

The Desire for Income Equality Amongst the UK Adult Population

Marc Cowling

Principal Economist
Institute for Employment Studies
University of Sussex Campus
Brighton BN1 9RF

E-mail: marc.cowling@ies.ac.uk

Rebecca Harding

Director GEM Global
London Business School

Abstract

Whilst there is a volume of literature mapping out the evolution, causes and implications of income inequality across countries, there is little in-depth evidence concerning the desire of populations for income equality. This paper tackles this gap by presenting UK evidence from a large-scale adult population survey for 2003. The headline result is that 75 per cent of the UK adult population prefer a fairer income distribution. Our econometric findings suggest that women are more likely to favour income equality than men and that better educated people are more tolerant of income inequality. Only the very rich favour income inequality. Geography is important, with the Welsh, Scots and Northern Irish all more likely to prefer a more equitable income distribution.

February 2007

ISBN: 978 1 85184 369 5

IES Working Paper: WP3

ies

1 Introduction

Whilst there is a volume of literature mapping out the evolution, causes and implications of income inequality across countries (see for example, Alvarez-Garcia et al., 2004; Coulter et al., 1992; EUROSTAT, 2000), there is little evidence concerning the desire of populations for income equality other than baseline survey statistics (Halesy, 1988; Taylor and Thomson, 1996). This paper tackles this gap by presenting UK evidence from a large-scale adult population survey for 2003. It is particularly apposite given that the UK has experienced an increase in income and wealth inequality (Paxton and Dixon, 2004) compared to other EU member states (Alvarez-Garcia et al., 2004).

Further, after a long period in which the Conservative Party (right of centre) dominated UK politics (1978 – 1997), since 1997 the Labour Party (traditionally left of centre) has been in power with a mandate to reduce poverty and social exclusion amongst the most disadvantaged in society. Importantly, a reduction in income inequality, by raising the income of the poorest sections of society, has been, econometrically, found to raise average levels of ‘happiness’ and ‘life-satisfaction’ (Di Tella et al., 2002).

To quote Taylor-Gooby (1990, p.1), ‘Average living standards are rising, but at the same time inequality between the comfortable majority and those left behind by their progress is becoming more marked.’ But does this matter? One theory proposed by Inglehart (1990) predicts that affluence reduces support for redistribution and the provision of welfare. This is based on the economists’ concept of diminishing marginal utility. Or put another way, as a society becomes richer, there is less demand for additional expenditure on welfare and social security to top-up incomes of the poorest sections of society. This is a bottom-up approach where an increasingly wealthy population reduces its demand for public goods and an income safety net. An alternative theory is proposed by Esping-Anderson (1990) who suggests that a top-down system, where welfare institutions influence both overall levels of support for welfare redistribution and the extent of social divisions over it. This accords with Evans (1996, p.186), who states that, ‘inequality, and governments’ reactions towards it, remain key political issues.’

So what does survey evidence tell us about historical trends in British social attitudes towards income inequality and redistribution? Table 1 reports evidence from the British Social Attitudes Survey for 1989.

Table 1: Reasons for Poverty

There are people who live in need:	% of respondents
Because of injustices in our society	29
Because of laziness or lack of willpower	19
Because it is an inevitable part of modern life	34
Because there are unlucky	11

Importantly, responses reflect ideological divisions [injustice causes poverty by political affiliation], rather than income level (Taylor-Gooby, 1990, p.8). Yet when we consider the

evidence concerning income and wealth distribution from the same survey we note that 65per cent of respondents thought that, 'ordinary people do not get their fair share of the nations' wealth'. However, only 50per cent thought that the government should redistribute income from the better off to those who are less well off. Here, we do observe an income effect, as people on high incomes are less likely than those on low incomes to view the current distribution of wealth as unfair. Employment status was also a defining issue with the self-employed [petit bourgeoisie] substantially less likely to support government redistribution of income than waged employees.

Fifteen years later evidence from the same social attitudes survey showed that 85per cent thought that the gap between rich and poor was too large (Taylor and Thomson, 1996), and this figure has remained remarkably constant since 1989 (NCSR, 2004), even though evidence in Paxton and Dixon (2004) shows that in many ways Britain has become fairer in the last ten years. Interestingly, Evans (1996, p.186), in a cross-country study of support for welfare and redistribution, reports that, 'the similarity between attitudes towards redistribution in Britain and mainland Europe is striking and quite distinct from (lower) levels in the US and Australia.'

An interesting, and related, body of research relates to social and economic determinants of voting choices. This is often, at least in the economics based literature, set in the context of utility maximisation where voters maximise their individual utility subject to their socio-economic characteristics (see for example Fielding, 2000). In his empirical study of the 1997 UK election, Fielding extends the scope of traditional economic self-interest models of voting to include sociological characteristics such as party loyalty. The general consensus appears to be that voting patterns not only depend upon attitudes to party political economic issues such as income distribution, but on liberal-authoritarian issues (Fielding, 2000; Heath et al., 1991). Thus our study can be seen as complementary to studies of voting behaviour. However, many of the issues raised in voting models are relevant to our study of peoples' attitudes towards income equality. For example, Fielding (2000) uses six main explanatory variables to predict voting behaviour at the constituency level, namely: the unemployment rate; disposable income; occupational classification; population density; education, and; geography.

Due to the nature of our survey we are able to incorporate a wider array of socio-economic variables in our study. Below we list our variables and briefly discuss how they might act to raise or lower an individuals' desire for more or less equality in the income distribution.

- **Labour market status** – the current labour market status of an individual may have an influence their desire for a fairer distribution of income. For example, currently unemployed people, or those involved in non-market based work (housewives, carers etc), may perceive that they are excessively penalised, in an income sense, for not being active in the formal labour market and thus would be more likely to prefer a fairer distribution of income. At the other extreme those in employment might see the unemployed as being lazy and undeserving of substantial welfare payments. This might be particularly acute amongst small business owners (the petite bourgeoisie). In addition to these effects there may also be a socialisation effect if we assume that the

unemployed, or indeed the petite bourgeoisie, are a distinct class of the general population.

- **Income** – actual income can be viewed as having similar effects as labour market status in the sense that the poorest people (typically unemployed or doing non-market work) might favour a more equitable distribution of income. *A priori* we might also expect that the very richest want to maintain their relative position, although Fielding (2000) finds the reverse to be true for voting for the Labour Party over the Conservatives. He surmises that rich voters do not believe that their income will be substantially affected even if a left wing party is elected with a re-distributive agenda.
- **Education** – in voting models, education tends to be more associated with an individuals positioning on libertarian issues. Evidence suggests that more education is associated with voting for left of centre parties (Fielding, 2000; Heath, 1991). Whether this extends to economic issues such as income redistribution is difficult to predict *a priori*, particularly as individuals may change their socialisation patterns once they have received a university level education.
- **Geography** – here we allow for geographical region to have an impact on the desire for a fairer income distribution via differences in socialisation patterns according to where an individual lives. Econometrically this is captured by a series of regional dummy variables, which allow for different intercepts for each region. We might expect that people from the South of England have less desire for a fairer income distribution *a priori*.
- **Personal Characteristics** – Here we are able to test for any potential impacts from a persons age, gender and ethnicity. These all potentially have an impact on socialisation patterns. For example, we might expect that individuals from ethnic minority backgrounds might be more supportive of a fairer income distribution, particularly as they might well have immediate, or family, experience of countries with extreme wealth and income inequality. Voting patterns tend to show that ethnic minorities are proportionately more likely to vote for left of centre parties. Age is also found to affect voting patterns with older people more aligned with right of centre parties. Younger people may also be more idealistic and thus have a stronger desire for fairness. Gender is more difficult to predict *a priori*, although it is likely that there are strong differences in socialisation patterns between men and women, which might lead to different preferences for income equality.

2 Data

The data we use is drawn from a telephone survey of the UK adult population stratified by gender, age and geographical distribution to reflect that of the general adult population. The survey was conducted in June 1993, amongst 22,000 adults by IFF Research on our behalf. The survey collects information on personal demographics, employment, culture, social attitudes and income. The specific question, which forms the basis of this research is: *Do you prefer uniform living standards?* Responses are coded yes or no.

3 Basic Sample Statistics

In this section we discuss the basic characteristics of the sample in terms of how many individuals, with a particular characteristic (eg male), support the statement that they would prefer a uniform standard of living. Univariate statistical tests are also conducted to highlight significant differences (eg between males and females). Full results are presented in Table 1 in the appendices.

3.1 Personal Characteristics

Firstly, we note that females are generally more supportive of a more equal distribution of income. The actual proportions of females and males are 80.1per cent and 70.9per cent respectively. Regarding age, no significant differences were identified, although 18-24 year olds were the most likely to support fairer distribution of income and over-65s the least likely. The general pattern shows a fairly linear and declining relationship between age and support for fairer income distribution, although the largest difference is only 2.6per cent between the very young and old.

Figure 1: Education and Desire for Income Equality

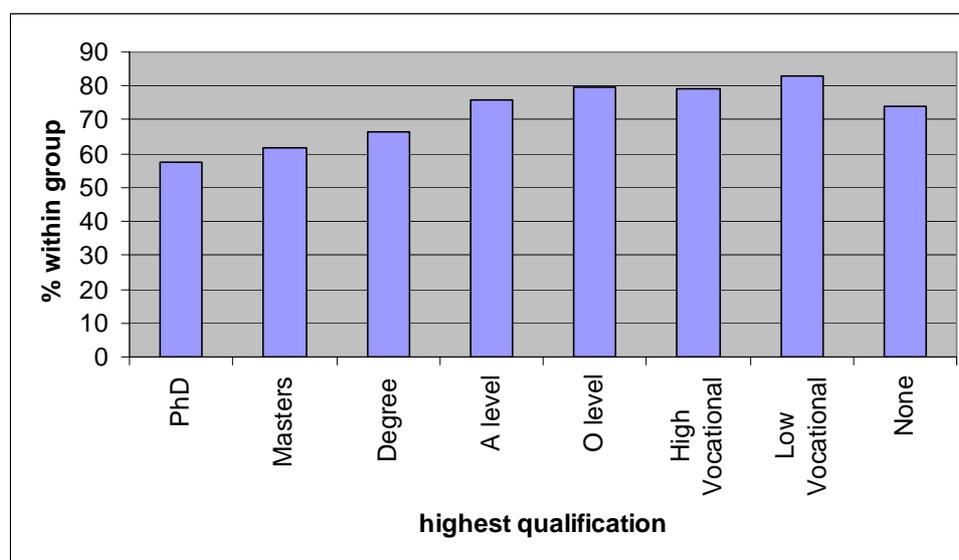


Fig 1 suggests that formal education has an impact on how individuals feel about income inequality. The pattern is quite clear, and shows that, the more highly educated a person is, the less likely they are to support a fairer income distribution. The difference between PhDs and O levels is 22.0per cent (57.3per cent compared to 79.3per cent). This might imply that once individuals are in a better position *vis a vis* having the qualifications that tend to attract higher paid employment and provide greater opportunity, they are more than willing to accept the rewards associated with this, even if it means that the rest of the population is at a comparative disadvantage.

Ethnicity is also an aspect where we observe significant differences between groups. For example, people from black Caribbean ethnic roots have the highest propensity to support

a fairer income distribution at 86.7per cent. This compares to only 53.8per cent of mixed race white and black Africans. White Irish and Pakistani people also have higher support for income equality (81.6per cent and 81.0per cent respectively), whilst black Africans (71.2per cent) and Indians (73.6per cent) much lower levels of support.

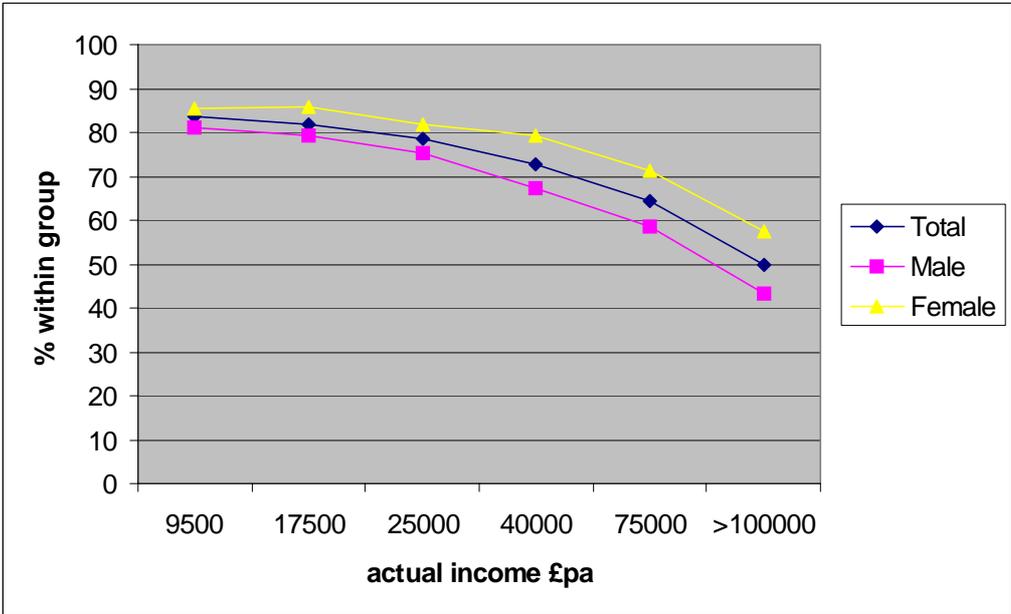
3.2 Labour Market Status

Here we observe that those classified as inactive (carers, housewives etc) in the formal labour market, and students, are most likely to be supportive of a fairer income distribution (83.3per cent and 82.5per cent respectively). This compares to only 70.9per cent of retired people. An interesting feature is that the unemployed are only marginally more likely to support income equality (74.9per cent) than those in full-time employment (74.0per cent).

There are also significant differences in terms of the nature of an individuals' employment. For example, we observe that only 64.0per cent of managerial staff support income equality, compared to 77.4per cent of waged employees. The self-employed fall in the middle of the two.

We also collected information about entrepreneurial characteristics, for example people starting a new business or social enterprise or those acting as owner-managers of an established business or social enterprise. Our findings are very consistent and support the notion of entrepreneurs as the petite bourgeois. Importantly, this holds even for social entrepreneurs. In all cases people involved in entrepreneurial activity are less supportive of a fairer income distribution than those not involved.

Figure 2: Actual Income and Desire for Income Equality



3.3 Income

Perhaps the most interesting feature of our data in the context of this paper is comparing attitudes to income equality with actual income. This goes straight to the heart of the concepts of altruism versus acting in ones self-interest. Although the picture is not perfectly consistent, there is evidence that those in the very highest income groups (greater than £50,000 per annum) are significantly less likely to support income equality. Taking the polar extremes, we observe that 77.7per cent of those in the poorest income group (<£4,500) support income equality compared to only 50.0per cent of those in the very highest income groups (>£100,000). Broadly, we can split the income groups into three. Those earning less than £17,500 per annum tend to have more than 80per cent support for income equality. Those earning between £17,500 and £50,000 per annum tend to have between 70per cent and 80per cent support for income equality, and those earning more than £50,000 per annum below 65per cent support for income equality. Importantly, differences in the desire for greater equality in income between men and women widen as actual income increases. In low income bands, the difference is only 4.3per cent, but this rises to 14.1per cent in the highest income band.

3.4 Regional Differences

Geography also appears to matter. There appears to be a North – South effect with the notable exception of Yorkshire & Humberside. Five regions, in descending order of support for income equality, namely; Northern Ireland (81.8per cent), Wales (79.6per cent), North East (78.0per cent), Scotland (77.5per cent), and the North West (75.8per cent) all have very high levels of support for a fairer income distribution. This contrasts with the much lower support identified in London (70.8per cent) and the South East (67.3per cent). However, there were no significant differences between those residing in urban or rural areas.

4 Econometric Analysis

In this section we econometrically investigate the fundamental determinants of an individuals propensity to support (or not) a fairer income distribution. Due to the nature of the dependent variable (coded 1 if individual supports income equality and 0 otherwise) we use a probit model, which takes into account the binary response of the dependent variable.

To allow more meaningful interpretation of the results generated we choose to report the marginal effects of the probit models.

The empirical results were generated using a basic probit model with likelihood function:

$$\ln L = \sum \omega_j \ln \Phi (x_j b) + \sum \omega_j \ln (1 - \Phi (x_j b))$$

where Φ is the cumulative normal distribution. This reflects the binary nature of the dependent variable that is coded 1 if the individual support income equality and 0 otherwise. The actual estimates reported are the marginal effects calculated around the means of the independent variables.

If \mathbf{b} and \mathbf{V} are denoted as the coefficients and variance matrix then for continuous variables the estimates reported show;

$$b_i^* = \partial\Phi(\mathbf{x}\mathbf{b})/\partial x_i \Big|_{x=x} = f(\mathbf{x}\mathbf{b}) b_i$$

where the i 's refer to the i th element of \mathbf{b} . For dummy variables (our [0,1] coded variables) the estimates reported are for a discrete change in the respective variable from 0 to 1. This is calculated by $b_i^* = \Phi(x_i\mathbf{b}) - \Phi(x_0\mathbf{b})$.

The actual estimating equation can be expressed thus:

$$\text{Pr}(=1) = \Phi(\beta_0 + \beta_i X_i)$$

where X is a vector of characteristics identified below.

The actual model can be written thus:

Step 1: Individual Supports Income Equality =
 $f(\text{personal demographics} + \text{labour market status} + \text{income} + \text{geographical region})$

The full models are presented in Table 2 in the appendices. Three different models are estimated. One full model, then separate models for men and women. This allows us to identify how different characteristics might have different impacts on an individuals desire for income equality according to whether they are male or female.

4.1 Full Model

The first point of note is that females have a 7.1per cent higher probability of supporting a fairer income distribution than males. This confirms out univariate findings, although the absolute difference of 9.2per cent is reduced when differences between the personal and labour market characteristics of males and females are taken into account. In contrast, age was not found to be important with the notable exception that the over-65s were 4.6per cent less likely to favour income equality than all younger people.

We also observe the entrepreneurial community (small business start-ups and owner-managers) have lower propensities to support a fairer income distribution. The magnitude of these effects are -3.1per cent for those starting a new business and -5.3per cent for owner-managers of existing small businesses. The finding tend to offer support for the 1980s policy thrust by the Conservative Party aimed at encouraging self-employment (Greene, 2004) and creating a natural bedrock of Conservative voters amongst an expanded small business community, traditionally in favour of low taxation. However, one seemingly perverse finding was that the unemployed were 5.7per cent less likely to favour a more equitable distribution of income than all people in other labour market states including the employed.

Education also mattered. On this we observe that individuals with a degree or higher-level degree qualification (Masters and PhD) are the least likely to support fairer income distribution. As we move down the educational ladder below this level we observe increasing support for fairer income equality. For example, A level educated people were 8.7per cent more likely to support income equality. Those with O levels were 11.1per cent

more likely and those with low-level vocational qualifications 14.5per cent more likely to support income equality.

In our initial look at the basic sample statistics, we found that there was tremendous variation in support for income equality across ethnic groupings. Yet once other characteristics are taken into account we only find one significant ethnic effect. On this we find that mixed race (white & black African) people are 28.2per cent less likely, than all other ethnic groups, to support a fairer income distribution.

In a similar vein, we initially found substantial difference across different income groups with poorer people, generally, more in favour of re-distribution and the very rich substantially less so. Here our estimation highlights significant effects for the very highest income earners. The results show that those earning over £100,000 per annum had a 21.1per cent lower probability of supporting a fairer distribution of income than those with median income levels. That is to say that the top 2.3per cent of the population in terms of income are substantially happier with their positions at the extreme right hand side of the income distribution and are the most unwilling to support a narrowing in the distribution.

Finally, we observe that people in three regions (countries), Wales, Scotland and Northern Ireland, have significantly higher propensities of supporting a fairer income distribution. The magnitude of these effects are +5.1per cent, +3.6per cent and +6.2per cent respectively over all other regions. Importantly, both Wales and Northern Ireland have elected assemblies (regional parliaments) but neither have tax raising or re-distributive powers.

4.2 Female Model

For females, age was not an important determinant of the desire for a fairer income distribution. Being involved in entrepreneurial or small business activity was and had a negative effect on ones desire for a fairer income distribution. Education was also important in that females with post-graduate degrees (Masters or PhD) were significantly less likely than all other females to support income equality. Perhaps surprisingly, first-degree holding females were 5.0per cent more in favour of income equality than their post-graduate holding counterparts. The difference for females with low vocational qualifications compared to post-graduates is 14.1per cent.

Only three other effects were apparent for women. Regarding income, we again identify a negative effect for those earning in excess of £100,000 per annum. The scale of the effect implies that the very richest 2.1per cent of the female population have a 18.3per cent lower probability of supporting a fairer income distribution than women in all other income groups. The other effect is for Black African women who are 25.0per cent less likely to be in favour of a fairer income distribution than women from any other ethnic background. Women in both Wales (+4.2per cent) and Northern Ireland (+5.0per cent) also had a higher probability of supporting a fairer income distribution.

4.3 Male Model

For men we do observe an age effect. On this we note that males between the ages of 55 and 65 are less likely than any other age group of men to support income equality. The difference is -6.7per cent. In line with the female results, we also observe that male entrepreneurs are substantially less likely to support income equality, as are business angels (those making informal equity investments in unquoted smaller businesses). In terms of labour market status, we note that male part-time workers are less concerned about reducing income inequality (-6.9per cent), as are male unemployed (-11.3per cent). In the latter case, this might suggest that the male unemployed accept that life is unfair and that they can do little to change things, or alternatively that they accept that some working people are getting their just rewards and deservedly so.

Educational effects were also apparent, but once again different when compared to women. Here we note that it is only men with below university level formal qualifications that are significantly more likely to support fairer income distribution. The magnitude of these effects varies between 7.9per cent and 13.5per cent over all higher levels of male educational qualifications.

We also identify some interesting, and significant, ethnic results. For example, mixed race (white & black Caribbean) males have the lowest propensity for supporting income equality. This is in stark contrast with Black Caribbean males who have the highest probability of supporting a fairer income distribution (+18.3 compared to our base category of white British males) and males of Pakistani origin (+17.2per cent). Thus ethnic effects are more apparent for males than females.

Regional effects were also identified, and the results are consistent with those identified for females. For males we observe, in descending order of magnitude, the Northern Irish (+7.5per cent), Welsh (+5.9per cent), and Scots (+5.1per cent) all had higher probabilities of supporting a fairer income distribution than males in any English regions.

Finally we, once again, find that males at the top of the income distribution (>£50,000 per annum) have a lower probability of supporting income equality than males at any lower point in the male distribution of income. Yet the actual effect at -24.6per cent is substantially larger than the -18.3per cent recorded for females.

5 Conclusions

Whilst there is a volume of literature mapping out the evolution, causes and implications of income inequality across countries there is much less evidence concerning the desire of populations for income equality. This paper has attempted to shed more light on this latter issue by presenting UK evidence from a large-scale adult population survey for 2003. It is particularly apposite given that the UK has experienced an increase in income and wealth inequality compared to other EU member states.

Our findings suggest that it is only the very oldest people in society that have less desire for a fairer income distribution. For the under-55s, teenagers (often claimed to be idealistic) are no more supportive of income equality than their parents. Small business owners (the *petit bourgeoisie*) are less in favour of income equality than the non-

entrepreneurial population. This is consistent with consecutive government policies (both Conservative and Labour) aimed at reducing the tax burden on this section of the population and effectively transferring income to this community in return for votes (around 4 million out of an adult population of xx million).

Education is also an important determinant of the desire for a fairer distribution of income. Broadly we observe that those with the ability, and privilege, to access a university level education are significantly less likely to be in favour of income equality. This is a contentious issue at present in the UK. Broadly, one section of society wants students to pay for their education as they reap the private returns in the form of higher wage incomes in the future, nicer jobs etc. The opposing argument centres around the fact that even though society in general pays for their education now, we all reap the benefits in terms of higher future taxes, and a more productive workforce with all the associated benefits. This assumes social returns are high.

Ethnic effects were also large, although much more important for men than women. This is a particularly interesting aspect of this work as it highlights the fact that recent (post-war) immigrants (West Indians and Pakistanis specifically), and their children are, generally, more in favour of a fairer distribution of income holding actual income constant. Thus they are not like the stereotypical immigrant to the US who aspires to becoming a millionaire and chases the American dream. By contrast UK immigrants and their offspring want to assimilate and enjoy similar standards of living as their White British counterparts.

We also observe that actual income affects ones propensity to be in favour of a fairer income distribution. There appears to be a cut-off point at around £50,000 per annum income. Above this income level, people become substantially less concerned about fairness and income equality. This is generally in line with 'happiness' studies which suggest that it is relative income, not actual income, that affects an individuals' happiness. In this case the very rich may well perceive that they are getting the just rewards for their, implicitly superior, efforts. What's the good of having a Ferrari if everyone's got one?

Finally, we note that people living in the non-English countries of the UK, Northern Ireland, Wales and Scotland are significantly more likely to support a fairer income distribution. This is generally supportive of their desire for more regional political autonomy, and in particular, the power to tax and spend.

Thus, to summarise, we have presented detailed evidence from a recent, and large-scale, UK adult population survey, concerning the desire of the population for a fairer income distribution. The headline figure is that 75per cent of the total adult population support a higher degree of income equality. Yet this varies substantially according to gender, education, actual income and geography. This preliminary work opens up several interesting lines of enquiry that might be exploited from different perspectives. For example, psychologists might shed more light on why the unemployed still accept and indeed appear to favour inequality. Political scientists might explore how a desire for income equality translates into voting patterns. They might also consider why governments have not implemented policies that might have stemmed the broadening of income inequality that the UK has experienced in the last decade in comparison with our European counterparts.

Appendices

Table A.1: Sample Statistics

	% preferring more equal income distribution		% preferring more equal income distribution		% preferring more equal income distribution
Male	80.1	<i>Income £</i>		<i>Ethnicity</i>	
Female	70.9***	<4500	77.7	White British	75.1
<i>Age</i>		4500 - 6500	83.3	White Irish	81.6
18-24	76.3	6500 - 7500	81.2	White other	72.7
25-34	76.1	7500 - 9500	83.8	Mixed (white & black Caribbean)	66.7
35-44	75.8	9500 - 11500	87.9	Mixed (white & black African)	53.8
45-54	75.5	11500 - 13500	82.7	Mixed (white & Asian)	72.5
55-64	74.6	13500 - 15500	79.1	Mixed other	61.9
65+	73.7	15500 - 17500	82.0	Indian	73.6
Starting an independent business	67.8	17500 - 25000	78.4	Pakistani	81.0
Not starting an independent business	75.9***	25000 - 30000	76.3	Bangladeshi	75.0
Involved in a job related business start	63.6	30000 - 40000	72.7	Chinese	75.0
Not involved in job related business start	75.8***	40000 - 50000	70.6	Other Asian	83.3
Owner-manager of business	68.2	50000 - 75000	64.5	Black Caribbean	86.7
Not owner-manager of business	77.0***	75000 - 100000	63.7	Black African	71.2

	% preferring more equal income distribution		% preferring more equal income distribution		% preferring more equal income distribution
Business Angel	67.0	>100k	50.0***	Black other	70.0
Not business angel	75.6***	Region		Other	77.5***
Starting a social enterprise	69.7	South West	72.5	Education	
Not starting a social enterprise	75.7***	South East	67.3	PhD	57.3
Owner-manager of social enterprise	67.6	London	70.8	Masters	61.9
Not owner-manager of social enterprise	76.1***	East	73.0	Degree	66.6
Labour Market Status		Wales	79.6	A level	76.0
Full-time	74.0	West Midlands	74.6	O level	79.4
Part-time	77.9	East Midlands	73.6	High Vocational	79.3
Inactive	83.3	Yorks & Humber	71.6	Low Vocational	83.1
Unemployed	74.9	North West	75.8	None	74.1***
Retired	70.9	North East	78.0	Job Status	
Student	82.5	Scotland	77.5	Employee	77.4
Other	77.1***	N Ireland	81.8***	Self-employed	70.6
Rural	73.7			Manager	64.0***
Urban	74.8				

Table A.2: Probit Models for Desire for Income Equality

	Full Model		Males		Females	
	dF/dx	z-stat	dF/dx	z-stat	dF/dx	z-stat
Male	-0.071	7.67				
Age						
Base=18-24						
25-34	-0.001	0.06	-0.021	0.61	0.002	0.09
35-44	0.007	0.36	-0.033	0.99	0.021	0.89
45-54	0.004	0.20	-0.024	0.70	0.013	0.53
55-64	-0.022	1.03	-0.067	1.86	0.007	0.26
65+	-0.046	1.69	-0.048	1.10	-0.046	1.33
Starting an independent business	-0.031	1.77	-0.006	0.24	-0.061	2.29
Involved in a job related business start	-0.043	1.76	-0.064	1.90	-0.024	0.64
Owner-manager of business	-0.053	4.51	-0.078	3.69	-0.041	2.46
Business Angel	-0.021	0.73	-0.003	1.93	0.054	1.31
Starting a social enterprise	-0.011	0.60	-0.057	0.12	-0.019	0.82
Owner-manager of social enterprise	-0.024	1.54	-0.069	2.32	0.006	0.31
Labour Market Status						
Base=Full-time						
Part-time	0.001	0.05	-0.069	2.34	0.019	1.38

	Full Model		Males		Females	
	dF/dx	z-stat	dF/dx	z-stat	dF/dx	z-stat
Inactive	-0.016	0.73	-0.083	0.54	0.002	0.11
Unemployed	-0.057	2.88	-0.113	3.55	-0.019	0.76
Retired	-0.063	1.63	-0.078	1.10	-0.041	0.93
Student	-0.038	1.10	-0.057	1.06	-0.025	0.55
Other	-0.047	1.83	-0.056	1.32	-0.047	1.46
Education						
Base=PhD						
Masters	0.006	0.16	-0.009	0.17	0.016	0.33
Degree	0.026	0.79	-0.010	0.20	0.050	1.09
A level	0.087	2.75	0.079	1.66	0.087	1.99
O level	0.111	3.54	0.115	2.45	0.103	2.32
High Vocational	0.111	3.59	0.117	2.46	0.098	2.28
Low Vocational	0.145	4.89	0.135	2.93	0.141	3.52
None	0.067	1.91	0.035	0.64	0.080	1.72
Ethnicity						
Base=White British						
White Irish	0.029	1.38	0.049	1.46	0.017	0.65
White other	-0.029	1.18	-0.013	0.33	-0.039	1.23
Mixed (white & black Caribbean)	-0.068	0.72	-0.402	2.41		
Mixed (white & black African)	-0.282	1.75	-0.301	1.27	-0.284	1.27
Mixed (white & Asian)	-0.092	1.12	-0.127	1.05	-0.076	0.66

	Full Model		Males		Females	
	dF/dx	z-stat	dF/dx	z-stat	dF/dx	z-stat
Mixed other	-0.046	0.62	-0.087	0.73	-0.006	0.07
Indian	-0.022	0.46	-0.003	0.05	-0.048	0.69
Pakistani	0.090	1.34	0.172	1.72	0.007	0.07
Bangladeshi	-0.026	0.23	-0.010	0.07	-0.038	0.20
Chinese	-0.043	0.47	0.053	0.34	-0.103	0.90
Other Asian	0.082	1.06	0.050	0.43	0.100	0.92
Black Caribbean	0.072	1.15	0.183	1.80	0.006	0.08
Black African	-0.062	0.98	0.097	1.13	-0.250	2.54
Black other	0.069	0.55			-0.009	0.06
Other	0.025	0.77	0.053	1.01	0.008	0.20
Income £						
Base=<4500						
4500 - 6500	0.048	1.63	0.043	0.80	0.047	1.40
6500 - 7500	0.029	0.84	0.030	0.48	0.028	0.70
7500 - 9500	0.053	1.78	0.073	1.38	0.043	1.23
9500 - 11500	0.091	3.36	0.125	2.65	0.075	2.38
11500 - 13500	0.043	1.50	0.043	0.85	0.047	1.44
13500 - 15500	0.008	0.26	-0.003	0.07	0.017	0.49
15500 - 17500	0.047	1.72	0.048	1.01	0.049	1.52
17500 - 25000	0.003	0.11	-0.004	0.09	0.008	0.26
25000 - 30000	-0.006	0.23	-0.008	0.18	-0.007	0.23
30000 - 40000	-0.033	1.22	-0.072	1.49	-0.007	0.21

	Full Model		Males		Females	
	dF/dx	z-stat	dF/dx	z-stat	dF/dx	z-stat
40000 - 50000	-0.050	1.70	-0.076	1.48	-0.031	0.89
50000 - 75000	-0.088	2.93	-0.122	2.35	-0.061	1.69
75000 - 100000	-0.077	2.04	-0.133	2.09	-0.030	0.66
>100k	-0.211	5.08	-0.246	3.67	-0.183	3.48
Region						
Base=South West						
South East	-0.035	1.52	-0.063	1.67	-0.012	0.42
London	0.027	1.23	0.028	0.80	0.024	0.84
East	0.009	0.38	0.011	0.32	0.007	0.24
Wales	0.051	2.97	0.059	2.14	0.042	1.98
West Midlands	0.018	1.19	0.034	1.39	0.007	0.36
East Midlands	0.010	0.66	-0.012	0.48	0.025	1.29
Yorks & Humber	0.004	0.19	-0.021	0.56	0.022	0.80
North West	0.025	1.13	0.033	0.92	0.014	0.50
North East	0.029	1.28	0.008	0.21	0.041	1.52
Scotland	0.036	2.12	0.051	1.79	0.026	1.24
N Ireland	0.062	3.70	0.075	2.73	0.050	2.41
Log Likelihood	-5185.63		-2514.49		-2630.08	
Pseudo Rsq	0.06		0.07		0.04	
N Obs	10,120		4,527		5,578	

Bibliography

- Alvarez-Garcia, S, Prieto-Rodriguez, J, Salas, R (2004) 'The Evolution of Income Inequality in the European Union during the Period 1993-1996'. *Applied Economics*, 36. 1399-1408.
- Di Tella, R, MacCulloch, R, Oswald, A (2002) *The Macroeconomics of Happiness*. Mimeo: Harvard Business School.
- Esping-Anderson, G (1990) *The Three Worlds of Welfare Capitalism*. Polity Press. Cambridge.
- Fielding, D (2000) 'Social and Economic Determinants of English Voter Choice in the 1997 General Election'. *Public Choice*, 102. 271-295.
- Heath, A, Jowell, R, Curtice, J (1985) *How Britain Votes*. Pergammon. Oxford.
- Heath, A, Curtice, J, Jowell, R, Evans, G, Field, J, Witherspoon, S (1991) *Understanding Political Change*. Pergammon. Oxford.
- Inglehart, R (1990) *Culture Shift in Advanced Industrial Society*. Princeton University Press.
- Jowell, R, Witherspoon, S, Brook, L (1990) *British Social Attitudes: the 7th Report*. Gower Publishing. Aldershot. England.
- National Centre for Social Research (2004) *British Social Attitudes: the 20th Report*. Sage Publications.
- Paxton, W, Dixon, M (2004) *The State of the Nation: An Audit of Injustice in the UK*. Institute for Public Policy Research. London.
- Taylor-Gooby, P (1990) 'Social Welfare: the unkindest of cuts'. Ch.1 in Jowell et al. (eds) *British Social Attitudes the 7th Report*.
- Taylor, B, Thomson, K (1996) *Understanding Change in Social Attitudes*. Dartmouth Publishing. Aldershot, England.