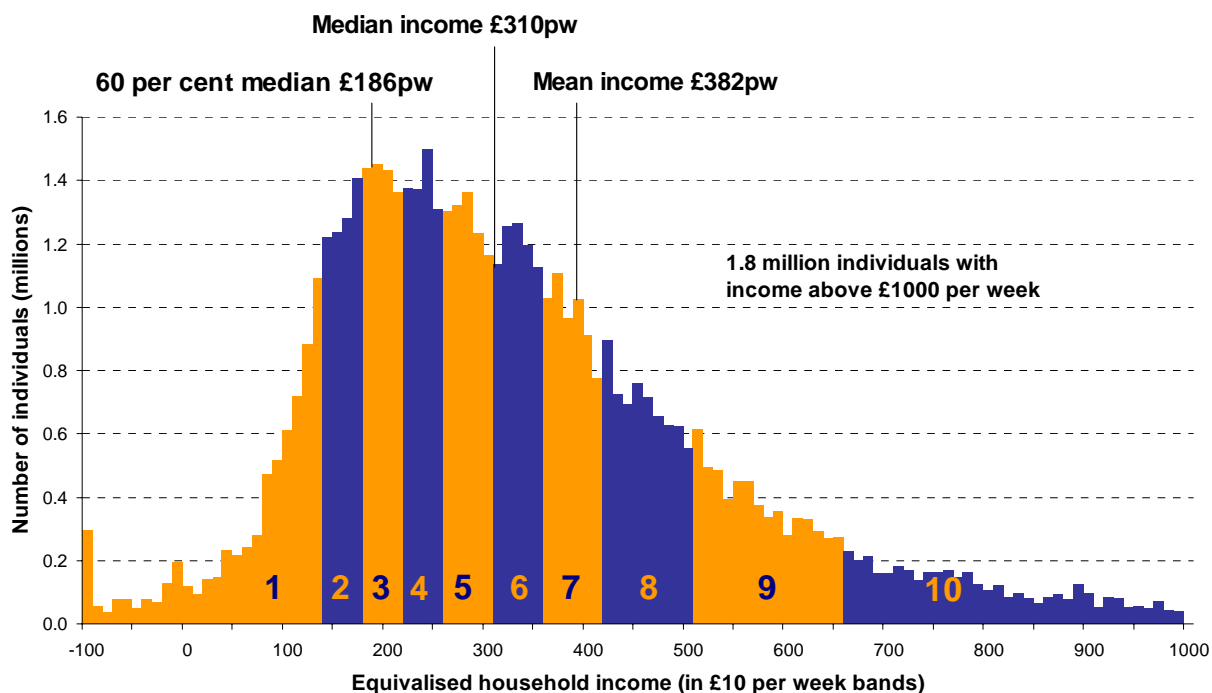
**Figure 2.1** shows the income distribution for the United Kingdom in 2005/06 both Before Housing Costs (BHC) and After Housing Costs (AHC). The shaded areas numbered 1 to 10 show each successive tenth, or decile, of the population.

HBAI presents analyses of disposable income on two measures: Before Housing Costs (BHC) and After Housing Costs (AHC). This is principally to take into account variations in housing costs that do not correspond to comparable variations in the quality of housing.

**Figure 2.1 (BHC): Income distribution for the total population, 2005/06**



**Figure 2.1 (AHC):** Income distribution for the total population, 2005/06



The income distribution for 2005/06 is clearly skewed towards the lower end and has a long tail at the upper end. On a Before Housing Costs basis, almost two-thirds of individuals had an equivalised household income that was less than the national mean average. There was a large concentration of individuals around the 60 per cent of median income mark. The distribution showed similar characteristics on an After Housing Costs basis.

The presence of substantial numbers of individuals with relatively high incomes results in a skewed distribution and a large difference between the overall mean and the median.

Income measures used in HBAI take into account variations in the size and composition of the households in which people live. This process is called equivalisation.

Equivalisation reflects the fact that a family of several people needs a higher income than a single individual in order for them to enjoy a comparable standard of living.

Equivalence scales conventionally take a couple with no children as the reference point. Consider a single person, a couple, and a

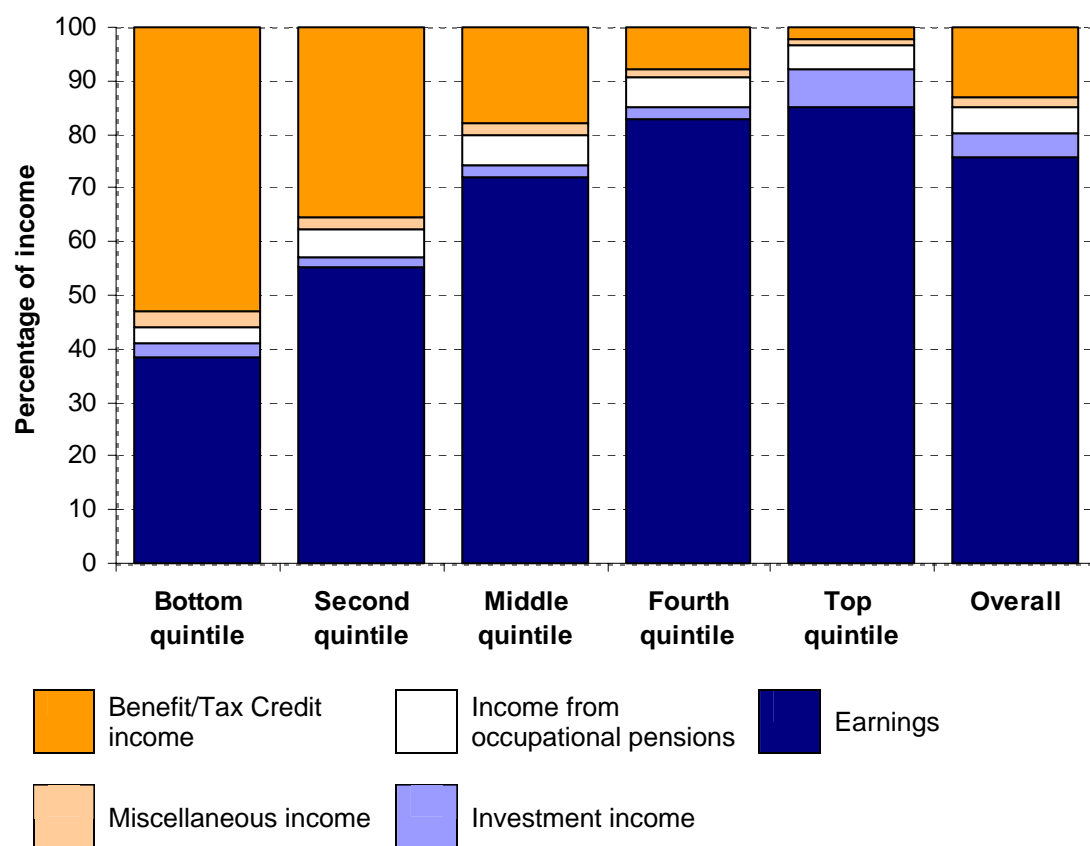
couple with two children aged fourteen and ten, all having unadjusted weekly household incomes of £200 (Before Housing Costs). The process of equivalisation, as conducted in HBAI, gives an equivalised income of £299 to the single person, £200 to the couple, but only £131 to the couple with children one aged under 14 and the other aged 14. **Appendix 2** gives more detail.

### Sources of income

Households receive income from a variety of sources. The main ones are earnings, self-employment, benefits, tax credits, interest on investments and occupational pensions. **Table 2.2** and **Figure 2.2** show the distribution of gross income sources for each fifth, or quintile, of the population, ranked by net disposable household income. The various sources of income are shown as a percentage of the total gross income of the quintile.

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Figure 2.2 (BHC): Income sources as a proportion of gross income by quintiles, 2005/06



Successive quintiles, from the bottom to the top, showed a steadily diminishing share of Benefit/Tax Credit income and an increasing share of income from employment. These were the main sources of income overall, accounting for around nine-tenths of income combined.

On a Before Housing Costs (BHC) basis, earnings made up around four tenths of the gross income of the bottom quintile while benefits together with Tax Credits made up over half. In the top quintile, around 85 per cent of income was derived from earnings. The largest proportion of income from investment was also seen in the highest income group (although it should be noted that comparisons with National Accounts data would suggest that surveys such as the FRS understate investment income). These findings were mirrored on an After Housing Costs (AHC) basis.

### Statistics relating to the overall equivalised income distribution and their equivalent money values for different family types.

As explained above, household incomes in HBAI are adjusted, or equivalised, in order to facilitate comparisons between different family types. The majority of monetary amounts presented in HBAI are on this equivalised basis and do not reflect actual monetary amounts or incomes for any family type other than a couple with no children. This 'couple' family type is the reference point for the equivalisation process.

**Table 2.3** shows how the equivalised values of different statistics relating to the overall income distribution can be translated into actual household incomes for different family types. Similar information is presented for historic years in **Supplementary Table C**.

For example, **Table 2.3** shows that equivalised median income BHC in 2005/06 was £362 per week. This translates into an actual net income of £362 for a couple with no children, £242 for a

single person with no children, £554 for a couple with two children aged five and fourteen and £434 for a lone parent with two children aged five and fourteen.

### Income growth in real terms

One way of measuring inequality is to determine the ratio of the top quintile median (90<sup>th</sup> percentile) to the bottom quintile median (10<sup>th</sup> percentile). **Supplementary Table A2** shows that there is some evidence to suggest that on the BHC basis, there was a slight fall in this measure since 1999/00. **Supplementary Table A2** also shows the ratio of the top to middle quintile medians, and middle to bottom quintile medians. Both BHC and AHC measures have shown little change since 1994/95.

**Table 2.1** shows comparisons between growth in Real Household Disposable Income and real growth in HBAI mean BHC unequivalised income. For some more recent years, income growth in the HBAI-based series appears slightly lower than the National Accounts estimates. The implication of this is that absolute real income growth could be understated in the HBAI series. Comparisons over a longer time period are believed to be more robust.

### Income shares

**Supplementary Table A3** shows the share of total income received by individuals in different quantiles of the income distribution. It can be seen that, in 2005/06, individuals in the top quintile accounted for over 40 per cent of total income whilst those in the bottom quintile accounted for less than ten per cent.

The income shares of the top ten and 20 per cent of the income distribution have fluctuated over the entire period 1994/95 to 2005/06. The shares of the top 30, 40 and 50 per cent showed very little change over the period 1994/95 to 2005/06.

Looking at the ratio of the total income received by equivalent quantile groups at the top and bottom of the income distribution over time is another way of measuring and tracking inequality in the income distribution. This information would suggest that there was very little change in inequality over the entire period 1994/95 to 2005/06. These results, however, are quite sensitive to data at the extremes of the income distribution that may be less reliable than other data.

### Gini coefficient

**Supplementary Table A3** also shows the value of the Gini coefficient since 1994/5. The Gini coefficient is a widely-used measure of inequality, which can take values from zero to 100. A value of zero would indicate complete equality, while a value of 100 would indicate total inequality. In 2005/06, the coefficient was 35 for income Before Housing Costs, and 39 for income After Housing Costs. Changes between 1994/95 and 2005/06 have been slight and have fluctuated, although there is some evidence of a marginal rise on both bases.

When considering changes in the top and bottom deciles, users should be aware that results for the bottom decile are particularly vulnerable to income measurement problems, and have no validity as a guide to the consumption capabilities of the poorest ten per cent of individuals. Results for the top ten per cent are also particularly susceptible to sampling errors and income measurement problems.

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Table 2.1: Recent Economic Indicators

Percentages						Source: ONS	
	GDP Growth	Base Interest Rate	Inflation Rate (Headline)	Male Employment rate	Female Employment Rate	Average Earnings Growth	Real Household Disposable Income growth
1995	2.9	6.6	3.4	76.3	65.8	3.1	2.6
1996	2.8	5.9	2.4	76.6	66.7	3.6	2.4
1997	3.0	6.6	3.1	77.7	67.4	4.2	3.8
1998	3.3	7.2	3.4	78.3	67.9	5.2	1.5
1999	3.0	5.3	1.6	78.6	68.6	4.8	2.8
2000	3.8	6.0	2.9	79.3	69.1	4.5	4.5
2001	2.4	5.1	1.8	79.5	69.4	4.5	4.3
2002	2.1	4.0	1.6	79.0	69.6	3.5	1.7
2003	2.7	3.7	2.9	79.4	69.8	3.4	2.4
2004	3.3	4.4	3.0	79.4	69.9	4.4	1.7
2005	1.9	4.6	2.8	79.0	70.1	4.0	2.1

**Notes:**

1. All growth figures are for the year in question compared to the previous year.
2. GDP at market prices, chained volume measure (UK National Accounts 2006 Edition).
3. The base interest rate is the annual average for the relevant calendar year.
4. Inflation rate is the annual average change for each calendar year as measured by All Items Retail Price Index.
5. Employment Rates are seasonally adjusted figures for the Spring quarter of each year (March to May).
6. Average earnings growth is the actual (as opposed to real terms) annual average for each calendar year.
7. Real disposable income growth is based on the Real Disposable Income series, calendar years.
8. All figures are for the United Kingdom, except Average Earnings Growth which covers Great Britain.
- 9: Some minor revisions exist since last year due to revisions to underlying ONS data.

Percentages		Source: FRS
	HBAI mean net disposable unequivalised income growth (BHC)	
	Real terms	Cash terms
1995/96	-0.5	2.8
1996/97	2.4	5.5
1997/98	3.7	5.2
1998/99	4.5	6.0
1999/00	0.6	3.3
2000/01	7.6	7.0
2001/02	5.1	6.5
2002/03	0.8	2.7
2003/04	-0.3	2.1
2004/05	1.9	4.9
2005/06	1.1	3.7

**Notes:**

1. Growth in unequivalised mean net disposable income is also presented here, in order to allow better comparisons with Real Household Disposable Income growth.
1. Figures are for the United Kingdom from 2002/03 onwards. Earlier years are for Great Britain only.

**Table 2.2: Income sources as a proportion of gross<sup>1</sup> income by quintile**

Percentage of gross <sup>1</sup> Income						Source: FRS 2005/06
	Bottom quintile	Second quintile	Middle quintile	Fourth quintile	Top quintile	Overall
<b>Before Housing Costs</b>						
Earnings	39	55	72	83	85	76
Investments	2	2	2	2	7	5
Occupational pensions	3	5	6	5	4	5
Miscellaneous	3	2	2	2	1	2
Benefits/Tax Credits	53	35	18	8	2	13
<b>After Housing Costs</b>						
Earnings	44	59	74	82	83	76
Investments	2	2	2	2	8	5
Occupational pensions	2	4	5	5	5	5
Miscellaneous	4	2	2	1	1	2
Benefits/Tax Credits	48	34	17	9	3	13

**Note:**

1. Gross income is not equivalised.

Table 2.3: Statistics relating to the overall equivalised net disposable income distribution and their equivalent money values for different family types, in 2005/06 prices, United Kingdom

£ per week equivalent 2005/06 prices							Source: FRS 2005/06		
	Mean	Median	50% mean	60% median	Bottom quintile	Second quintile	Middle quintile	Fourth quintile	Top quintile
Including the self-employed									
Before Housing Costs									
Couple with no children	443	362	222	217	< 226	226 - 313	314 - 416	417 - 573	574 +
(equivalised income benchmark)									
Single with no children	297	242	148	145	< 152	152 - 210	211 - 279	280 - 384	385 +
Couple with two children aged 5 and 14	678	554	339	332	< 346	346 - 479	480 - 637	638 - 877	878 +
Single with two children aged 5 and 14	532	434	266	260	< 272	272 - 375	376 - 499	500 - 688	689 +
After Housing Costs									
Couple with no children	382	310	191	186	< 179	179 - 263	264 - 359	360 - 504	505 +
(equivalised income benchmark)									
Single with no children	222	180	111	108	< 104	104 - 153	154 - 208	209 - 292	293 +
Couple with two children aged 5 and 14	619	502	310	301	< 290	290 - 427	428 - 581	582 - 816	817 +
Single with two children aged 5 and 14	459	372	229	223	< 215	215 - 316	317 - 431	432 - 605	606 +

**Note:**

This table takes levels of equivalised income for the population as a whole and translates them into cash equivalents for a selection of family types. For example, for results Before Housing Costs including the self-employed, it shows that 60 per cent of median (equivalised) income in 2005/06 was £217 per week. This implies that a single person without children needs a cash income of £145 or less to be below 60 per cent of median (equivalised) income for the population as a whole.



**Table 2.3 (continued): Statistics relating to the overall equivalised net disposable income distribution and their equivalent money values for different family types, in 2005/06 prices, United Kingdom**

£ per week equivalent 2005/06 prices										Source: FRS 2005/06
	Mean	Median	50% mean	60% median	Bottom quintile	Second quintile	Middle quintile	Fourth quintile	Top quintile	
<b>Excluding the self-employed</b>										
<b>Before Housing Costs</b>										
Couple with no children	431	359	215	215	< 227	227 - 312	313 - 412	413 - 565	566 +	
(equivalised income benchmark)										
Single with no children	289	240	144	144	< 152	152 - 209	210 - 276	277 - 379	380 +	
Couple with two children aged 5 and 14	659	549	330	330	< 348	348 - 477	478 - 631	632 - 865	866 +	
Single with two children aged 5 and 14	517	431	258	258	< 273	273 - 374	375 - 495	496 - 678	679 +	
<b>After Housing Costs</b>										
Couple with no children	372	309	186	185	< 180	180 - 263	264 - 357	358 - 497	498 +	
(equivalised income benchmark)										
Single with no children	216	179	108	107	< 105	105 - 153	154 - 207	208 - 288	289 +	
Couple with two children aged 5 and 14	602	500	301	300	< 292	292 - 426	427 - 578	579 - 806	807 +	
Single with two children aged 5 and 14	446	370	223	222	< 216	216 - 316	317 - 428	429 - 597	598 +	

**Note:**

This table takes levels of equivalised income for the population as a whole and translates them into cash equivalents for a selection of family types. For example, for results Before Housing Costs excluding the self-employed, it shows that 60 per cent of median (equivalised) income in 2005/06 was £215 per week. This implies that a single person without children needs a cash income of £144 or less to be below 60 per cent of median (equivalised) income for the population as a whole.