Racing away? Income inequality and the evolution of high incomes

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Racing Away?

Income Inequality and the Evolution of High Incomes

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1. Introduction

This Briefing Note provides an analysis of the characteristics of high-income individuals and how their incomes have evolved over time.

We begin by setting out recent trends in overall income inequality and why these lead us to focus on the pattern of income growth at the very top of the income distribution. We then present some basic facts about high-income individuals and how they compare with the rest of society (for example, what is their average before-tax income, what is their average tax rate, how much of total personal income do they receive, in what industries do they tend to work?). We then discuss recent trends in their incomes over time and how this pattern compares with that for the rest of the income distribution. We then briefly summarise some recent research on longer-term trends in high incomes. Appendix A will undertake a brief comparison with other sources of information – compensation of executives and measures of personal wealth.

2. Data and methodology

In this Briefing Note, we make most use of two sources of data – the Households Below Average Income data-set (HBAI) and the Survey of Personal Incomes (SPI). The HBAI data-set is created annually by the Department for Work and Pensions and is used to measure progress against the

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government's targets for child poverty. In the past, we have also used the HBAI data-set to measure trends in income inequality and average living standards.[1] The SPI is constructed from income tax records by HMRC and allows us to look in more detail at high-income individuals (see Box 1 for more detailed information).

In this note, we frequently use the terms 'high-income individuals', 'top incomes' and 'the rich'. We do not have a precise definition in mind when using these terms, but we have endeavoured to make clear in the text to whom we are referring.

Throughout these discussions of income inequality, we will be adopting a relative notion of inequality. This means that should all incomes increase or decrease by the same proportional amount, we would conclude that income inequality had remained unchanged.

3. Recent trends in income inequality

One way to summarise trends in overall income inequality is to look at the Gini coefficient. This measure of income inequality condenses the entire income distribution into a single number between zero and one: the higher the number, the greater the degree of income inequality. A value of zero corresponds to complete equality, so that having adjusted for household size and composition, all individuals have the same household income. In contrast, a value of one corresponds to an economy where a single individual has all the income and the rest have nothing.[2]

Figure 1 shows the evolution of the Gini coefficient since 1979 in Great Britain. Inequality rose dramatically over the 1980s, with the Gini rising from a value of around 0.25 in 1979 and reaching a peak in the early 1990s of around 0.34. The scale of this rise in inequality has been shown elsewhere to be unparalleled both historically and compared with the changes taking place at the same time in most other developed countries.[3]

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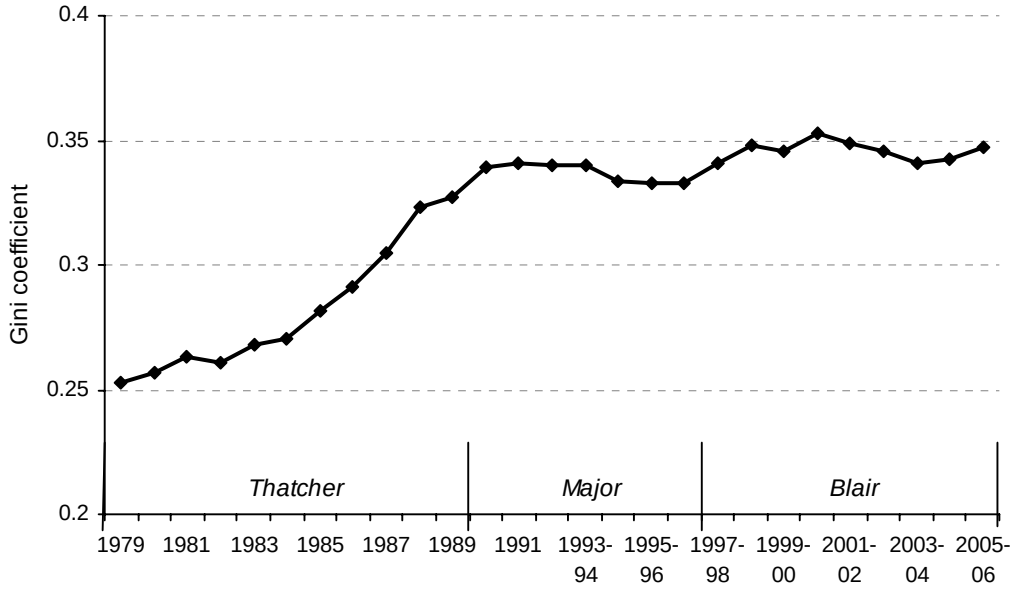
[1] M. Brewer, A. Goodman, A. Muriel and L. Sibieta, *Poverty and Inequality in the UK: 2007*, IFS Briefing Note 73, 2007 (http://www.ifs.org.uk/bns/bn73.pdf); M. Brewer, A. Goodman, J. Shaw and L. Sibieta, *Poverty and Inequality in Britain: 2006*, IFS Commentary 101, 2006 (http://www.ifs.org.uk/comms/comm101.pdf).

[2] See appendix C of M. Brewer, A. Goodman, J. Shaw and L. Sibieta, *Poverty and Inequality in Britain: 2006*, IFS Commentary 101, 2006 (http://www.ifs.org.uk/comms/comm101.pdf) for more information about the Gini coefficient. Note that the Gini coefficient can be interpreted as the expected proportional income gap between two individuals randomly selected from the population (normalised by twice the mean).

[3] See A. Goodman, P. Johnson and S. Webb, *Inequality in the UK*, Oxford University Press, Oxford, 1997; P. Gottschalk and T. M. Smeeding, 'Cross-national comparisons of earnings and income inequality', *Journal of Economic Literature*, 1997, 35(2): 633–87; and A. B.

Figure 1. The Gini coefficient, 1979 to 2005–06 (GB)



Note: The Gini coefficient has been calculated using incomes that have been equivalised, are net of all direct taxes and have been measured before housing costs have been deducted.
Source: Authors' calculations using Family Resources Survey and Family Expenditure Survey, various years.

Since the early 1990s, the changes in income inequality have been less dramatic. After falling slightly over the early to mid-1990s, inequality rose again during Labour's first term, with the Gini coefficient reaching a new peak of 0.35 in 2000–01. After falling for three years, the Gini coefficient has been rising since 2003–04, and is now slightly higher (0.35 compared with 0.33) than when Labour came to power in 1996–97 – an increase that is statistically significant at the 5% level.

Figure 2 presents a fuller way of showing recent trends in the income distribution. It divides the population into 100 equally sized groups, ranked from those with the lowest incomes on the left to those with the highest on the right. The black line shows the average annual real rate at which incomes grew in each of these 'percentiles' between 1979 and 1996–97. The line slopes up from left to right, showing that incomes grew more quickly for richer individuals. Given this pattern of income growth, it is hardly surprising that this was a period of rising income inequality, as shown in Figure 1.

It is important to note here that we do not observe the same households' incomes each year. Instead, we observe the incomes of different households at

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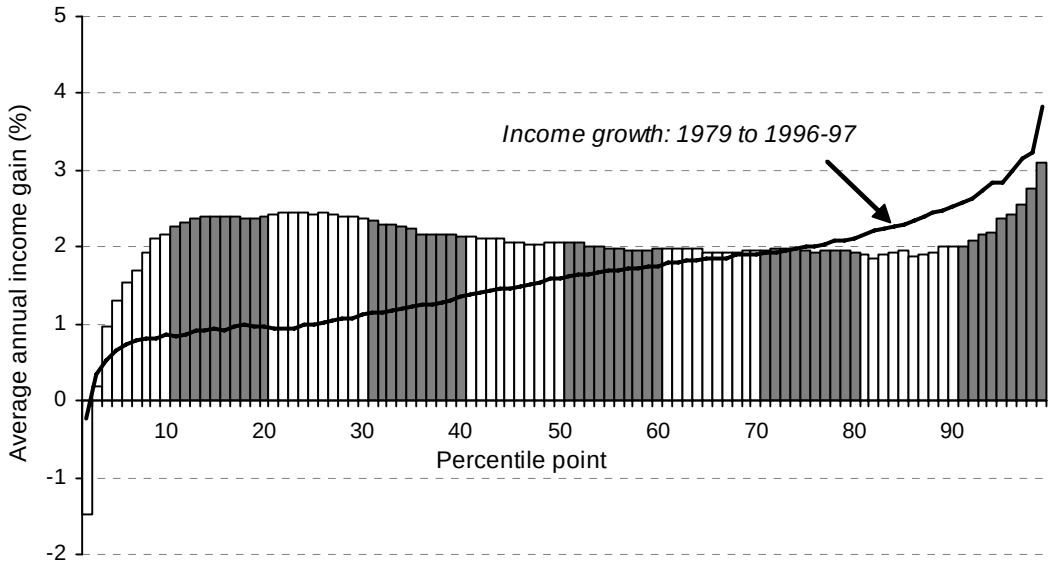
Atkinson, 'The distribution of income in the UK and OECD countries in the twentieth century', *Oxford Review of Economic Policy*, 1999, 15(4), 56–75.

Figure 2. Real income growth by percentile point, 1996–97 to 2005–06 (GB)



Notes: The change in income at the 1st percentile is not shown on this graph. Incomes have been equivalised, are net of all direct taxes and have been measured before housing costs have been deducted. Percentile incomes are measured as the income of the person on the border of the two percentiles.
Source: Authors' calculations using Family Resources Survey and Family Expenditure Survey, various years.

different points in time, which allows us to calculate the implied growth in percentiles of the income distribution but not the income growth of individual households.

The pattern under the current government – shown by the bars in Figure 2 – looks very different. Over most of the income distribution, from around the 15th percentile to the 90th percentile, we see the opposite pattern to that under the Conservatives when higher percentile points saw higher income growth. Again, it is important to note that we do not observe the same households over time.

If this were the whole story, inequality as well as poverty would have fallen since 1997. And indeed, on some measures – such as the ratio of incomes at the 90th percentile to those at the 10th percentile – inequality has fallen. But most measures, including the Gini coefficient, also take account of what has happened at the very top and very bottom of the income distribution, where this trend is reversed.

As Figure 2 shows, average annual income growth since 1996–97 accelerates significantly as one moves up through the richest 10% of the population. The incomes of the top percentile have grown at an average real rate of 3.1% a year under Labour to date, more quickly than those of any other percentile and significantly above the 2.3% growth in mean household incomes. Meanwhile,

income growth is weaker and weaker as one moves down through the poorest 15% of the population.

Therefore the pattern of change in the income distribution since 1996–97 is rather more complex than that of the previous 17 years. If one looks at the main bulk of the income distribution, this seems to be a period of modest income equalisation. However, income growth at the extremes of the income distribution – the top 10% and bottom 15% – has essentially cancelled out this trend, to leave overall levels of inequality slightly higher (as measured by the Gini coefficient) than when Labour came to power.

Therefore it seems as though there are two interesting phenomena, at either end of the income distribution, that are driving trends in overall income inequality. In this Briefing Note, we choose to focus in more depth at the top of the income distribution. This is partly because we build on the groundbreaking work on top incomes in the UK over the entire twentieth century by Tony Atkinson[4] and make use of publicly-available micro-data on the rich based on income tax returns (the SPI). In addition, focusing on trends at the top of the income distribution will allow us to inform an increased level of public debate about subjects concerning 'high-income' individuals.[5]

We do not discuss here potential explanations for relatively slow growth in the bottom 15% of the income distribution, mainly because of uncertainty over the ability of the Family Resources Survey to fully capture incomes at the very bottom of the income distribution.[6] Whilst we are able to make use of the SPI to investigate high-income individuals in more detail, there is no comparable source of information for individuals at the very bottom of the income

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[4] A. B. Atkinson and T. Piketty, *Top Incomes over the Twentieth Century*, Oxford University Press, Oxford, 2007.

[5] For example, see D. Maxwell, *Fair Dues: Towards a More Progressive Inheritance Tax,* Institute for Public Policy Research, London, 2004 (http://www.ippr.org/members/download.asp?f=%2Fecomm%2Ffiles%2Ffair%5Fdues%2Epdf) or S. Lansley, *Rich Britain: The Rise and Rise of the New Super Wealthy*, politicos, London, 2006. Moreover, one could note that a large number of recent tax reforms have focused either on ensuring that rich individuals pay more in tax (non-domiciles charge, capital gains tax) or on how they affect these rich individuals (inheritance tax). Alternatively, note the comments of the Rt Hon. Peter Hain MP (then Northern Ireland Secretary, currently Secretary of State for Work and Pensions) on the bonuses received by individuals working in the City (10 February 2007; http://news.bbc.co.uk/1/hi/uk/6350997.stm).

[6] In its response to a recommendation made by the Treasury Select Committee to publish the proportion of individuals with household incomes below 40% of the contemporary median, the government stated that 'Reported snap-shot incomes are not seen as a reliable reflection of the living standards of people below 40 per cent of median income, and they are not produced in accordance with National Statistics standards, therefore the Government does not report against a 40 per cent of median income threshold' (page 11 of http://www.publications.parliament.uk/pa/cm200607/cmselect/cmtreasy/696/696.pdf).

distribution. However, in the future, we hope to investigate trends at the very bottom of the income distribution in more detail.

4. What characterises 'high-income' individuals?

So, who are 'high-income' individuals and how do they differ from the rest of the population?

These are questions for which it is difficult to get robust quantitative information. Such individuals are probably less likely than other people to participate in supposedly nationally-representative household surveys and, when they do, such surveys may not accurately record their incomes given that high-income individuals will tend to get income from a range of different sources.[7] The Family Resources Survey (FRS) – the survey that forms the basis of the official HBAI series – is likely to suffer from such a problem, and that is why the government statisticians make an adjustment to the incomes of the very rich who appear in the FRS when producing the HBAI series.[8]

An alternative source of data is the information provided by individuals and employers to HMRC for income tax purposes. From these administrative data, HMRC takes a sample of individuals to produce the Survey of Personal Incomes. 'High-income' individuals are, by design, over-represented in the SPI. This means that the SPI gives us a much clearer picture of what is going on at the top of the income distribution than the FRS (see Box 1 for more details on the SPI). According to HMRC, 'Where income exceeds the threshold for the operation of PAYE (£4,745 in 2004–05), the SPI provides the most comprehensive and accurate official source of data on personal incomes'.[9]

To be sure, this statement does require a few provisos. First, the tax authorities only know about information on income declared for the purpose of calculating UK income tax liabilities. The SPI thus misses any UK or foreign income not subject to UK income tax received by these individuals[10] and any income not

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[7] For instance, see M. Barnard, J. Taylor, J. Dixon, S. Purdon and W. O'Connor, *Researching the Very Wealthy: Results from a Feasibility Study*, Final Report prepared for HMRC, National Centre for Social Research, London, 2007 (http://www.hmrc.gov.uk/research/report31.pdf).

[8] See appendix 2 of Department for Work and Pensions, *Households Below Average Income 1994/95–2005/06*, London, 2006.

[9] *Source:* HMRC, *Survey of Personal Incomes 2004–05 Public Use Tape Documentation* (http://www.data-archive.ac.uk/doc/5661%5Cmrdoc%5Cpdf%5C5661userguide.pdf).

[10] For example, income from tax-exempt sources, such as tax-free lump-sum payments from personal pensions, is not recorded. To pick another recent high-profile example, nor is foreign income received by non-domiciles; this is one reason why it is so difficult to estimate the revenue that would arise from attempting to tax these individuals more heavily (see Treasury costing of Shadow Chancellor's proposal for a £25,000 levy on non-domiciles (http://www.hm-treasury.gov.uk./media/6/4/foi_costingtemplate031007.pdf)).

declared by individuals in order to evade income tax (the importance of which is by definition difficult to ascertain). The tax authorities may also not know about the income earned by UK-resident non-taxpayers, such as those with a taxable income below the personal allowance; as the focus of this report is on high-income individuals, this is not a concern.

Box 1. The Survey of Personal Incomes

The Survey of Personal Incomes (SPI) is an annual survey conducted by HMRC based on data collected on individuals who could be liable for income tax. Stratified samples are drawn from three separate HMRC databases (those subject to PAYE, self-assessment and neither of these). Variables that were used to stratify the sample include sex, pay, tax liability, main source of income and occupational pensions in previous years. Individuals with high incomes or rare allowances tend to be over-sampled. In 2004–05, this procedure produced a valid sample of 523,621 cases.

The SPI covers individuals from across the UK. However, we have chosen to focus only on individuals living in Great Britain in order to ensure comparability with the HBAI data-set over time (as this only included Northern Ireland cases from 2002–03 onwards).

Around 15% of individuals within the SPI are not taxpayers, since their taxable income (i.e. that left after deducting various tax reliefs) does not exceed the personal allowance (£4,745 in 2004–05 and £5,435 in 2008–09). However, the SPI does not cover all non-taxpayers, since some individuals do not have any interaction with HMRC in a particular year, e.g. individuals without children on non-taxable state benefits.

The SPI contains data pertaining to before-tax income, sources of before-tax income, tax reliefs and some data on individual characteristics, e.g. sex, age group, industry and their marginal rate of income tax. However, the measure of total before-tax income (and some of its components) is incomplete because income that is not subject to tax is not provided to HMRC (see footnote 10). Moreover, certain items have to be imputed by HMRC, e.g. investment income where tax has been deducted at source and personal pension contributions.

Certain steps also have to be conducted in order to ensure anonymity. All sources of income, deductions and reliefs are rounded to three significant figures, with tax amounts imputed based on these rounded figures. Unusual combinations of allowances must be examined to ensure no-one can be identified. Some variables are combined to further ensure anonymity. HMRC also ensures that no group has a sampling weight less than 1 in 60 or represents a population of less than 10,000. Finally, individuals with incomes greater than £600,000 are combined to create ‘composite records’ in order to ensure anonymity. This is done by combining cases with similar characteristics (e.g. same stratum and sex) and taking averages for each variable on the file.

In 2004–05, there were about 46.8 million adults in Great Britain, about 29.5 million of whom paid income tax. This means that about 63% of adults in Great Britain in 2004–05 paid income tax. This group will serve as our comparison or reference group when we look at what characterises high-income individuals compared with the rest of the population, i.e. we will compare the characteristics of high-income individuals with those of the

average income tax payer (where the characteristics of the average income tax payer will always be defined in terms of the mean value for all taxpayers). Ideally, one would compare high-income individuals with *all* adults. However, the SPI is only a reliable source of information for income tax payers, not for all adults.

Given that one needs an income greater than the personal allowance in order to pay income tax, income tax payers are likely to have a higher average income than all adults. This means that comparing the incomes of high-income individuals with those of the average income tax payer is likely to understate the difference in the average incomes of high-income individuals and all adults. This will also be true for anything that is positively associated with income. For instance, if income is positively associated with height, high-income individuals will, on average, be taller than the average adult. Comparing the average height of high-income individuals and the average height of an income tax payer will give an underestimate of the true difference in the average height of high-income individuals and all adults. However, it will tell us that, on average, high-income individuals are taller than all adults.

The incomes and taxes of 'high-income' individuals

Table 1 presents some basic facts on the incomes of high-income individuals in 2004–05 (the latest year of the SPI) compared with the average income tax payer in Great Britain. All monetary values are presented in today's prices, i.e. 2007–08 prices. Unlike the data used to produce Figures 1 and 2, Table 1 looks at income before tax. This is a measure of income that includes private income from earnings, self-employment and investments before tax has been deducted. However, it also includes taxable social security benefits (e.g. jobseeker's allowance) before tax has been deducted. It does not include income that is not subject to UK income tax (e.g. income from non-taxable benefits such as child benefit).

In 2004–05, the average income tax payer had an annual income before tax of £24,769 in 2007–08 prices and paid just over £4,400 in income tax. They paid 17.8% of their pre-tax income in income tax.[11] This is clearly a lot lower than the basic rate of income tax at the time of 22%, but one should remember that the UK income tax system is progressive, so that the marginal rate individuals face on an extra pound earned will always be greater than their average tax rate on all income earned (see also Figure 3 later). In 2004–05, all individuals were entitled to a basic allowance of £4,745[12] – some individuals, such as

[11] Note that this definition of the average income tax rate does not record National Insurance contributions, nor receipt of child tax credit and working tax credit, but it does include capital gains tax. Naturally, this definition of the average tax rate also excludes VAT, council tax, stamp duty, corporation tax and specific excise duties.

[12] As one might expect, putting this figure into 2007–08 prices gives a value (£5,140) very close to the minimum value of before-tax annual income for all income tax payers in Great Britain.

pensioners, received more – and there was also a 10% starting rate in operation. The marginal rate for about 11% of income tax payers in Great Britain in 2004–05 was the higher income tax rate of 40%; for 12% of income tax payers, it was the starting rate of 10%; and for 77%, it was the basic rate of 22%.

Table 1. Basic facts on the incomes and taxes of 'high-income' individuals in 2004–05

	All taxpayers	*Top 10–1% of adults*	*Top 1–0.1% of adults*	*Top 0.1% of adults*
Number of adults	29,500,000	4,215,483	421,702	46,854
Before-tax annual income				
Minimum value	£5,093	£35,345	£99,727	£351,137
Average value	£24,769	£49,960	£155,832	£780,043
Average relative to all taxpayers	1.0	2.0	6.3	31.5
Net taxes paid				
Higher-rate taxpayers	11.0%	66.6%	99.6%	99.2%
Average net income tax paid	£4,415	£10,550	£49,477	£274,482
Average net income tax rate[a]	17.8%	21.1%	31.8%	35.2%
Deductions permitted from pre-tax income, e.g. pension contributions[b]	2.3%	4.0%	5.2%	6.3%

[a]This is measured as average tax paid for each group divided by average total income for each group.
[b]This represents the average proportion of before-tax income that is deducted from before-tax income in order to arrive at taxable income (excluding personal allowances).
Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance.
Source: Authors' calculations based on SPI 2004–05.

How do 'high-income' individuals compare with the average income tax payer? Before we can answer this, we must define what we mean by 'high-income' individuals. In this section, we have chosen to look at the richest 10% of all adults in Great Britain, or the richest 4.68 million adults (99.9% of the cases in the SPI that represent these adults are income tax payers[13]). We assume that all of the richest 10% of adults in Great Britain are represented by cases in the SPI. One reason for choosing this group of individuals is that it is what others in this field have chosen to focus upon in the past.[14] Moreover, as

[13] About 0.1% of the richest 10% of adults in Great Britain did not pay UK income tax in 2004–05. This was mainly due to relatively high levels of deductions permitted from pre-tax income.

[14] For instance, see A. B. Atkinson and T. Piketty, *Top Incomes over the Twentieth Century*, Oxford University Press, Oxford, 2007, or A. Leigh, 'How closely do top income shares track other measures of inequality?', *Economic Journal*, 2007, 117(524): F619–F633.

we have seen in Figure 2, it is the income growth amongst the top 10% that appears to be one of the major drivers behind recent trends in income inequality.

We have further broken the richest 10% of all adults into three separate subgroups:

- the richest 0.1% of all adults – about 47,000 adults in 2004–05 – who all had an annual income before tax of at least £351,137 (2007–08 prices);

- the richest 1% of all adults but excluding the top 0.1% ('the richest 1–0.1%') – the next richest 422,000 adults – who all had annual incomes before tax between £99,727 and £351,137 (2007–08 prices);

- the richest 10% excluding the top 1% ('the richest 10–1%') – the next richest 4.22 million adults – who had annual incomes before tax between £35,345 and £99,727. The lower band for this group is less than the effective threshold for the top marginal rate of income tax (£36,145 at the time, or about £39,201 expressed in 2007–08 prices). Consequently, about a third of this group did not have incomes high enough to pay the top rate of income tax.[15]

The average (mean) incomes before tax of these three groups are shown in Table 1. These average values imply that the richest 10–1% of adults received an average income about twice the value received by the average income tax payer in 2004–05. The richest 1–0.1% of adults received an average income over six times greater than that of the average income tax payer, whilst the richest 0.1% of adults received an average income over 31 times greater.

How much do these individuals pay in income tax? As one would expect, they pay a lot more than the average income tax payer. The average tax rate also increases as one moves up the income distribution, again as one would expect, increasing from 21.1% for the top 10–1% to 35.2% for the top 0.1%.

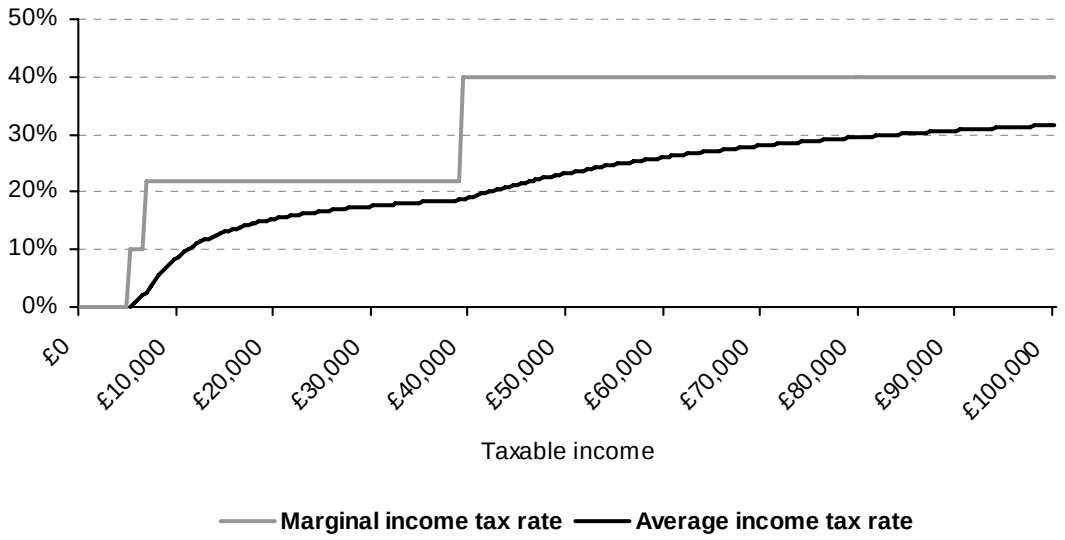
The average tax rate on the top 10–1% may seem quite low at 21.1%. In fact, the rate is not surprising, given the progressive nature of the UK income tax schedule. Figure 3 plots both the marginal and the average rates that individuals with various levels of taxable income (expressed in 2007–08 prices) would have faced in 2004–05. It can be seen that even though a large proportion of individuals with a taxable income between £35,000 and £100,000 (the approximate range of before-tax incomes for the top 10–1% of adults) would have faced a marginal rate of 40%, the average tax rate ranges from

[15] Given that 11% of taxpayers pay the higher rate of income tax, one might be surprised to observe only two-thirds of the richest 10–1% of adults paying the higher rate. These facts are not inconsistent with one another as 11% of taxpayers corresponds to less than 7% of all adults.

around 18% to about 32%. Therefore it is not surprising that, on average, such individuals had an average tax rate of 21.1% in 2004–05 (especially if some of them were also entitled to age-related personal allowances or other deductions).

It is important to note that Figure 3 shows how marginal and average tax rates evolve according to *taxable* income (before personal allowances have been deducted), rather than according to before-tax income. Individuals are able to deduct some items from their before-tax income in order to arrive at taxable income, e.g. contributions to personal pension schemes. The average values of these deductions as a proportion of before-tax income are also shown in Table 1. We can see that for the average income tax payer, these deductions represent an average of about 2.3% of before-tax income. They represent more for the top 10–1% of adults, at 4.0%, and even more for the top 1–0.1% and top 0.1%, at 5.2% and 6.3% respectively.

Figure 3. Marginal and average income tax rates by total taxable income



Source: Authors' calculations for an individual of working age, not entitled to tax credits or any special allowances.

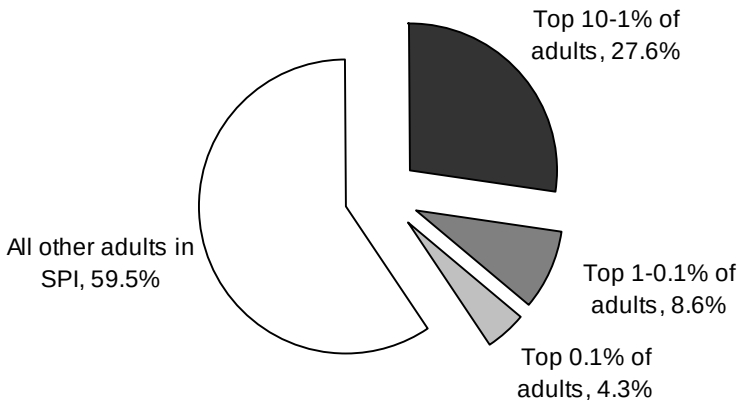
In 2004–05, the sum of total income received by taxpayers and non-taxpayers as measured by the SPI was £826.6 billion, expressed in 2007–08 prices.[16] Figure 4 shows the shares of this total that were received by our three high-income groups in 2004–05.[17] As can be seen, the top 10–1% of adults received over a quarter of total personal income as measured in the SPI in 2004–05. The top 1–0.1% received 8.6% and the top 0.1% received 4.3%. In total, the top

[16] As noted earlier, not all of personal income is subject to income tax, and thus total income as measured in the SPI will be an incomplete measure of total personal income in the economy.

[17] This is achieved by dividing the total personal income of each of these three groups by total personal income for all individuals in the SPI in 2004–05.

10% of all adults (about 4.7 million adults) received just over 40% of all income measured in the SPI in 2004–05.

Figure 4. Share of total SPI income received by different groups in 2004–05



Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance.
Source: Authors' calculations based on SPI 2004–05.

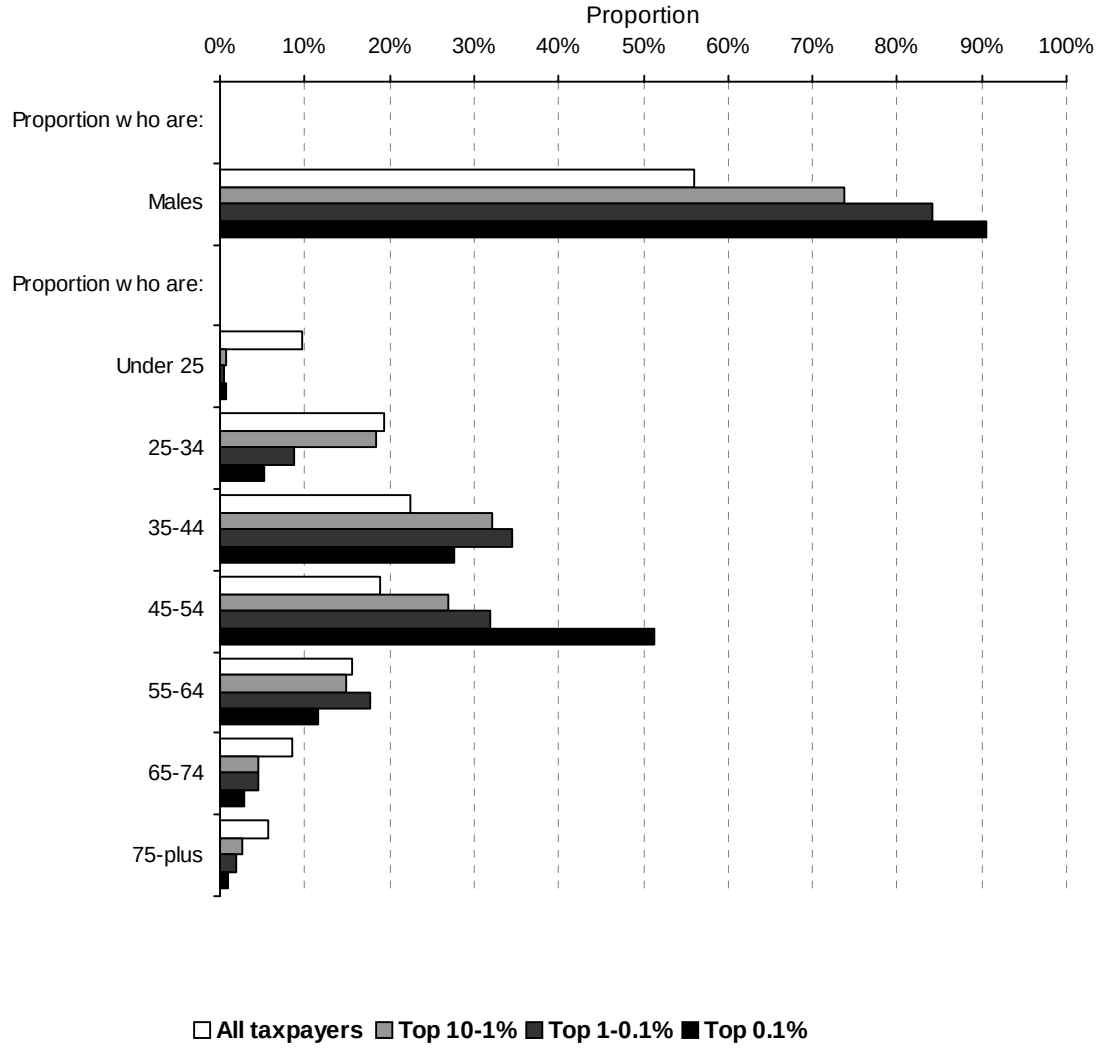
Other characteristics of 'high-income' individuals

The SPI contains a limited amount of information on things other than income, including sex, age, region, industry and an indicator of whether individuals were company directors. Figure 5 compares high-income individuals with all taxpayers by sex and age range (the data behind this graph can be found in Appendix B). As one moves further up the income distribution, it becomes more likely that individuals are male: over 90% of the richest 0.1% (about 47,000 adults) are male, compared with 56.1% of all taxpayers.

In terms of age, it seems as though high-income individuals are less likely to be old (over 65) and less likely to be young (under 35). Instead, they are much more likely to be found in the 45- to 54-year-old age bracket. Whilst fewer than 20% of all income taxpayers can be found in this age band, more than 30% of the richest 1–0.1% can be found in this age band and over 50% of the richest 0.1%.

The picture is slightly more complicated for individuals aged 35–44 and those aged 55–64. Whilst a larger proportion of each of the three high-income groups are aged 35–44 compared with all taxpayers, a larger proportion of the top 1–0.1% of adults are aged 35–44 than of the top 0.1%. In terms of individuals aged 55–64, a lower proportion of the top 10–1% of adults and top 0.1% can be found in this age bracket compared with all taxpayers. However, a larger proportion can be found in the top 1–0.1% of adults compared with all taxpayers.

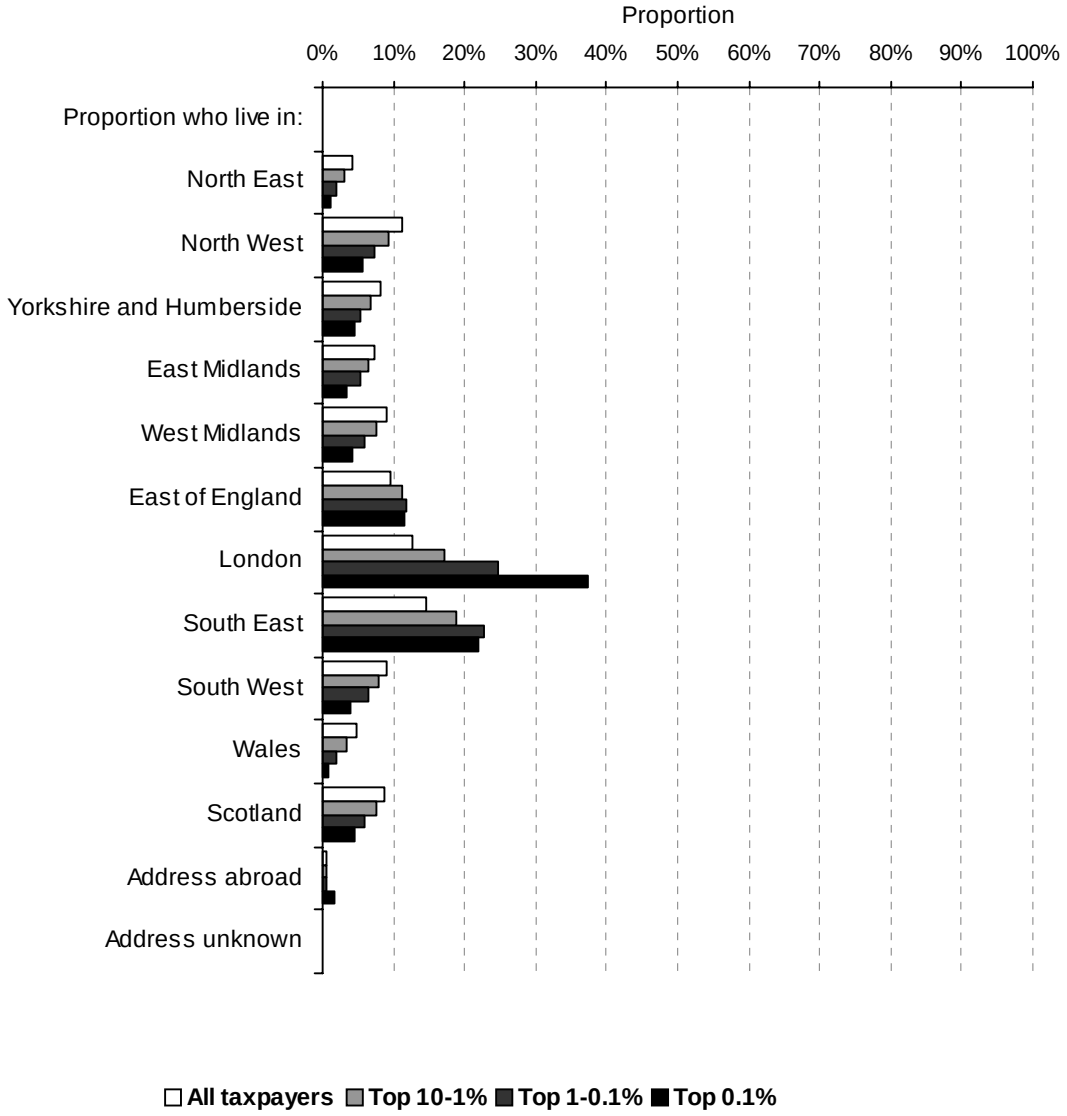
Figure 5. Age and sex of 'high-income' individuals



Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance.
Source: Authors' calculations based on SPI 2004–05.

Figure 6 shows the proportions of all taxpayers and of our three high-income groups that live in different regions of Great Britain (the data behind this graph can be found in Appendix B). It shows that high-income individuals are less likely – and increasingly less likely as income increases – to be found in the following regions: North East; North West; Yorkshire and Humberside; East Midlands; West Midlands; South West; Wales; and Scotland. However, they are more likely than the average taxpayer to be found in the following regions: East of England; South East; and London. The picture is particularly striking with regard to London: about an eighth of all taxpayers live in London, which compares with about a quarter of the top 1–0.1% of adults and about three-eighths of the top 0.1%.

Figure 6. Where do 'high-income' individuals live?

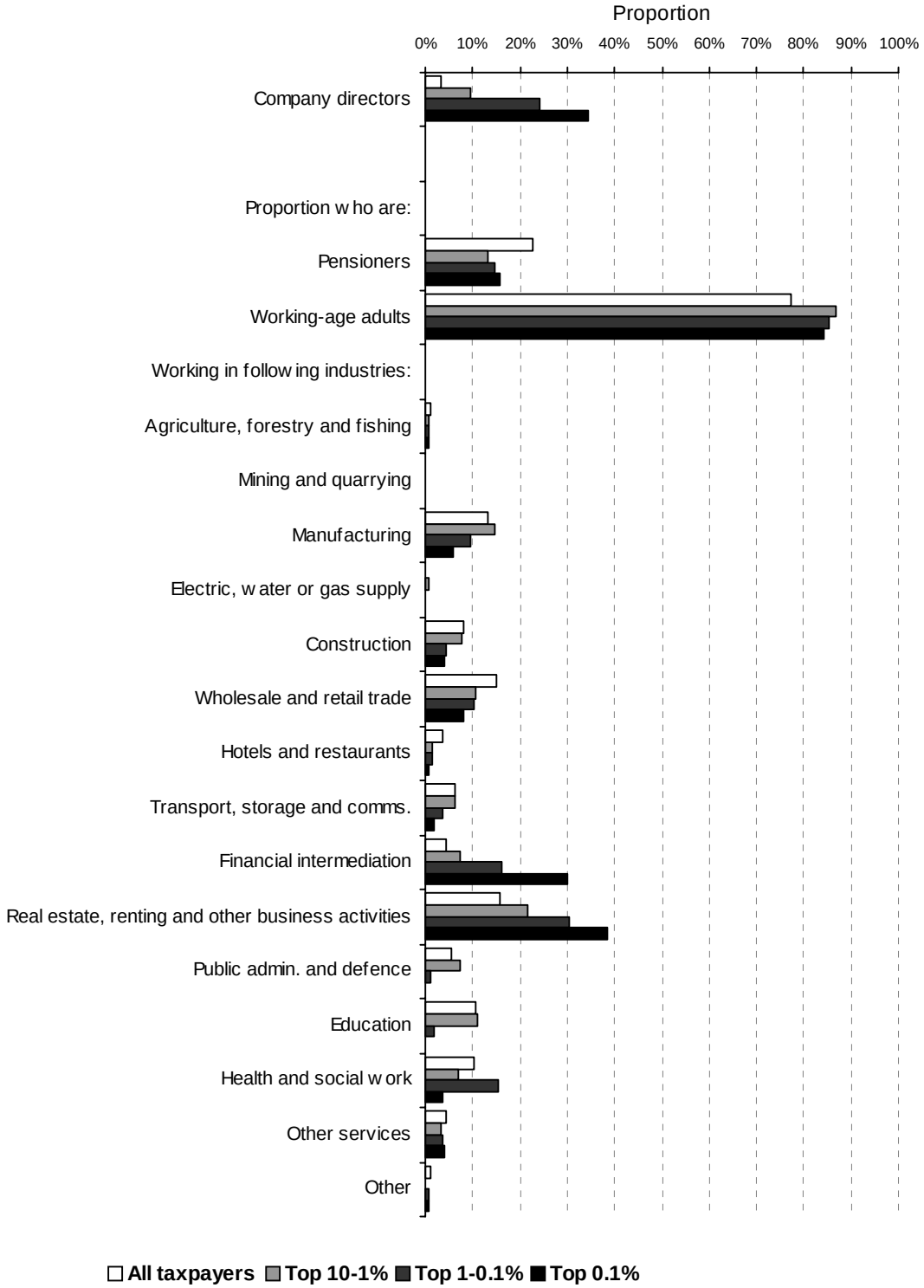


Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance. Top 0.1% excludes 'composite records'; see Box 1.
Source: Authors' calculations based on SPI 2004–05.

Figure 7 shows the proportions of all taxpayers and of our three high-income groups that are classified as company directors.[18] It also shows what proportions are classed as pensioners and what proportions are classed as working-age adults. The term pensioner, here, refers to individuals who are receiving income from either a state or private pension; thus it is not confined to individuals of state retirement age or older. It also includes early retirees.

[18] Here, 'company directors' refers to individuals who are members of a board of directors and to individuals who perform a role similar to that of a board of directors but on their own.

Figure 7. What do 'high-income' individuals do?



Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance. Top 0.1% excludes 'composite records'; see Box 1.
Source: Authors' calculations based on SPI 2004–05.

Our definition of working-age adults thus excludes early retirees. The data behind Figure 7 can be found in Appendix B.

Figure 7 shows that high-income individuals are more likely to be directors of companies than the average taxpayer. Nearly a quarter of the richest 1–0.1% (422,000 adults) were company directors in 2004–05, compared with 3.4% of all taxpayers in Great Britain in 2004–05. This increases to over a third when we look at the top 0.1% (excluding 'composite records'; see Box 1).

High-income individuals are less likely to be pensioners than the average taxpayer in Great Britain in 2004–05. More than 22% of all taxpayers were classed as pensioners, whilst 13.2% of the top 10–1% of adults were classed as pensioners in 2004–05. However, this proportion then slightly increases as one looks further up the income distribution – 14.5% of the top 1–0.1% and 15.8% of the top 0.1% were pensioners (again, excluding 'composite records').

Figure 7 also shows in which industries working-age adults (excluding early retirees) can be found. Compared with the average taxpayer in Great Britain in 2004–05, the top 10–1% and top 1–0.1% of all adults seem much more likely to work in 'real estate, renting and other business activities [inclusive of individuals practising law]', 'financial intermediation' and 'health and social work'. Just looking at working-age adults in the top 1–0.1%, over 60% work in these three industries, compared with just over 30% of all taxpayers. Although the fact that high-income individuals are more likely to work in real estate, law and finance should not be surprising, a higher likelihood of working in 'health and social work' might come as a surprise. However, it is not so surprising when one notes that the average net earnings of contracted GPs in 2004–05 were well above £100,000.[19]

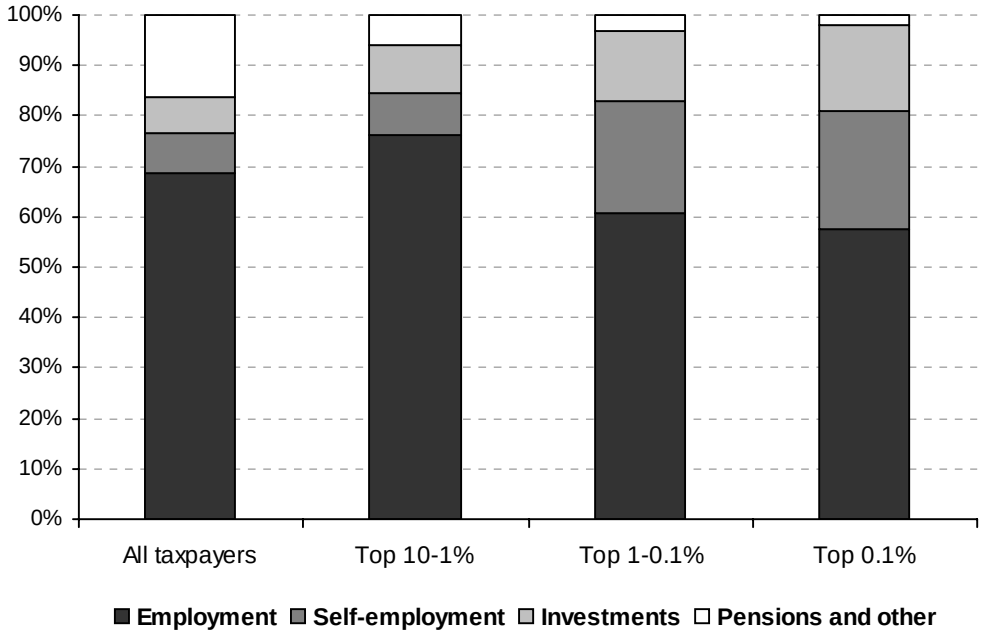
If one just looks at the top 0.1% of adults (excluding 'composite records'), a lower proportion can be found in 'health and social work' than for the other two high-income groups and for the average taxpayer. However, the proportion working in either 'real estate, renting and other business activities' or 'financial intermediation' continues to increase: over two-thirds of the richest 0.1% of working-age adults can be found in these two industries.

There are also industries in which individuals in the top 10–1% of all adults are slightly more likely to be found than the average taxpayer, but in which individuals in the top 1–0.1% or the top 0.1% are less likely to be found. These include 'education', 'manufacturing' and 'public administration and defence'. However, there are other industries in which individuals seem increasingly less likely to be found as one moves up the income distribution. These include 'wholesale and retail trade' and 'transport, storage and communications'.

[19] *Source:* http://www.ic.nhs.uk/webfiles/publications/earnex0506/2005_06%20GP%20Earnings%20and%20Expenses%20Initial%20Report%20TSC35rev11%2031%20oct.pdf.

As well as asking in what industry these 'high-income' individuals worked, we can ask what proportion of their total before-tax income they received from different sources. Figure 8 shows the average value of 'employment income', 'self-employment income', 'investment income' and 'pensions and other income'[20] as proportions of before-tax income for each of the four groups we have hitherto discussed.

Figure 8. Sources of before-tax income



Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance.
Source: Authors' calculations based on SPI 2004–05.

The main source of income for most individuals is earned income from employment – even for those on the highest incomes. For instance, Figure 8 shows that the average share of total income that comes from employment is 69% for the average taxpayer. It also shows that the top 10–1% of all adults receive a higher proportion of their income from employment than the average taxpayer, at around 76%. The richest two groups receive a lower share of their total income from employment than the average taxpayer and than the richest 10–1% of all adults. The richest 1–0.1% receive 61% of their income from employment and the richest 0.1%, 58%.

Figure 8 also shows income from self-employment, i.e. earned income not received from an individual's employer. This could include tips, shared profits

[20] Other income includes, amongst other things, taxable state benefits.

from a partnership in law and individual fees for accountants, for instance. From the graph, we can see that all three high-income groups in the richest 10% of all adults receive a greater share of their income from self-employment than all taxpayers, particularly the two groups that together make up the top 1%. However, the combined income from employment and self-employment declines only very slightly as income rises through the top 10%. In fact, the share of total income coming from either employment or self-employment declines from around 84% to 81% when comparing the top 10–1% with the top 0.1%.

Individuals can also receive income from investments, e.g. dividends or interest from savings accounts. As we can see from Figure 8, the share of income that comes from investment increases the further up the distribution we go, with the top 0.1% receiving 17% of their income from investments, compared with 7% for the average taxpayer.

The last source of income we investigate is 'pensions and other income', which includes occupational pensions, taxable state benefits and other forms of income. The share of income from this source is much higher for the average taxpayer than for the three groups that together make up the richest 10%.

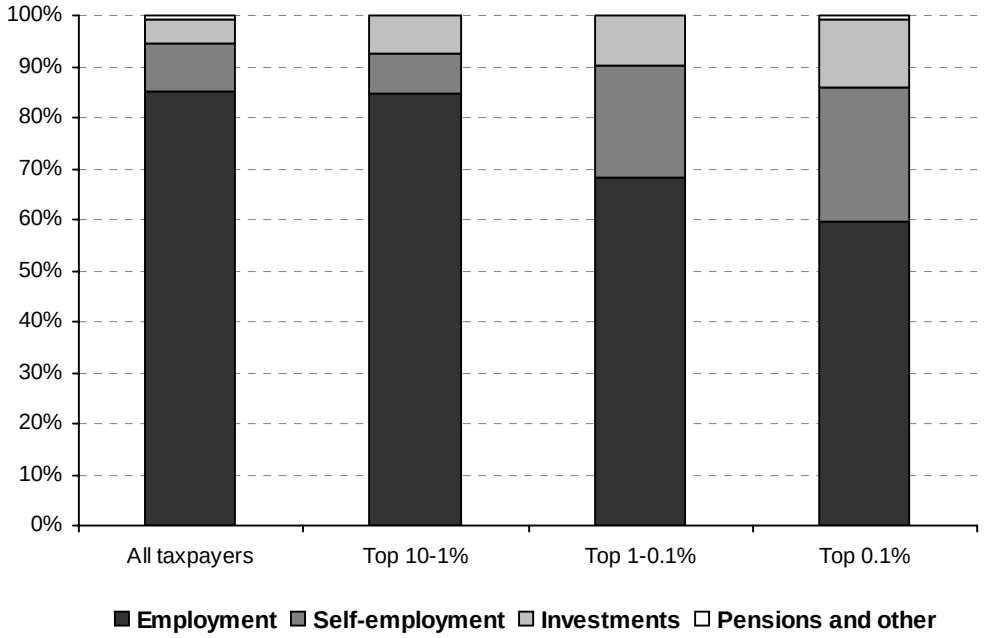
One might reasonably expect pensioners and working-age adults to receive their incomes from different sources – pensioners receiving much more through occupational and state pensions, and working-age adults receiving much more through employment earnings. We also know from Figure 7 that pensioners are less likely to be found at the top of the income distribution than all taxpayers, and that this is increasingly so for the higher-income groups. Therefore the changing relative importance of different sources of income we observed in Figure 8 may be driven by the changing balance of the group between pensioners and working-age adults. Figure 9 thus presents the same information as Figure 8 except that pensioners have been excluded.

First, we note that all groups receive a negligible proportion of their income from 'pensions and other income' when we look solely at working-age adults. This strongly suggests that the main component of 'pensions and other income' is state and occupational pension income.

We can also see that amongst working-age adults, the top 10–1% receive a *lower* share of their income from employment than all taxpayers. This contrasts with the *higher* share that was observed amongst the top 10–1% of all adults in Figure 8, which is probably the result of relatively fewer pensioners amongst the top 10–1% than amongst all taxpayers. The other patterns we observed in Figure 8 can also be seen when we exclude pensioners, these being: a declining share of income from employment for the top 1–0.1% and top 0.1%; a rising share of income from self-employment for the high-income groups; only a small decline in the combined share from employment and self-employment for

the high-income groups; and a rising share of income from investments for high-income groups.

Figure 9. Sources of before-tax income (excluding pensioners)



Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance.
Source: Authors' calculations based on SPI 2004–05.

Summary

To summarise this section, there were about 4.2 million adults in Great Britain in 2004–05 with before-tax incomes between £35,000 and £100,000 in today's prices. There were a further 422,000 very rich adults with before-tax incomes between £100,000 and £350,000 in today's prices. There were also about 47,000 very, very rich individuals with incomes above £350,000 in today's prices, who had average incomes about 31 times the income received by the average taxpayer in Great Britain in 2004–05.

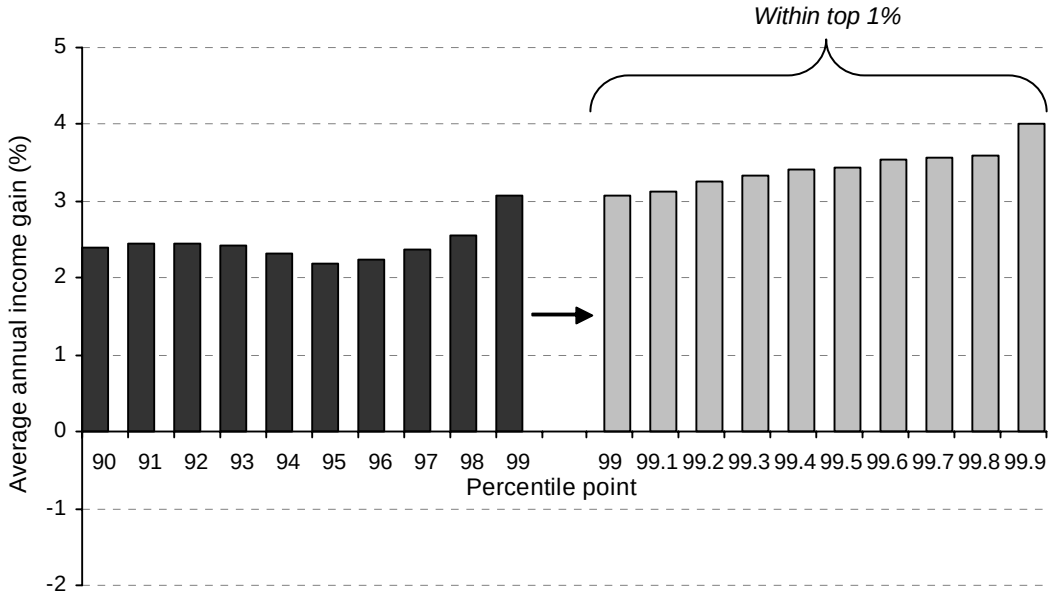
So what typifies these high-income individuals? Well, they are much more likely to be male and in their 40s than the average income tax payer in Great Britain. They are also more likely to live in London or the South East. If they are of working age, they are more likely to work in real estate, law and other business activities, finance, or health and social work. High-income individuals also receive more of their income from self-employment or investments than the average income tax payer. Although the top 1% receive less as employment earnings than the average income tax payer, this form of income still amounts to almost three-fifths of income even for the richest 0.1%.

5. Recent changes in incomes among 'high-income' individuals

This section looks at recent trends in the incomes of high-income individuals as recorded in the SPI. Because we wish to compare these trends with those in the HBAI data-set in the next section, we change from using a before-tax measure to a measure of after-income-tax income (i.e. total private income as recorded in the SPI less income tax paid).

The black bars in Figure 10 show the annualised growth in the real net incomes of each 1% of individuals within the richest 10% of individuals (each bar represents around 470,000 individuals). This graph presents similar information to the last 10 bars of Figure 2. However, it is based on the SPI rather than the FES and FRS, does not include growth in 2005–06 and does not include dependent children. The dark bars in Figure 10 show a similar pattern to that shown in Figure 2, with the real incomes of the top 1% growing at the fastest rate.

Figure 10. Real income growth for the richest 10% and 1% using the SPI, 1996–97 to 2004–05 (GB)



Notes: Incomes are net of income tax but do not include the deduction of council tax or National Insurance contributions. Incomes have not been equivalised. Percentile incomes are measured as the income of the person on the border of the two percentiles.
Source: Authors' calculations using Survey of Personal Incomes, various years.

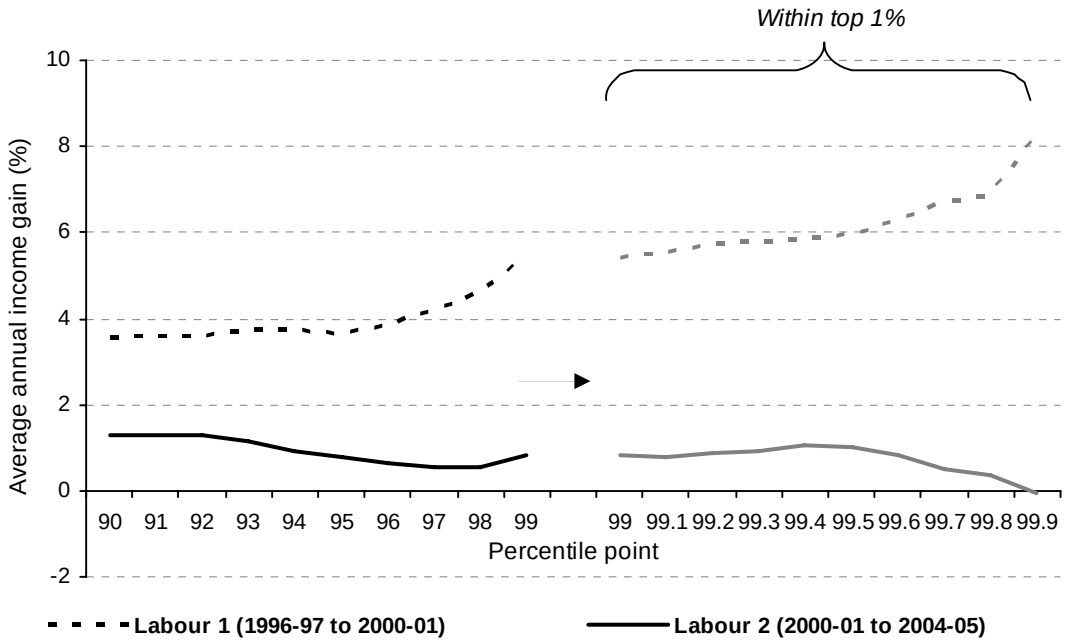
At this point, it is important to state that the SPI does not follow the same individuals over time. Instead, we observe the incomes of different individuals at different points in time, which allows us to calculate the implied growth in percentiles of the income distribution but not the income growth of individuals. This is particularly important at the top of the income distribution, since individuals in the richest 10% of adults in one particular year might not necessarily be in the richest 10% of adults in future years. The richest 10% of

adults could be quite a fluid and changing group of individuals from one year to the next.

The SPI allows us to ask whether the spike in real income growth continues further into the top 1%: just as the top 1% saw faster growth than the rest of the top 10% (and probably the rest of the population), did the top 0.1% experience faster growth than the rest of the top 1%? The grey bars in Figure 10 show the annualised growth in the real net incomes of each 0.1% of individuals (around 47,000) within the richest 1% of individuals (around 470,000). It clearly shows that the top 0.1% of individuals did indeed experience faster real income growth than the rest of the top 1% of individuals over this period (and, by implication, the rest of the top 10%, and probably the rest of the adult population as well).

Given the fluctuations in the economy over the period 1996–97 to 2004–05, it is unlikely that income growth across the income distribution would have been evenly spread across this period. For instance, we know that growth in average real incomes was much lower during Labour's second term than during its first,[21] but did this also apply to the rich?

Figure 11. Real income growth for the richest 10% and 1% using the SPI, 1996–97 to 2000–01 and 2000–01 to 2004–05 (GB)



Notes: Incomes are net of income tax but do not include the deduction of council tax or National Insurance contributions. Incomes have not been equivalised. Percentile incomes are measured as the income of the person on the border of the two percentiles.
Source: Authors' calculations using Survey of Personal Incomes, various years.

[21] See pages 8–12 of M. Brewer, A. Goodman, A. Muriel and L. Sibieta, *Poverty and Inequality in the UK: 2007*, IFS Briefing Note 73, 2007 (http://www.ifs.org.uk/bns/bn73.pdf).

In order to answer this question, Figure 11 shows the same information as Figure 10 but broken down into Labour's two complete terms of office to date: the dashed lines correspond to Labour's first term of office and the solid lines correspond to Labour's second term of office. The black lines correspond to growth within the top 10% and the grey lines correspond to growth within the top 1%.

During Labour's first term of office, annualised average real income growth was highest amongst the top 1% and, within the top 1%, it was highest amongst the top 0.1%. In fact, the top 0.1% of adults experienced average real income growth in excess of 8% each year between 1996–97 and 2000–01, or a rise in real income of over a third (37%) in just four years.

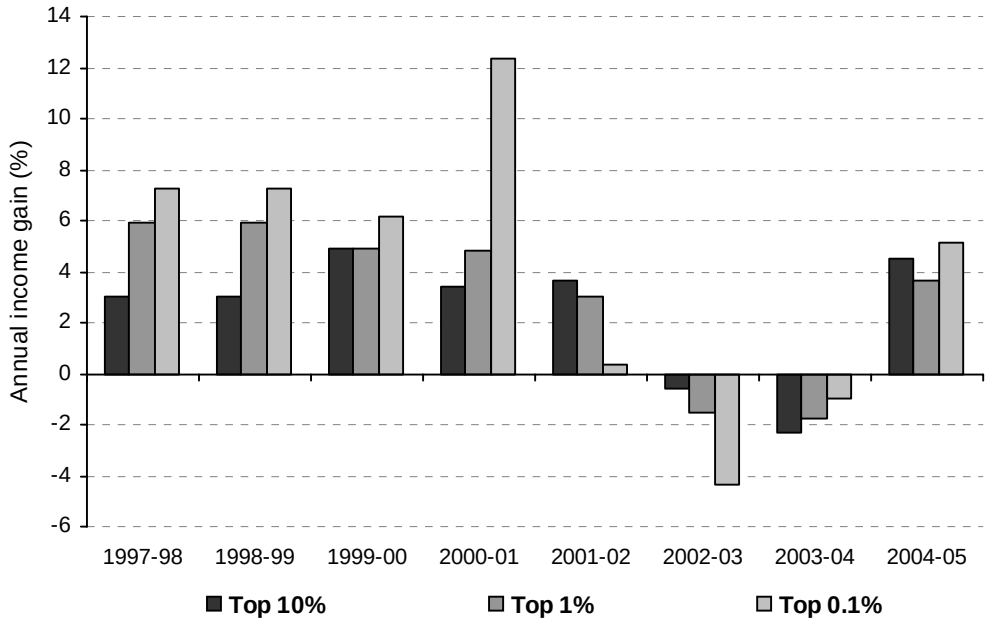
But real income growth in Labour's second term of office (defined here as 2000–01 to 2004–05) is very different indeed. Real income growth was substantially lower for each 1% within the top 10% over Labour's second term than during Labour's first term. The grey lines show that this slowdown can also be observed for each 0.1% of adults within the top 1%. It is also noticeable that the slowdown is even more pronounced at the very top of the distribution: for example, the top 0.1% saw annualised average real income growth in excess of 8% over Labour's first term but close to zero over Labour's second term, whereas the 90th percentile saw annualised average real income growth of 3.6% over Labour's first term but only 1.3% over Labour's second term.

Splitting the period into Labour's two complete terms of office may seem slightly arbitrary. In reality, it appears that 2002–03 was the turning point in terms of the real income growth of the top 10% and top 1% (2001–02 for the top 0.1%). This is demonstrated by Figure 12, which shows the year-on-year real-terms growth in the 90th, 99th and 99.9th percentiles, i.e. the after-income-tax incomes required to be in the top 10%, top 1% and top 0.1% respectively.[22]

Figure 12 also demonstrates that the relatively low growth in the real incomes of these high-income groups can largely be accounted for by negative real income growth between 2001–02 and 2003–04 for the top 10% and top 1% (between 2000–01 and 2002–03 for the top 0.1%). In the latest year of SPI data, real income growth in these parts of the distribution is actually much more similar to that seen in 2000–01 and before. It will be very interesting to see whether this pattern continues into 2005–06 and later years, and so whether 2002–03 and 2003–04 represented a brief interlude in the upward trend in the growth of high incomes.

[22] Growth rates for 1997–98 and 1998–99 are necessarily equal as they both refer to the annualised average growth between 1996–97 and 1998–99 (due to the absence of data for 1997–98).

Figure 12. Year-on-year real income growth for the top 10%, top 1% and top 0.1% using the SPI, 1996–97 to 2004–05 (GB)

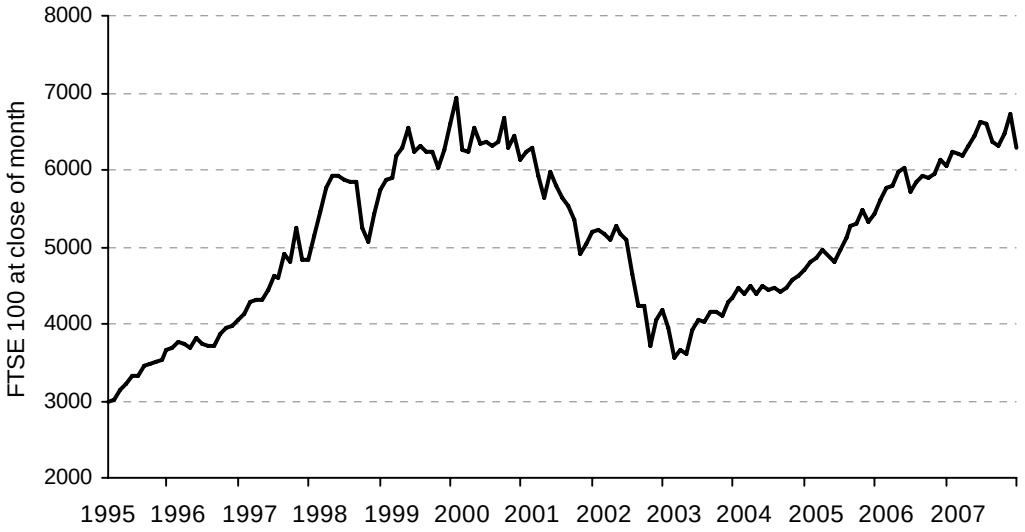


Notes: Incomes are net of income tax but do not include the deduction of council tax or National Insurance contributions. Incomes have not been equivalised. Top 10% refers to the 90th percentile, top 1% refers to the 99th percentile and top 0.1% refers to the 99.9th percentile. Percentile incomes are measured as the income of the person on the border of the two percentiles. Growth rates for 1997–98 and 1998–99 are necessarily equal as they both refer to the annualised average growth between 1996–97 and 1998–99 (due to the absence of data for 1997–98).
Source: Authors' calculations using Survey of Personal Incomes, various years.

One clue might be provided by the correspondence of the periods of relatively high and low income growth with the relative performance of financial markets, as partially indicated by trends in the FTSE 100 Index shown in Figure 13. For instance, the period of relatively fast income growth at the top of the income distribution from the late 1990s up to 2001 was also a period that saw substantial increases in the FTSE 100. Between 1996 and 2001, it increased from below 4000 to reach a peak of nearly 7000 points in late 1999 and it then maintained a level of above 6000 until 2001. Also, the period of relatively low or negative income growth corresponds to a period when this index fell, from around 6000 at the beginning of 2001 to a low of below 4000 during 2003. Since 2003, the FTSE 100 has been on the increase, as has income growth at the top of the income distribution.

Therefore, if the performance of financial markets is indeed the driving force behind income growth at the top of the income distribution, one might expect that high-income individuals will have seen relatively fast income growth in the years after 2004–05 up until recently, given the gains on the stock market over this period.

Figure 13. FTSE 100 at close of month, 1995–2007



Source: Data downloaded from http://www.econstats.com/eqty/eqem_eu_1.htm.

6. Comparisons with HBAI

How do the trends in high incomes in the SPI compare with those in the HBAI series (shown in Figure 2) and, by implication, the trends for the rest of the population?

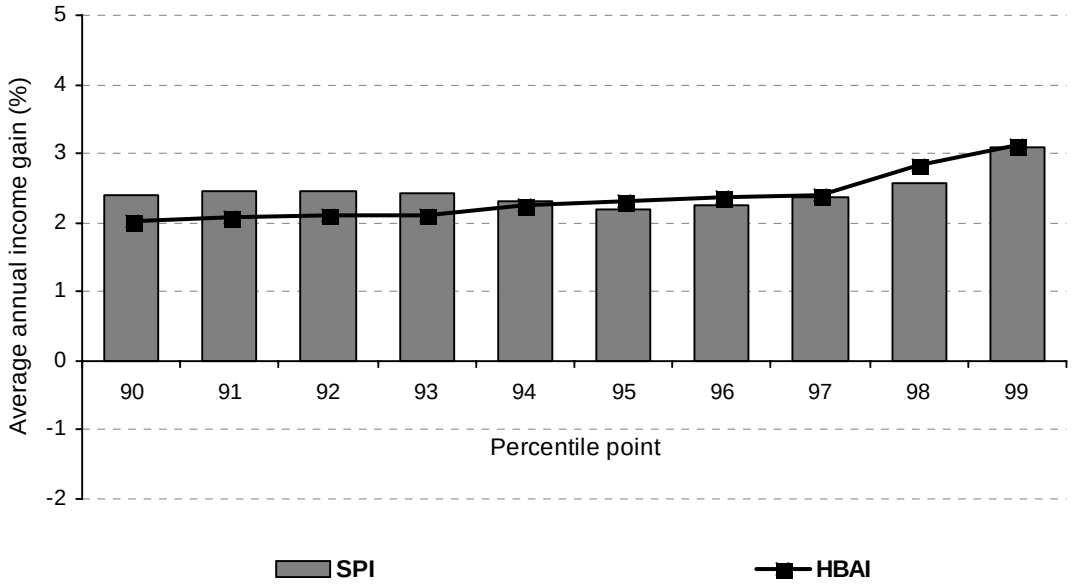
In fact, we would not expect the two surveys to give the same impression because their concepts of income are rather different from each other. The HBAI series looks at disposable income (private income plus state benefits less income tax, National Insurance contributions and council tax). This is similar to the measure of after-income-tax income we have discussed with respect to the SPI, but there are some important differences. First, the SPI does not record payments of National Insurance contributions or council tax or receipt of some non-taxable state benefits (e.g. child benefit). Second, the measure of income in the HBAI series and shown in Figure 2 is measured at a household level and equivalised to account for family size and composition, whilst the SPI records only individuals' income.[23] But, although these issues mean that the two surveys will give different values for the level of net income of the rich, we

[23] Essentially, the HBAI series allows one to identify rich households, but the SPI data-set identifies rich individuals. To see the difference, consider two individuals each earning £100,000 a year, one of whom has a partner with no private income: the SPI data-set would record this as two individuals on £100,000 and one individual with no income, but the HBAI series would say that the two adults in the couple shared the same standard of living, and that standard of living would be lower than that of the single person earning £100,000 with no partner. Because of this, it is likely that some of the individuals in the top 1% of the HBAI series have individual private incomes that are not high enough to put them in the top 1% of individuals in the SPI.

might hope that they will give similar impressions of growth rates amongst high incomes.

The bars in Figure 14 are identical to those on the left-hand side of Figure 10: the annualised average real income growth for each 1% of the richest 10% of adults between 1996–97 and 2004–05 using the SPI. The black line shows the equivalent growth in top incomes recorded in the HBAI series (this is the same as that shown by the last 10 bars in Figure 2, except that 2005–06 is excluded to ensure comparability and also dependent children have been excluded).

Figure 14. Comparing the growth rates in the incomes of the richest 10% using HBAI and SPI, 1996–97 to 2004–05



Notes: SPI incomes are net of income tax but do not include the deduction of council tax or National Insurance contributions and have not been equivalised. HBAI incomes are net of all direct taxes and have been equivalised. Percentile incomes are measured as the income of the person on the border of the two percentiles. Dependent children are excluded.
Source: Authors' calculations using Survey of Personal Incomes and Family Resources Survey, various years.

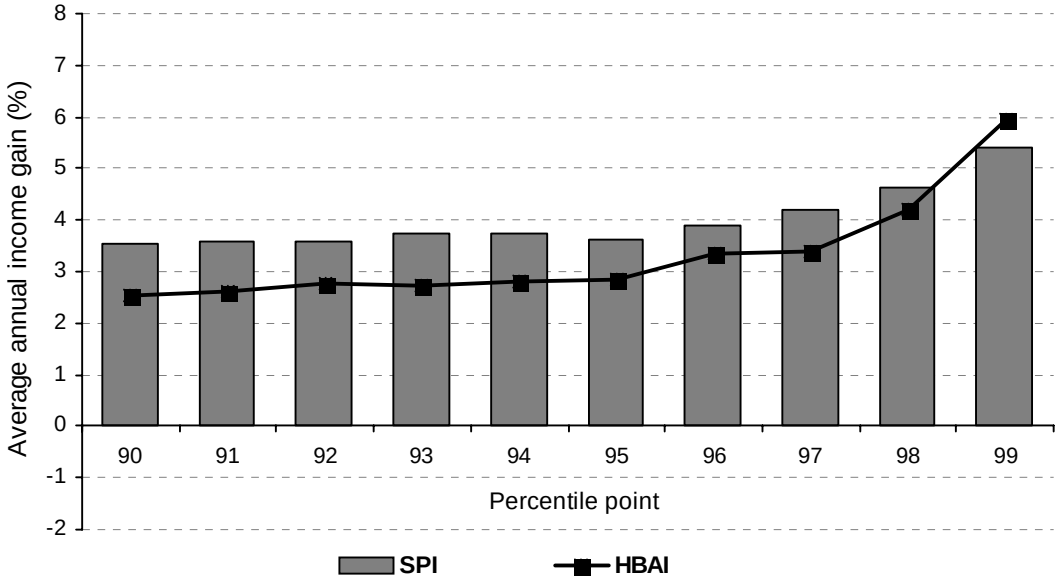
Despite the differences in definition, the growth rates in Figure 14 are remarkably similar, and both surveys show the same spike in the growth rate of the real incomes of the richest 1% of individuals. Observing such comparability does not completely allay the potential problems of non-comparability between the two surveys discussed up to now. However, it does give us a greater level of confidence in comparing trends observed in the SPI and HBAI data.

Figure 15 shows the same information as Figure 14 but split into Labour's first and second terms of office (as before, defined as 1996–97 to 2000–01 and 2000–01 to 2004–05). Looking at the period 1996–97 to 2000–01, the growth rates for individual percentiles within the top 10% are noticeably higher in the SPI than in the HBAI series for all percentiles except the 99th, for which the

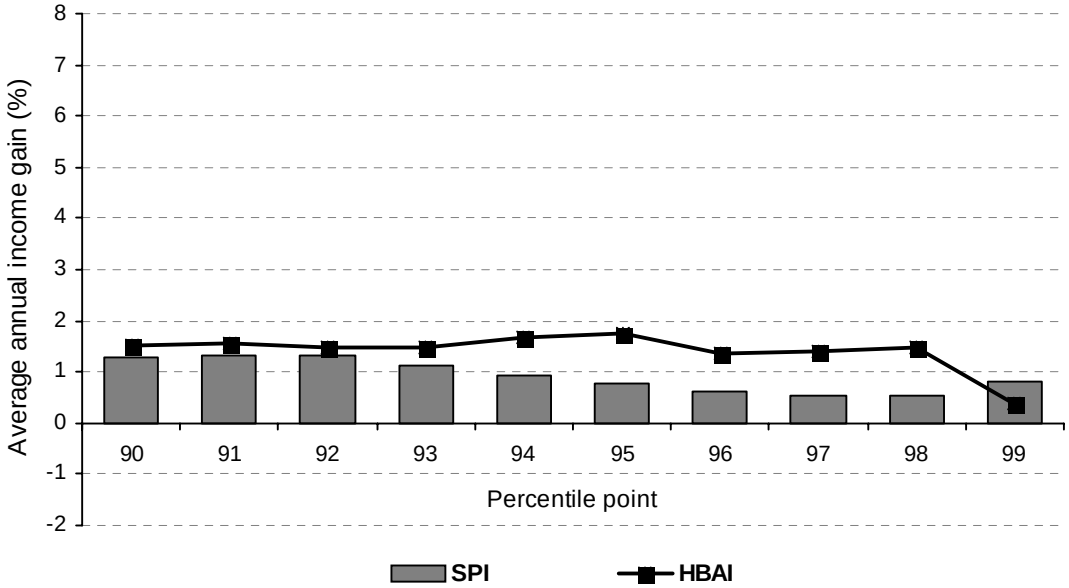
growth rate is higher in the HBAI series. However, this pattern is reversed for the period 2000–01 to 2004–05, when growth appears to be greater as measured in the HBAI series for all the percentiles bar the 99th.

Figure 15. Comparing the growth rates in the incomes of the richest 10% using the FRS and SPI, 1996–97 to 2000–01 and 2000–01 to 2004–05

(a) 1996–97 to 2000–01



(b) 2000–01 to 2004–05

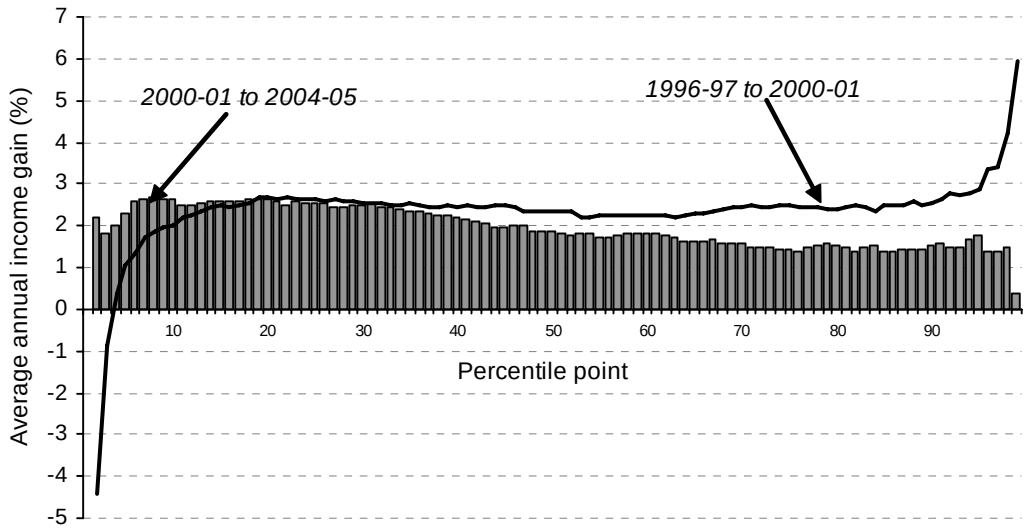


Notes: SPI incomes are net of income tax but do not include the deduction of council tax or National Insurance contributions and have not been equivalised. HBAI incomes are net of all direct taxes and have been equivalised. Percentile incomes are measured as the income of the person on the border of the two percentiles. Dependent children are excluded.
Source: Authors' calculations using Survey of Personal Incomes and Family Resources Survey, various years.

Although the levels of growth appear to be quite different, the patterns of growth across the distribution are similar across the two surveys for both periods. Amongst the top 10%, the richest 1% experienced the highest real income growth over Labour's first term. Then during Labour's second term, there was a slowdown in income growth across the whole of the top 10%, with the slowdown being most pronounced at the very top of the income distribution.

To complete the picture, Figure 16 shows income growth across the whole income distribution split by Labour's first and second terms of office, as measured by the HBAI series. This is the same representation as used by Figure 2, except that the black line represents annualised average real income growth over Labour's first term (1996–97 to 2000–01) and the grey bars represent that seen during Labour's second term (2000–01 to 2004–05).

Figure 16. Real income growth by percentile point, 1996–97 to 2000–01 and 2000–01 to 2004–05 (GB)



Notes: The change in income at the 1st percentile is not shown on this graph. Incomes have been equivalised and measured before housing costs have been deducted. Percentile incomes are measured as the income of the person on the border of the two percentiles. Dependent children are excluded.
Source: Authors' calculations using Family Resources Survey, various years.

Figure 16 shows that below the 20th percentile point, real income growth was faster over Labour's second term than during Labour's first term. However, beyond the 20th percentile point, income growth was lower during Labour's second term than over its first term, with the slowdown becoming more accentuated as we move further up the distribution.

When one looks at the year-on-year growth in median incomes using the HBAI, the slowdown in real income growth seems to have begun in 2002–03.

This is the same as we saw for the SPI. In fact, between 2001–02 and 2004–05, median incomes (as measured in the SPI) only increased by an annualised average of 1.4%, compared with 2.8% between 1996–97 and 2001–02.

To sum up what we have seen so far, whether one uses the SPI or the HBAI series to measure real income growth since 1996–97, the top 10% of the income distribution have experienced faster growth in net incomes than the rest of the population. The top 1% have experienced still faster growth, and the top 0.1% the fastest growth of all. However, this exceptional growth in income was mostly confined to the late 1990s up to 2001–02. Since then, there has been a slowdown in income growth almost right across the income distribution, with the slowdown being particularly pronounced at the top of the income distribution.

7. Changes in shares of income over a longer time period

In Table 1, we showed the share of total before-tax personal income received by the top 10–1%, 1–0.1% and 0.1% of individuals. Tony Atkinson has shown how these shares have changed over a longer time frame, using both SPI and surtax data.[24] His research shows that over the post-war period up to 1979, the share of total personal income going to these three groups decreased. However, since then it has increased, so that the shares of total personal income are now at a comparable level to those last seen in the late 1940s. For instance, the share of total personal income going to the top 0.1% declined from 3.5% in 1949 to reach 1.3% in 1979; however, it then increased to reach 4.6% by 2000.[25]

This might lead one to conclude that income inequality is currently at its highest levels since the late 1940s. However, it is important to remember that even if inequality is unchanged since the late 1940s, mean incomes and incomes at all parts of the income distribution are likely to be much higher today than they were in the late 1940s. Even if we are more unequal now than we were in the 1940s, we are almost certainly better off in absolute terms.

8. Summary and conclusions

Complementing previous work using the HBAI data-set, this Briefing Note has used the Survey of Personal Incomes, constructed from income tax records, to provide more information on the characteristics of high-income individuals and the trends in their incomes over time.

[24] A. B. Atkinson and T. Piketty, *Top Incomes over the Twentieth Century*, Oxford University Press, Oxford, 2007.

[25] Note that this definition of total personal income includes adjustments for personal income not measured in the SPI. As a result, the figures are not comparable to those shown in Figure 4.

During the 1980s, those on high incomes saw their incomes rise by more than those on middle incomes, who in turn saw their incomes grow by more than those on low incomes. It is thus not surprising that this was also a period of rising income inequality. However, since Labour came to power in 1997, the poor have fared slightly better, seeing faster income growth than they did under the period of Conservative government. Moreover, between the 15th and 90th percentile points (the main bulk of the income distribution), those on lower incomes saw faster income growth than those on higher incomes. So why has income inequality remained at historically high levels? The main reason is that those on high incomes (about the top 10%) have seen still faster income growth and the very poor (about the poorest 15%) have seen weak income growth.

In 2004–05, there were about 4.2 million adults in Great Britain with before-tax incomes between £35,000 and £100,000 in today's prices. There were a further 422,000 very rich adults with before-tax incomes between £100,000 and £350,000 in today's prices. There were also about 47,000 very, very rich individuals with incomes above £350,000 in today's prices – about 31 times the income received by the average taxpayer in Great Britain in 2004–05.

What typifies these high-income individuals? Well, they are much more likely to be male and in their 40s than the average income tax payer in Great Britain. They are also more likely to live in London or the South East. If they are of working age, they are more likely to work in real estate, law and other business activities, finance, or health and social work. High-income individuals also receive more of their income from self-employment or investments than the average income tax payer. Although the top 1% receive less as employment earnings than the average income tax payer, this form of income still amounts to almost three-fifths of income even for the richest 0.1%.

When looking at either the Survey of Personal Incomes or the Households Below Average Income data-set, we see that high-income individuals have seen relatively fast growth in their incomes after tax since 1996–97. However, this growth was not evenly spread. They experienced very strong growth indeed up to 2000–01, with the top 0.1% seeing their incomes grow by an average of over 8% each year, even after inflation. This was a much greater rate than that for the rest of the population. However, high-income individuals then experienced low or negative growth in the three years up to 2003–04 – almost certainly less than that for the rest of the adult population. These periods of relatively fast and then relatively slow income growth correspond quite neatly to periods of rising and then falling UK share prices respectively.

In 2004–05, the incomes of the rich seem to have recovered somewhat, with income growth of a similar magnitude to that seen in the late 1990s. Whether this indicates that 2004–05 represents a return to the pattern of the late 1990s is an interesting question. If the performance of financial markets is the driving force behind income growth at the top of the income distribution, then one

might expect that high-income individuals will have seen relatively fast income growth in the years after 2004–05 up until quite recently.

Appendix A

In this appendix, we compare the trends we observed in the Households Below Average Income data-set and the Survey of Personal Incomes with those seen in other often-quoted sources of data on the 'very rich'. We will look at summary trends in chief executive pay and trends in wealth inequality.

Comparison with trends in executive compensation

A widely-used proxy for trends in income amongst high-income individuals is the remuneration of the executives of large UK firms, which has been the subject of much public debate.[26] However, it is important to remember that trends in the remuneration of executives of large UK firms should not necessarily match up with trends in the incomes of high-income individuals in the SPI. Executives of large UK firms are only a small group of individuals – fewer than a thousand individuals – compared with the 47,000 adults that make up the top 0.1% of the income distribution. Moreover, executives receive their remuneration from a large number of different sources, including salaries, fees, bonuses, share options, long-term incentive plans and many more sources of incentive-based remuneration. The SPI might not be able to capture all of these sources of remuneration, particularly as some of them might not be subject to income tax or might only be subject to tax when capital gains from them are realised. The relatively complex nature of executive pay can also lead different indicators of executive pay over time to indicate different trends, as they might use different definitions of remuneration.[27]

Gregg, Jewell and Tonks (2005)[28] document trends in the total remuneration of the executives of large UK firms between 1994–95 and 2001–02, making use of Datastream annual company accounts.[29] They show that the mean and median pay of all directors of these large UK firms increased by 4.7% and 4.3% in real terms, respectively, over this period. They also show that the

[26] For example, see the annual survey of CEO compensation conducted by the *Guardian* (http://www.guardian.co.uk/business/2004/aug/27/executivesalaries.executivepay1).

[27] Trends in the incomes of high-income individuals are also shown net of income tax, whilst most surveys of executive remuneration look at gross remuneration. However, note that the slowdown in the real growth of net incomes after 2001–02 can also be seen in before-tax incomes (not shown).

[28] P. Gregg, S. Jewell and I. Tonks, 'Executive pay and performance in the UK 1994–2002', CMPO Working Paper 05/122, 2005 (http://www.bristol.ac.uk/cmpo/workingpapers/wp122.pdf).

[29] 'Large' here refers to the 415 companies that constituted the FTSE 350 Index between 1994–95 and 2001–02.

largest increases appear to have occurred in 1999–2000 and 2000–01, with real increases in excess of 10% per annum. These are even larger than the annual real-terms increases of around 8% for the richest 0.1% shown in Figure 11. However, the authors also show that the average pay of all directors of large UK firms fell in real terms in 2001–02 (in terms of both the mean and the median). Figure 12 showed that this also occurred in the SPI for the richest 0.1% of adults.

Conyon, Core and Guay (2005)[30] use the public accounts of large UK firms in order to compare executive compensation in the UK and the US.[31] They show that in 2003, CEOs of large UK firms received just under £1.1 million on average in cash compensation (2007–08 prices). This would be enough to put any CEO with above-average cash compensation in 2003 into the richest *0.01%* of adults (about 5,000 adults). Their results also imply that the annualised average real growth in the cash compensation for CEOs of large UK firms was about 5.5% between 1997 and 2000, and then increased to around 11.3% between 2000 and 2003, with no apparent drop-off in 2002 and 2003. This contrasts with the slowdown shown in the SPI for high-income individuals and in Gregg, Jewell and Tonks (2005). However, as already stated, these figures are not perfectly comparable to one another due to differences in the sample and different definitions of income or remuneration.

Comparison with trends in distribution of wealth

So far, we have looked at the distribution of *income* and how *incomes* have changed over time. However, the distribution of *wealth* might also be of interest. It is important here to be clear that wealth and income are quite different concepts. Wealth refers to the stock of assets held by an individual or household at a point in time, e.g. financial savings held in a bank account, pension rights that will be drawn upon in retirement, durable goods such as cars and houses, or even an individual's level of human capital. Income refers to the flow of funds received by an individual or household in a particular year, e.g. employment earnings, interest income from savings, profits from self-employment, or state benefits. Having noted the difference between income on the one hand and wealth on the other, we now move on to look at the distribution of wealth.

Unfortunately, there is very little data available on individual or household wealth. The most reliable source of data is that collected by HMRC in order to determine how much inheritance tax and capital transfer tax is due from estates. However, such data are unlikely to be representative of the entire adult population, since individuals may possess levels of wealth when they die that

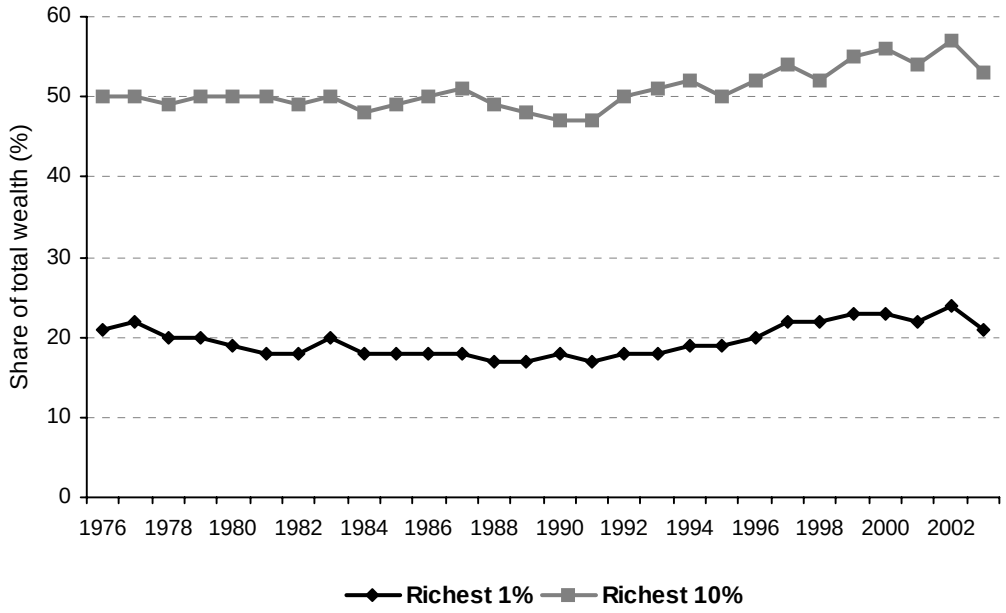
[30] M. J. Conyon, J. E. Core and W. Guay, 'How high is US CEO pay? A comparison with UK CEO pay', 2005 (http://www.nber.org/~confer/2005/cgs05/core.pdf).

[31] 'Large' here refers to the largest 250 firms by market value.

are quite different from those at other points in their lifetime.[32] Moreover, such data do not capture some fairly important components of individuals' wealth, such as state and occupational pension rights and human capital.

Despite such concerns that the data do not capture all forms of wealth and may not be representative, it is still interesting to look at trends in wealth inequality as measured by such data. Therefore Figure 17 shows the proportion of personal, marketable wealth owned by the richest 10% of individuals (grey line) and the richest 1% of individuals (black line) between 1976 and 2003.

Figure 17. Shares of total wealth held by richest 1% and richest 10%, 1976 to 2003



Source: HMRC, *National Statistics: Personal Wealth*, Table 13.5, 'Distribution among the adult population of marketable personal wealth (Series C)' (http://www.hmrc.gov.uk/stats/personal_wealth/table13_5.pdf).

The graph shows that during the 1980s and early 1990s, the shares of total wealth owned by the top 1% and top 10% stayed roughly constant. This stands in contrast to the rising income inequality shown in Figure 1 for this period. Since the mid-1990s, the shares of wealth owned by the top 10% and top 1% have increased. However, it is important to remember the limitations in the coverage and representativeness of such data. These make it very difficult to use such data to draw any firm conclusions.

[32] HMRC does use a procedure known as the 'estate multiplier' in order to make its sample more representative; see http://www.hmrc.gov.uk/stats/personal_wealth/menu.htm for more details.

Appendix B

Tables 2–4 show the data that were used to construct Figures 5–7. The grey shaded cells show instances where the proportion of high-income individuals falling into these categories is greater than the proportion of all taxpayers falling into the same category.

Table 2. Age and sex of 'high-income' individuals

	All taxpayers	*Top 10–1%*	*Top 1–0.1%*	*Top 0.1%*
Proportion who are:				
Males	56.1%	73.7%	84.2%	90.5%
Proportion who are:				
Under 25	9.6%	0.8%	0.5%	0.6%
25–34	19.3%	18.4%	8.8%	5.3%
35–44	22.5%	32.1%	34.5%	27.7%
45–54	19.0%	26.9%	32.0%	51.2%
55–64	15.5%	14.8%	17.8%	11.5%
65–74	8.5%	4.4%	4.4%	2.8%
75-plus	5.7%	2.6%	1.9%	0.9%

Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance.
Source: Authors' calculations based on SPI 2004–05.

Table 3. Where do 'high-income' individuals live?

	All taxpayers	*Top 10–1%*	*Top 1–0.1%*	*Top 0.1%*
Proportion who live in:				
North East	4.3%	3.1%	1.9%	1.1%
North West	11.2%	9.3%	7.3%	5.5%
Yorkshire and Humberside	8.2%	6.7%	5.2%	4.5%
East Midlands	7.4%	6.5%	5.4%	3.3%
West Midlands	8.9%	7.5%	5.8%	4.3%
East of England	9.6%	11.3%	11.7%	11.4%
London	12.6%	17.2%	24.6%	37.3%
South East	14.7%	18.9%	22.8%	21.8%
South West	8.9%	8.0%	6.5%	3.8%
Wales	4.8%	3.4%	2.1%	0.9%
Scotland	8.7%	7.5%	5.9%	4.4%
Address abroad	0.6%	0.5%	0.7%	1.7%
Address unknown	0.0%	0.0%	0.0%	0.0%

Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance. Figures for the top 0.1% exclude 'composite records'.
Source: Authors' calculations based on SPI 2004–05.

Table 4. What do 'high-income' individuals do?

	All taxpayers	*Top 10–1%*	*Top 1–0.1%*	*Top 0.1%*
Company directors	3.4%	9.7%	24.2%	34.6%
Proportion who are:				
Pensioners	22.6%	13.2%	14.5%	15.8%
Working-age adults	77.4%	86.8%	85.5%	84.2%
Working in following industries:				
Agriculture, forestry and fishing	1.1%	0.6%	0.7%	0.9%
Mining and quarrying	0.2%	0.4%	0.5%	0.3%
Manufacturing	13.1%	14.6%	9.6%	5.9%
Electric, water or gas supply	0.4%	0.8%	0.3%	0.1%
Construction	8.1%	7.8%	4.5%	4.0%
Wholesale and retail trade	15.0%	10.7%	10.1%	8.2%
Hotels and restaurants	3.7%	1.3%	1.3%	0.9%
Transport, storage and comms.	6.3%	6.1%	3.8%	1.9%
Financial intermediation	4.3%	7.2%	16.0%	30.2%
Real estate, renting and other business activities	15.6%	21.5%	30.5%	38.5%
Public admin. and defence	5.5%	7.2%	1.0%	0.3%
Education	10.7%	11.1%	1.8%	0.3%
Health and social work	10.2%	6.8%	15.5%	3.6%
Other services	4.4%	3.4%	3.5%	4.0%
Other	1.2%	0.5%	0.8%	0.9%

Notes: All data are presented at the adult level and for Great Britain only. There were 46.8 million adults in Great Britain in 2004–05, and the numbers of adults in the richest bands have been calculated assuming that adults not represented in the SPI have incomes below the income tax personal allowance. Figures for the top 0.1% exclude 'composite records'.
Source: Authors' calculations based on SPI 2004–05.