Article:
Georgiadis, A orcid.org/0000-0003-1774-771X and Manning, A (2012) Spend it like Beckham? Inequality and redistribution in the UK, 1983–2004. Public Choice, 151 (3-4). pp. 537-563. ISSN 0048-5829

https://doi.org/10.1007/s11127-010-9758-7

Spend It Like Beckham?
Inequality and Redistribution in the UK, 1983-2004

February 2010
Revised July 2010

Abstract

A main activity of the state is to redistribute resources. Standard political economy models predict that a rise in inequality will lead to more redistribution. This paper shows that, for the UK in the period 1983-2004, a plausibly exogenous rise in income inequality has not been associated with increased redistribution. We explore this example of the 'paradox of redistribution' using attitudinal data. We show that standard political economy models of the individual demand for redistribution do have explanatory power, but that other attitudes and beliefs are also very important. Moreover, these attitudes and beliefs change quite quickly so are very important in explaining variation in the demand for redistribution.

Keywords: Taxation, Inequality, Redistribution
JEL Classification: H20, D72

We would like to thank Alistair Wilson for his research assistance on this project and participants at the PEUK Conference in Leicester, the editor, associate editor and referees for their comments.

"I warn you that there are going to be howls of anguish from those rich enough to pay over 75% on their last slice of earnings", a gleeful Denis Healey, Labour Party Shadow Chancellor, 1973.

"The justice for me is concentrated on lifting incomes of those that don't have a decent income. It's not my burning ambition to make sure that David Beckham earns less money", Tony Blair, Labour Party Leader, 2001 Election Campaign.

Introduction

One of the main activities of the state is to redistribute resources. This redistribution can take many forms, being explicit through the tax and welfare system, less direct through the subsidized public provision of certain services (notably education and health) and even indirectly through various government regulations (e.g. the minimum wage). Social scientists have sought to understand the determinants of the variability in the amount of redistribution both across countries and over time. One prediction that has received a lot of attention is that made by political economy models that, ceteris paribus, an increase in inequality should bring about an increase in redistribution in democracies (originating with Romer, 1975, Roberts, 1977, Meltzer and Richard, 1981 – see Persson and Tabellini, 2002, ch. 6, for a more recent overview). For example, in the model of Meltzer and Richard (1981), where the median voter is both selfish and decisive, the amount of redistribution is determined by the ratio of mean to median income, a simple measure of inequality. It is probably possible to construct political economy models in which this prediction does not hold but it is widely regarded as a 'best guess'[1]. Although the first paper investigating the prediction that more inequality leads to more redistribution claimed support (Meltzer and Richard, 1983, using time-series US data) the hypothesis has not fared particularly well empirically (see, for example Perotti (1996), Moene and

[1] Examples of these models include Piketty (1995), Roemer (1998), Corneo and Gruner (2000, 2002), Moene and Wallerstein (2001, 2003), Dalgaard et al., (2004) Galor et al., (2005) and Gruner and Schils (2007), see also Harms and Zink (2003) for a review of this literature.

Wallerstein (2001, 2003), Kenworthy and McCall (2008) though Kenworthy and Pontusson (2005) Finseraas (2006) does claim some support when comparing European countries) – this is sometimes called the 'paradox of redistribution'. One stark example of the paradox comes from a simple comparison of the United States and Europe where Europe has lower pre-tax inequality and more redistribution (see Alesina, Glaeser and Sacerdote, 2001).

However, as noted by Acemoglu and Robinson (2005), the empirical studies that use cross-country data are not without problems. There are many differences between countries that are likely to muddy the link between income inequality and redistribution. While the existing studies do make serious attempts to control for these confounding factors (e.g. racial divisions - Alesina, Glaeser and Sacerdote, (2001) - the political system - Austen-Smith, (2000), Iversen and Soskice, (2006), Tam (2008)) it is very difficult to do this in a way that is beyond reasonable criticism (e.g. see Strulik, 2007, for a discussion of the sort of factors one might have to control for) . What does not seem to be in the existing literature is a study of how, for a given country, redistribution responds to changes in income inequality. Looking at a country over time has the potential advantage that many factors that might be thought to be relevant to redistribution (e.g. the political system) are held constant so we might hope to get a better estimate of the link between inequality and redistribution. That is the purpose of this paper where we consider the case of the UK.

The UK is a good country to consider because it has had large rises in pre-tax income inequality that are generally thought to be the result of the exogenous forces of technological change and globalization (Machin, 2003) or changes in the supply of skills

(Card and Lemieux, 2001). In particular there has been a large rise in the share of pre-tax income going to those at the top of the income distribution (see Atkinson, 2003, for the evolution of the income share of the top 1% over 100 years). As discussed above, most political economy models would predict that the political response to this would take the form of rising redistribution with rising marginal tax rates on the rich. In the first section of the paper we document some basic facts about the changing distribution of pre- and post-tax income in the UK over the past 30 years and show that the rise in pre-tax inequality was not met by an increase in redistribution so that the paradox of redistribution holds for the UK in this period.

This raises the question as to why the prediction of standard political economy models that more inequality leads to more redistribution fails in the UK over this period. The rest of the paper explores this question using attitudinal data on the demand for redistribution from the British Social Attitudes Survey for the period 1983-2004. We show that the demand for redistribution has fallen since 1995 to its lowest-recorded levels even though there has been no dramatic fall in income inequality over this period – we try to understand this change.

The third section documents that the model of the individual's demand for redistribution typically used in political economy models does contain important elements of truth e.g. the rich are less in favour of redistribution than the poor, that those who believe that the disincentive effects of taxation are large are less likely to favour redistribution and that those who believe there is a lot of inequality are more likely to favour redistribution. But we also show that this model has a number of serious limitations. First, the extent and nature of other-regarding preferences are important in

understanding the demand for redistribution; and, second, the extent to which the government is trusted affects the demand for redistribution by it. Furthermore many of the attitudes apart from self-interest change rapidly over time and it is these changes that dominate observed changes in the demand for redistribution that are much larger than the changes in underlying inequality. The third section attempts to explain the falling demand for redistribution in the UK. We are able to find variables that can explain 75% of the fall in the demand for redistribution over the period from the mid 1980s to the mid 2000s with an increasing belief in the importance of incentives being the most important factor.

So, our conclusion is that more inequality did not lead to more redistribution in the UK in this period because preferences and beliefs changed quite rapidly in this period in a way that led to a fall in the demand for redistribution. This raises a deeper but much harder question about where preferences and beliefs come from and why they change – if they change quite fast there is at least the possibility that they should be thought of as endogenous and affected by the economy and society. The final section of the paper reviews the ways in which inequality might influence beliefs though it is hard to present direct evidence for any of these ideas.

1. Inequality and Redistribution in the UK

In this section we briefly describe the evolution of inequality in both pre- and post-tax income in the UK over the last 30 years. The UK tax and benefit system has a vast number of different programmes that take from one group and give to another – we will not seek to document them all here. Rather we will simply focus on one measure of the

overall amount of redistribution taken from the reported figures on the "The effects of taxes and benefits on household income" that has been produced by the Office for National Statistics on a more or less comparable basis since 1971 (and earlier on a less comparable basis) – see Jones (2006) for the most recent version of this analysis. This divides households into deciles and then reports levels of original income and various other measures of income including final income that includes imputed estimates of the value of benefits derived from public services (most importantly, health and education)[2].

The ONS produces different statistics based on different groupings of households into deciles. We use the figures based on ordering households by disposable income i.e. unequivalised and after taxes as this is the ordering available for the longest period – 1971 to 2005[3]. Figure 1 shows the trends in the cumulative shares of original income (i.e. before redistribution) from 1971-2005. One can clearly see the marked decline in the share going to the bottom 80% of households in the period from the late 1970s to the early 1990s since when it has been stable. This obviously implies a rise in the share of original income for the top 20% of households. From the trough in 1977 to 2004, the top 20% saw their share of original income rise from 43% to 52% an increase of nine percentage points. There was almost no change in the income share of the bottom quintile, but the second and third quintiles saw their income shares both fall by about 4 percentage points. The fourth quintile saw their share fall by one percentage point. So,

[2] This is important as, for example, an important aspect of redistribution in the UK is the National Health Service which provides free health care to all. If the share of GDP going on health rises over time and taxes are raised to pay for it, the UK welfare state will be becoming more redistributive even if the income tax system is not becoming more progressive.

[3] This ordering is not the ideal one for our purpose as we would prefer some measure of equivalised original income. None of this matters if the tax and benefit system left the ordering of households in terms of income unchanged but there are ways in which it doesn't (e.g. many pensioners have zero original income but are higher up the income distribution in terms of disposable income). But, in practice these difficulties seem to make little difference to an assessment of the trends in redistribution and the results we report here.

the fall in the income share is largest for those in the middle of the income distribution , where one might expect the median voter to be located. This is the rise in pre-tax income inequality.

Now consider what happens post-tax. Figure 2 reports shares in final income after all redistribution through taxes and benefits, both in cash and in kind. The changes here are more muted because the tax and benefit system does redistribute income but the pattern is the same – a rise in the share in final income of the top 20% (from 36.4% in 1977 to 41.7% in 2004), with falls in income shares for all other quintiles. The share of final income of the bottom quintile fell by 1 percentage point, the second quintile by 1.4 percentage points, the middle quintile by 2 percentage points and the fourth quintile by 0.9 percentage points.

Together, Figures 1 and 2 show that the tax and benefit system has not become more redistributive as pre-tax income inequality has risen. One might also point to the fall in the top marginal rate of income tax from 83% to 40% as evidence of declining progressivity at the top of the distribution (see Adam et al, 2007).

There are a number of reasons why the prediction of political economy models that more inequality leads to more redistribution might fail. It might be that the underlying model of the way in which individuals form preferences for redistribution is wrong. The rest of the paper focuses on this question.

2. Empirical Evidence on the Demand for Redistribution: Data

To look at evidence on the individual demand for redistribution we turn to data from the British Social Attitudes Survey (BSAS) and British Election Studies (BES)[4]. The BSAS has been conducted every year since 1983, except for the years 1987 and 1992, with the BES being conducted in each election year. The BSAS/BES asks questions on a wide range of social and political attitudes though the questions asked vary from year to year and even across sub-samples in the same year. Some questions are asked every year or almost every year, some questions occasionally and some in only one survey. Because we are primarily interested in changes over time, we focus most of our attention on the questions asked reasonably regularly but use the more infrequent questions where they are particularly relevant to our investigations.

The question asked in many years of the BSAS/BES that relates most closely to the role that the government should play in redistribution is the question:

REDISTRIBUTE: "government should redistribute from the better-off to those that are less well-off" (1=strongly disagree, 5 strongly agree)

In what follows we will use the answers to this question as our measure of the demand for redistribution[5]. Although the responses to this question might be expected to give some indication of the demand for redistribution, there are a number of possible interpretations of the answers, not all of which would support its use as a measure of the demand for redistribution. For example, it might be that some respondents think there should be some redistribution so agree with the statement but think that redistribution has

[4] There have been other studies that use this data to look at attitudes to redistribution in general and the welfare state in particular – e.g. Bromley (2003) and Sefton (2003, 2005). Their focus is much more on identifying groups of voters who have a particular constellation of views and of investigating the way in which attitudes have changed conditional on political party affiliation. We do not include any party affiliation variables in our analysis as the policies proposed by these parties are themselves endogenous.
[5] BSAS does contain some other questions relating to opinions on the distribution of income and wealth but those questions are either asked only rarely or do not mention a role for government – see Bromley (2003).

gone too far and would like less in the current situation. Perhaps the question one would like to have been asked would be 'government should *do more to* redistribute from the better-off to those that are less well-off'.

Although we do not have the answers to that specific question for all years, there are occasional questions asked about whether more should be done to redistribute. For example in 1987, 1992, and 1997, a question about the view on the current level of redistribution was asked where respondents were asked to place themselves on an 11-point scale where 1 was the belief that government should make much greater efforts to make people's incomes equal and 11 was the belief that the government should be much less concerned about how equal people's incomes are. This correlates closely with the REDISTRIBUTE variable suggesting that those who think there should be redistribution also think there should be more efforts to redistribute - in a regression of REDISTRIBUTE on the other question, the t-statistic is 59.

Figure 3 presents the time-series for the mean responses to REDISTRIBUTE. In the late 1970s the demand for redistribution was at its highest, then falling until the mid 1980s. The demand for redistribution then rose until the mid-1990s when it began to fall again. The demand for redistribution is currently at its lowest level even though the level of inequality is at or close to its highest level as we have seen in Figures 1 and 2. We would offer the following narrative to explain this pattern as compared to the actual evolution of inequality documented in the previous section. The economic failures of the 1970s led to disillusion with the policies of the Labour Party (including its egalitarian inclinations) and the election of Margaret Thatcher. The 1980s and early 1990s were a period of starkly rising inequality in both pre- and post-tax incomes. This was the period

in which the tax system did not respond to the rise in inequality as we have seen from the analysis in the previous section. But the redistributive policies of the Thatcher government were never particularly popular and there was increasing dissatisfaction with the rise in inequality as evidenced by a rising demand for redistribution. The Conservative government remained in power because its policies in other dimensions were deemed better, notably its management of the economy. But, after a narrow election victory in 1992, and the ejection from the exchange rate mechanism later that year, the government was extremely unpopular and would have lost an election at any time. So, by the time of the Blair landslide in 1997 it is plausible to think there was a gap between the demand for redistribution and the actual amount in the economy. One might have predicted the Blair government to have been strongly redistributive. But, in fact, little happened[6] – both pre- and post-tax inequality were quite stable in this period. If the demand for redistribution was unchanged this would suggest a continuing unmet demand for redistribution. But Figure 3 shows that the demand for redistribution was falling. It is this fall in the demand for redistribution in recent years in the face of relative stability in the income distribution that will be the main focus of the remaining part of this paper.

Our aim is to explain the time-series behaviour of the redistribution variable. Our empirical strategy is to think about the factors likely to be able to explain the attitude towards redistribution, then to see whether these factors can explain the cross-section variation in the demand for redistribution and then to see whether time-series variation in these variables can explain the trend in the demand for redistribution. If all relevant questions were asked in all years of BSAS this would be very straightforward but unfortunately they are not so it is a bit messier. This explains why, for example, one

[6] The redistribution that did take place focused heavily on children and pensioners.

cannot simply include all variables of potential interest in a single regression and why the sample sizes in the regressions reported below vary from one case to the next.

What are the factors we might think influence the demand for redistribution by individuals. We start with the standard political economy model. In that model individuals are motivated solely by self-interest and the degree of distribution supported by individual is based on their position in the income distribution, the amount of inequality there is in the economy and the extent to which high tax rates discourage work effort (the disincentive effect). We consider these elements in turn and how we can capture these ideas using variables in BSAS.

Self-Interest

We might expect that individuals care about the outcomes that affect their current selves so that the current position in the income distribution (which we measure by log income relative to the median) affects the demand for redistribution. Because measures of current income are quite likely to have a lot of noise in them we also include occupation and education as measures of permanent income.

But, people's position in the income distribution is not constant. The future position in the income distribution might be unpredictable leading to a demand for social insurance which means weight is put on people at points in the income distribution where they think they might be in the future not just where they are now. The more important luck is felt to be in determining success or the more risk-averse one is the higher one might expect the demand for redistribution to be. Other work (e.g. Fong, 2001; Alesina and La Ferrara, 2005) has shown how the attitude to redistribution is influenced by

beliefs about whether success is the result of luck or hard work and Cusack et al (2006) find that the demand for redistribution is related to exposure to labour market risk. The question in BSAS that comes closest to capturing these ideas is the one that asks "why do you think there are people who live in need?" There are four possible answers and respondents are asked to indicate which one comes closest to their own views. The four possible answers are:

WHYNEED-LUCK: People live in need because they have been unlucky
WHYNEED-LAZY: People live in need because of laziness or lack of willpower
WHYNEED-INJUSTICE: People live in need because of injustice in our society
WHYNEED-INEVITABLE: People live in need because it's an inevitable part of modern life

The first two answers are clearly related to the luck/hard work distinction the existing literature considers but the other two answers are harder to interpret though they both suggest factors beyond the control of the individual. In the analysis that follows we omit the WHYNEED-INEVITABLE response and use the other three variables.

It might also be that the future position of an individual in the income distribution might be predictable. The prospect of upward mobility would mean individuals put some weight on outcomes in parts of income distribution where they expect to be in the future (Benabou and Ok, 2001). Alesina and La Ferrara (2005) use predicted income mobility from panel data and find higher future income growth is useful in predicting attitudes to redistribution in the US. We do not take this approach as, in the absence of data on actual mobility, the identification strategy depends on excluding some variables that influence

income growth from the redistribution equation, which might be questionable. But, in our data we might expect the young to be less in favour of redistribution than the old with a given level of current income as the young can expect their income to grow in the future. Strulik (2007) presents a model in which current taxation affects capital accumulation and hence future expected incomes – in this case, even those with low current incomes might support low taxation as they want to encourage economic growth.

Incentives

In the standard political economy model of the demand for redistribution, an important factor is the extent to which work effort and/or labour supply respond to tax rates i.e. how important are incentive effects. If incentive effects are very large then this will tend to reduce the demand for redistribution. For example, if increasing redistribution to the poor who have little labour income encourages those people to reduce their labour supply this will increase the cost of redistribution making redistribution less attractive. In standard political economy models, the disincentive effect of taxation is a parameter of the model, assumed to be known correctly by everyone in the economy. However this assumption of identical, correct beliefs is implausible: after all, academic economists debate the size of disincentive effects (see, for example, the contrasting views of Feldstein, 1995, and Gruber and Saez, 2002) so we should not be that surprised if this difference in views was also present in the general population. And we would expect that those who believe incentive effects to be large to be less in favour of redistribution. To capture these ideas we use the following questions:

INCENTIVES1 "the welfare state makes people nowadays less willing to look after themselves" (1: strongly disagree,…, 5: strongly agree)

INCENTIVES2 “if welfare benefits weren’t so generous people would learn to stand on their own feet” (1: strongly disagree,…,5: strongly agree)
INCENTIVES3 “Around here most unemployed people could find a job if they really wanted one” (1: strongly disagree,…,5: strongly agree)

These questions are about incentives in the bottom part of the income distribution that may not necessarily be linked to those at the top. There are no directly equivalent questions about incentives in the top part of the distribution but we do experiment with:

INCENTIVES4 “no-one would study for years to become a lawyer or doctor unless they expected to earn a lot more than ordinary workers” (1: strongly disagree,…, 5: strongly agree)
INCENTIVES5 “large differences in income are necessary for Britain’s prosperity” (1: strongly disagree,…,5: strongly agree)

These two last questions are only asked in a handful of years so cannot be used when trying to account for the changing demand for redistribution.

Perceptions of Inequality

In standard political economy models, the amount of inequality also influences the demand for redistribution. Again, the standard model simply assumes that everyone knows the true amount of inequality in the economy, an assumption that is implausible. For example, there is evidence that the extent of wage inequality at the top is much greater than perceived – see Hills (2004) and Pahl et al (2007). How much redistribution one supports may well be influenced by the amount of inequality one perceives in society. Those who think there is not much inequality might be expected to be less supportive of redistribution.

In 1987 and 1999 (but unfortunately, only those years) respondents are asked about what they think the actual pay is and what it should be of certain groups of workers – the occupations asked about in both years are skilled factory workers, unskilled factory workers, doctors, chairman of a big corporation and a cabinet minister. There is considerable heterogeneity in the answers to the questions about what actual pay is, revealing considerable misperceptions of the true pay distribution. As measures of perceived actual pay differentials we use the following:

ACTPAYDIFF1 "log of actual pay of unskilled factory worker relative to skilled factory worker"
ACTPAYDIFF2 "log of actual pay of chairman of big corporation relative to skilled factory worker"
ACTPAYDIFF3 "log of actual pay of doctor relative to skilled factory worker"
ACTPAYDIFF4 "log of actual pay of cabinet minister relative to skilled factory worker"

where we use the perceived earnings relative to a skilled factory worker as this occupation's earnings are close to average earnings. We also define the variables SHDPAYDIFFx to represent the actual pay differential the respondent believes there should be. As documented by Hills (2004) the responses to these questions do show a demand for redistribution as the desired pay differentials are smaller than the actual (subject to the proviso that doctors are generally thought particularly deserving of high salaries and cabinet ministers less deserving). But this data also show widespread variation in the perceptions of the actual degree of pay inequality.

All of the factors discussed so far are components of the standard political economy models of the demand for redistribution, although we have modified the standard model to recognize the fact that there are divergent views in the population about the importance of incentives and the degree of inequality in society. But, there are

other factors that may well be important that are not present at all in the standard model and we now discuss these.

Other-Regarding Preferences

Part of the demand for redistribution may be explained by the fact that people have other-regarding preferences i.e. they care about the well-being of others. These 'other-regarding' preferences might be true 'social preferences' or ideology – we do not pretend to be able to distinguish between these two different perspective though the rapid change in social preferences we document here might best be thought to reflect ideology..

Caring about the well-being of others might be positively in the sense of altruism or negatively in the sense of status rivalry (see, for example, Corneo and Gruner, 2000, 2002). We might expect a higher demand for redistribution both if people are less selfish and if they are more envious – Alesina, Glaeser and Sacerdote (2001) make this point. It is important to note that the effects of more altruism and more envy are essentially symmetric in terms of their predictions about what will happen to redistribution even though we think of one as a good and the other as a bad human characteristic. For example, if one cares more about the poor, one will support more redistribution from rich to poor. If one is more envious of the rich one will also support more redistribution from rich to poor. To capture these ideas about social preferences we include variables which measure whether people agree with the statements that

CLASSCONFLICT1 "big business benefits owners at the expense of workers" (1 strongly disagree….5 strongly agree)
CLASSCONFLICT2 "there is one law for the rich and one for the poor" (1 strongly disagree….5 strongly agree)

on the grounds that these seem to reflect views that the pre-tax distribution of income is not legitimate so agreement with these statements might be expected to be associated with a greater demand for redistribution. Because these ideas are associated with the trade union movement we also control for trade union membership, TUNION.

Some work (e.g. Luttmer, 2001; Vigdor, 2006) has suggested that it is how one is doing relative to people in one's own neighbourhood and not the national level that is most important in influencing views on redistribution. That is a plausible hypothesis but we are not really able to test it with our data because BSAS only has regional information at the level of 11 broad regions.

Race has also been argued to be a 'cross-cutting' issue in politics. The more prominence race has in people's preferences, the less likely is the issue of redistribution to dominate politics (see, Roemer et al, 2007 for formal justification of this claim). Alesina, Glaeser and Sacerdote (2001) also argue that interpersonal altruism seems linked to race. In the UK, as in many countries, ethnic minorities tend to have lower incomes so are favoured by redistribution. If this is the case we might expect those who express racial prejudice to be more opposed to redistribution. To capture this idea we include the following self-assessed measure of racial prejudice:

RACIALPREJUDICE "Would you describe yourself as: 3: very prejudiced against people of other races, 2: a little prejudiced, 1: not prejudiced at all"

We also include a variable NORELIGION according to whether individuals do not have a religion (Scheve and Stasavage, 2006, provide an argument for why the

religious are less in favour of redistribution). Non-Christians are too few in number to allow more disaggregation than this.

Trust

Citizens rely on their elected representatives to implement policies and this principal-agent problem (emphasized in the public choice literature but less so in the standard optimal tax literature) is one in which the politicians are only held to account in occasional elections. If one thinks that the government is not trustworthy, one might be inclined to think it should do less redistribution as it cannot be trusted to do what one would like. To capture these ideas we use various measures of trust in government:

TRUST1 "How much do you trust the British government of any party to place the needs of the nation above the interests of their own political party" (4: just about always,…., 1: almost never)
TRUST2 "Generally speaking those we elect as MPs lose touch with people pretty quickly" (1: strongly disagree,…,5: strongly agree)
TRUST3 "Parties are only interested in people's votes not in their opinions" (1: strongly disagree,…,5: strongly agree)
TRUST4 "People like me have no say in what the government does" (1: strongly disagree,…,5: strongly agree)
TRUST5 "Sometimes politics and government seem so complicated that a person like me cannot really understand what is going on" (1: strongly disagree,…,5: strongly agree)

Another way in which the actual amount of redistribution might differ from the intended amount is through incompetence. To capture these ideas we use the following measures of fraud in the welfare system:

FRAUD1 "Most people on the dole are fiddling in one way or another" (1: strongly disagree,…,5: strongly agree)

FRAUD2 “Large number of people these days falsely claims benefits” (1: strongly disagree,…,5: strongly agree)

Descriptive statistics of all these variables are reported in Table 1 together with means for different time periods to give an idea of trends.

3. Empirical Evidence on the Demand for Redistribution: Pooled Cross-Section Results

We start by reporting results based on pooled cross-sections, and then try to decompose changes over time. Table 2 reports descriptive statistics for the demographic variables and the results of an equation for the demand for redistribution that only includes demographic variables.

The dependent variable is the response to the question “government should redistribute income from the better-off to those that are less well-off” and takes the value 1-5 with higher values representing a greater demand for redistribution. We simply estimate a linear model because this makes the decompositions that follow easier but nothing crucial depends on this.

In column 2 of Table 2 we see that there is a very strong effect of relative equivalised income on the demand for redistribution, a common finding in the literature. This suggests that political economy models of the demand for redistribution as first proposed by Romer (1975) and Meltzer and Richard (1981) do contain an element of truth. Current income might contain a lot of noise so it is not surprising that we find an additional effect of occupation with those in higher level occupations favouring less

redistribution[7]. But education, conditional on income and occupation does not have a simple relationship to the demand for redistribution – the demand is highest amongst those with a college degree and then those with no qualification[8].

But, unsurprisingly, other factors are also significant. Women are less in favour of redistribution than men, the demand for redistribution rises with age, ethnic minorities are more in favour of redistribution than whites, the non-married are more in favour of redistribution than the married with the divorced and separated being particularly in favour of redistribution (perhaps in line with Edlund and Pande, 2002). Those with more children are less in favour of redistribution. There are sizeable regional effects with those in Scotland, Wales, the north of England and greater London being more in favour of redistribution.

We do not seek to explain all of these correlations – rather we simply use them as background for the variables in which we have more interest. We start by including the sets of variables in groups because one has very few observations if all potentially relevant variables are included at once. In the first column of Table 3 we include variables related to preferences towards redistribution. The coefficients on these variables have the expected sign and are significantly different from zero. Particularly strong are the variables that measure views on the fairness of society – those who think big business is bad and who think there is one law for the rich and one for the poor are much more likely to be in favour of redistribution. Those who are racially prejudiced and

[7] This is also consistent with status rivalry that is predicated on the assumption that individuals are better off when social status differentials between them and individuals from higher social classes are reduced and when differentials between them and individuals from lower classes are increased because of social competition for non-market goods (Corneo and Gruner, 2000).
reduce social status differentials between them and those in higher social classes and similarly expand these differentials expand them with those from lower classes because of social competition.

[8] This ordering is reversed if one excludes income and occupation but it remains the case that those with a degree tend to favour more redistribution than those with lower levels of education.

the religious are less in favour of redistribution while trade union members are more. The second column then includes the questions on why people live in need. The WHYNEED variables have the expected sign and are significant, with those who believe that there are people who live in need due to social injustice or because of bad luck being more in favour of redistribution than those who feel that this is an inevitable part of modern life (the omitted category). Those who think need exists because of laziness are less in favour of redistribution.

The next set of results then include variables designed to measure misperceptions of inequality. In the first column of Table 4 we include the perceptions about actual pay differentials. Individually these are not very significant but one can reject the hypothesis that they are jointly equal to zero. The significance of these variables improves if one controls for desired pay differentials (suggesting, perhaps in line with the predictions of cognitive dissonance that people do not perceive what they do not like) – the results are reported in the second column. The third column then only retains the pay differentials relating to unskilled workers, chairmen of corporations and ministers. The coefficients on what pay differentials should be suggest that SHDPAYDIFF variables are correlated with the demand for redistribution in the way one would expect. The results here suggest that, controlling, for preferences on desired pay differentials, one is more likely to be in favour of redistribution if one perceives a great deal of inequality. As Hills (2004) has documented, people tend to under-estimate the size of pay differentials so this has the potential to explain a weak demand for redistribution. However, to explain a falling demand for redistribution, one would have to argue that misperceptions have worsened over time. The fact that these questions were only asked in 1987 and 1999 makes it hard

to consider whether this has happened but the means reported in Table 1 suggest that perhaps perceptions of inequality at the top have risen.

Table 5 includes the variables related to incentives. In the first column all of the questions about the incentives associated with the welfare state are included. Agreeing that the welfare state makes people less willing to look after themselves, that the unemployed could get a job if they really wanted one, that if welfare benefits weren't so generous they would learn to stand on their own two feet are all associated with demanding less redistribution. As discussed earlier these variables are about the incentives effects at the bottom of the distribution not the top, but the second column shows that the variables relating to incentives at the top are also correlated with the demand for redistribution. The third column includes all the incentive variables. Unfortunately, the variables relating to incentives at the top are only available for a few years so cannot be used in the decomposition reported below.

In Table 6 we include the variables related to trust in government and belief that the system operates fairly. Belief that large numbers of people falsely claim benefits and that most people on the dole are fiddling are strongly associated with lower demands for redistribution. The variables related to trust in government are much weaker and individually do not appear significant but generally their coefficients are of the 'correct' sign[9]. But as the third column shows, this is partly a collinearity problem – exclusion of some variables makes the remaining ones significant and again with the sign in line with that predicted.

[9] All trust variables included in the regressions are scaled so that higher values are associated with more trust in the government/politicians, and thus only the first one i.e. "how much you trust the government to place nation's needs above that of their own party" has a sign that is not consistent with the prediction of our model.

We have included sets of variables one at a time. But, if one selects the most significant variables and includes them in a pooled regression one gets results like those presented in Table 7. The variables that were significant individually remain significant – the effects of the class conflict variables are particularly large. These results suggest that the standard political economy model of redistribution misses factors – other-regarding preferences and perceived fraud – that are very important in practice. We now move on to attempt to use the framework we have developed here to explain the fall in the demand for redistribution observed in Figure 3 - that is the subject of the next section.

4. Empirical Evidence on the Demand for Redistribution: Changes Over Time

Our aim in this section is to try to provide an account of the change in the demand for redistribution over time. Because not all of the relevant questions are asked in each year of the BSAS, our approach is limited, to a considerable degree, by the availability of data. We take three sample periods, early (1986 and 1987), middle (1994 and 1996) and late (2003 and 2004). The choice of years might appear a little arbitrary but are chosen in part to reflect the availability of data (e.g. the key question on the demand for redistribution is not asked in 1995). Our chosen periods do reflect a period in the 1980s when the demand for redistribution was low, a period in the 1990s when it was at its peak and a period of still lower demand in the 2000s.

Our empirical approach is to estimate separate equations for the demand for redistribution in each of these periods. To keep the exposition simple assume there are only two periods denoted 0 and 1 (though our application has three). In each period we estimate by OLS a regression model for the demand for redistribution of the form:

$$y_i = \beta_i x_i + \varepsilon_i, \quad i = 0,1 \tag{1}$$

Where x are our included covariates. A well-known property of regression models is that the estimates go through the means so that we have:

$$\overline{y}_i = \hat{\beta}_i \overline{x}_i, \quad i = 0,1 \tag{2}$$

This means that we can write the difference in the average value of the dependent variable as:

$$\overline{y}_1 - \overline{y}_0 = \hat{\beta}_1 \overline{x}_1 - \hat{\beta}_0 \overline{x}_0 = \hat{\beta}_1 \left(\overline{x}_1 - \overline{x}_0 \right) + \left(\hat{\beta}_1 - \hat{\beta}_0 \right) \overline{x}_0 \tag{3}$$

So that the observed change in the demand for redistribution can be decomposed into a part that is due to changes in the average values of the regressors (the first terms) and a part due to changes in the loadings of characteristics. The first component can then be further decomposed into a part due to each type of variable. This decomposition is what is known as the Oaxaca decomposition (Oaxaca, 1973). It is not unique we could also derive:

$$\overline{y}_1 - \overline{y}_0 = \hat{\beta}_1 \overline{x}_1 - \hat{\beta}_0 \overline{x}_0 = \hat{\beta}_0 \left(\overline{x}_1 - \overline{x}_0 \right) + \left(\hat{\beta}_1 - \hat{\beta}_0 \right) \overline{x}_1 \tag{4}$$

And we present both to check on the robustness of our results.

Our chosen specification for this exercise includes all the demographics and then the variables CLASSCONFLICT1, CLASSCONFLICT2, RACIALPREJUDICE, INCENTIVES2-3 and FRAUD2. This choice of variables to include is partly determined by those that were especially significant in the results reported in the previous section but also by the availability of questions in enough years. For example, the variables relating to government trust are not available in enough years to be useful, but were not generally found to be very significant.

The estimates of the redistribution equation for the 3 periods are reported in Table A1 and the Oaxaca decompositions in Table 8. We report results when evaluating the

change in characteristics at both sets of coefficients i.e. both (3) and (4) – though the choice of year for the coefficients typically makes little difference. The first point is that the effect of demographics is normally very small and not always in the direction of a falling demand for redistribution. For example, the share of graduates is rising strongly, and graduates tend to be more pro-redistribution.

But the other included variables can explain much of both the rise in the demand for redistribution from the mid 1980s to the mid 1990s and the subsequent fall, though the important factors vary from one sub-period to another. First, let us consider the whole period from the mid 1980s to the 2000s. Here one can explain approximately 75% of the fall in the demand for redistribution and it is the variables related to incentives that are most important in that. Changing preferences and declining trust in the system are much less important.

But, the decomposition for the 2 sub-samples is a bit different. In the first sub-period, from 1986/7 to 1994/6 there is a rise in the demand for redistribution with something like two-thirds being explainable. The most important factor here were the changes in the 'class conflict' variables – there was, for example, little change in attitudes about incentives. This change is perhaps not surprising given the large rise in pre-tax income inequality in this period. But in the second sub-period, from 1994/6 to 2003/4 things are very different. There is now a very large collapse in the demand for redistribution with, again, something like two-thirds being explainable. Now, it is the attitudes about incentives that are changing the most but the class conflict variables move in the direction of reducing the demand for redistribution, ending up, more or less, where they had been in the 1980s. This change in attitudes is perhaps remarkable because,

although attitudes ended up in a similar place, income inequality did not – it was much higher in 2003/4 than in 1986/7. But, considering the period as a whole it appears that this rise in income inequality has not made people more hostile to the rich and their belief in the power of incentives has increased.

It is also worth commenting on the role played by racial prejudice. There is a modest reduction in reported in racial prejudice over the sample period (see Table 1). Putting this together with the evidence that the racially prejudiced are less pro-redistribution (Table 7), the changes in racial prejudice act to increase modestly the demand for redistribution in Table 8. This is broadly consistent with the argument of Roemer et al (2007) who argue that the elimination of racial prejudice in the UK would lead to a large increase in redistribution.

There is one other issue that deserves some discussion. One of the demographic variables included in these regressions is age. But, others have argued that cohort effects are important that, for example, those who came of age in the Thatcher era have very different preferences from the hippies of the sixties generation (see, for example, Bromley, 2003). There is a well-known insurmountable collinearity problem that year of birth=year-age so one cannot hope to separately disentangle age from cohort and time effects. Perhaps more worryingly, for the investigation here, the way in which one chooses to model the demand for redistribution will affect the Oaxaca decomposition. To see this, consider the following simple example. Suppose there are no cohort effects, only age effects and the relationship between the demand for redistribution and age is linear and stable over time. Represent it by:

$$y_{it} = \beta_0 + \beta_1 a_{it} + \varepsilon_{it} \tag{5}$$

Then all of any observed change in redistribution can only be due to changes in the age distribution – the Oaxaca decomposition will tell us the contribution of changing coefficients is zero. But, now suppose we model the demand for redistribution as a function of year of birth, b_{it}. (5) now becomes:

$$y_{it} = (\beta_0 + \beta_1 t) - \beta_1 b_{it} + \varepsilon_{it} \quad (6)$$

The average year of birth must be increasing over time so that the intercept in the redistribution equation will appear to be changing. The Oaxaca decomposition will give a different answer about the contribution of characteristics and coefficients to the changing demand for redistribution.

There is no solution to this problem as one can never separately identify age and cohort and year effects. But we do not believe it is a serious problem. We have done our decomposition with year of birth instead of age in the demographic variables and our results are very similar. The reason for this is that views on redistribution are not strongly correlated with age (see Alt, Preston and Sibieta, 2007, for a similar conclusion).

Our findings suggest that it is the changing views about the workings of the economy, both in terms of the importance of incentives and the justness of the pre-tax distribution of resources (as measured by the class conflict variables), that can explain the fall in the demand for redistribution. Of course, one should not think of this as a deep causal explanation – these preferences should themselves be seen as endogenous and it is an impossible task to track changes in attitudes back to some clearly exogenous fundamentals. Because of this problem, the next section sketches some ways in which these preferences might be endogenous.

5. The Endogeneity of Preferences and Beliefs

In this paper we have shown how, over the past 25 years, pre-tax income inequality has risen and the demand for redistribution has fallen. These changes might be independent of each other but there is also the possibility that they are connected. Such connections might run in both directions. For example, Benabou and Tirole (2006) and Alesina and Angeletos (2004) have constructed ingenious theoretical models in which the level of inequality influences beliefs. These models can have multiple equilibria in which inequality and redistribution are negatively correlated. Alternatively, it may be that a rise in inequality puts the rich at more risk of redistribution while giving them more resources to fight it – Docquier and Tarbalouti (2001) present a model in which the rich can spend money to buy votes[10]. Hence it may be that the rise in inequality caused the rich to invest more in moulding the attitudes of voters in ways that are more tolerant of inequality.

But it is also possible that the causality runs from beliefs to pre-tax income inequality. This might be because pre-tax inequality is influenced by some aspects of government policy e.g. the minimum wage or high-quality publicly funded education though these are not the factors most often mentioned in accounts of the evolution of UK wage inequality. For example, Carter (2006) presents evidence that countries with more economic freedom (in the case of democracies this presumably being because of the beliefs of the population) tend to have more inequality. So, it might also be that the decline of class conflictual attitudes and the rising belief in the importance of incentives leads to rising relative pay for managers within firms i.e. to widening pre-tax income inequality.

[10] We did investigate whether changes in the patterns of voting could explain the changing demands for redistribution but found this to be unimportant.

There is no way that we can hope to disentangle these interconnections with the data available to us. But our data does suggest that preferences and attitudes can change quite markedly over short periods of time (so might reflect ideology more than preferences as conventionally understood) so that models that always treat these fundamentals as changing rather slowly may be rather inaccurate and that a very important part of politics may be the battle for the hearts and minds of voters.

6. Conclusions

In this paper we have shown how the rise in pre-tax income inequality in the UK has not led to more redistribution – another example of the so-called 'paradox of redistribution'. The main reason for this would appear to be that the demand for redistribution is falling and is currently at its lowest recorded level. We have shown that standard political economy theories of the demand for redistribution by individuals do have explanatory power – e.g. the rich are less in favour of redistribution, and those who believe incentives are important favour less redistribution. But, these are not the only important factors – the nature and extent of other-regarding preferences is particularly important. Furthermore, attitudes can change quite rapidly over time so that the demand for redistribution can change quickly without any obvious change in economic fundamentals. We have argued that the main change in attitudes that can account for the falling demand for redistribution in the UK in our sample is a greater belief in the importance of incentives as proxied by attitudes about the disincentives to work associated with the welfare state. Quite why attitudes have changed in this way is an interesting question and

could, conceivably be linked with the rise in wage inequality, but we are not able to offer an answer to this question.

One interesting question is how the current economic crisis will affect the demand for redistribution. It seems plausible to believe that the faith in the ability of a free market system to deliver earnings growth for all will be eroded and there will be a return, to some extent, of 'class conflict' politics. Our results would then suggest we might expect to see a rise in the demand for redistribution which might meet with a political response. It is worth noting that, in 2009, the top rate of income tax for those who earn more than £150,000 a year (a very small proportion of the population) was raised from 40% to 50% with effect from April 2010 and the new government elected in May2010 has not proposed to remove it.[11] It will be some time until the relevant years of the BSAS are made available to researchers but how well the model we have proposed here stands up is an interesting question.

[11] At the risk of being excessively immodest we would like to point out that, based on the research in this paper, we suggested a rise in the top rate of tax was more likely ahead of the actual announcement (Georgiadis and Manning, 2007)– see http://cep.lse.ac.uk/pubs/download/dp0816.pdf

Table 1: Descriptive statistics for attitudinal variables

Variables	*Average-1980s*	*Average-1990s*	*Average-2000s*	*Average-All Years*
REDISTRIBUTE: Government should redistribute income from better-off to those that are less well-off	3.2	3.24	3.08	3.2
CLASSCONFLICT1: Big business benefit owners at the expense of workers	3.37	3.51	3.5	3.48
CLASSCONFLICT2: There is one law for the rich and one for the poor	3.63	3.75	3.6	3.68
RACIALPREJUDICE	1.4	1.34	1.3	1.36
WHYNEED-LUCK: There are people who live in need because they have been unlucky	0.12	0.17	0.16	0.15
WHYNEED-LAZY: There are people who live in need because of laziness/lack of willpower	0.21	0.16	0.26	0.24
WHYNEED-INJUSTICE: There are people who live in need because of social injustice	0.28	0.31	0.2	0.23
WHYNEED-INEVITABLE: There are people who live in need because it's an inevitable part of modern life	0.38	0.35	0.37	0.37
NORELIGION	0.32	0.38	0.42	0.38
TRADE UNION MEMBER	0.25	0.19	0.18	0.2
ACTPAYDIFF1. Log of actual pay of unskilled worker relative to skilled worker	-0.48	-0.41	n/a	-0.45
ACTPAYDIFF2 Log of actual pay of chairman of big corporation worker relative to skilled worker	1.89	2.24	n/a	2.03
ACTPAYDIFF3. Log of actual pay of a doctor relative to skilled worker	0.73	0.88	n/a	0.79
ACTPATDIFF4. Log of actual pay of cabinet minister relative to skilled worker	1.24	1.42	n/a	1.31
SHDPAYDIFF1. Log of preferable pay of unskilled worker relative to skilled worker	-0.41	-0.36	n/a	-0.39
SHDPAYDIFF2. Log of preferable pay of chairman of big corporation relative to skilled worker	1.22	1.4	n/a	1.29
SHDPAYDIFF3. Log of preferable pay of doctor relative to skilled worker	0.67	0.77	n/a	0.68
SHDPAYDIFF4. Log of preferable pay of cabinet minister relative to skilled worker	0.8	0.91	n/a	0.84
INCENTIVES1: Welfare state makes people less willing to look after themselves	3.06	3.19	3.34	3.16
INCENTIVES2: If benefits weren't so generous people would learn to stand on their own feet	2.9	2.84	3.15	2.95
INCENTIVES3: Unemployed people could find a job if want to	2.71	2.86	3.63	3.05
INCENTIVES4: No-one would study to become a lawyer or doctor unless they expect to earn a lot more than ordinary workers	3.71	3.61	3.61	3.64
INCENTIVES5: Large differences in income are necessary for Britain's prosperity	2.75	2.55	2.78	2.72
TRUST1: How much trust gov to place nation's needs above that of their own party	2.38	2.14	1.95	2.13
TRUST2: MPs lose touch with people quickly	3.72	3.82	3.85	3.82
TRUST3: Parties are interested in people's votes not their opinions	3.5	3.72	3.86	3.73
TRUST4: People like me have no say in what gov does	3.46	3.46	3.6	3.52
TRUST5: Gov and politics are so complicated	3.61	3.47	3.47	3.48
FRAUD1: People on the dole fiddle	2.92	3.01	3.16	3.05
FRAUD2: Many people falsely claim benefits	4.05	4.27	4.34	4.23

Notes: Higher values are associated with (stronger) support of relevant statements/questions. In particular, RACIALPREJUDICE is coded as 1: no prejudiced, 3: very prejudiced, PREFERENCES1 as 1: too large, 0: about right/too small and TRUST1 as 1: almost never, 4: just about always. WHYNEED1-4, NORELIGION and TRADE UNION MEMBER are binary coded as 1 if yes and 0 if no. All other variables except ACTPAYDIFF1-4 and SHDPAYDIFF1-4 are coded as 1: strongly disagree, 5: strongly agree.

Table 2: Descriptive statistics for demographic variables and results from a regression of REDISTRIBUTE on demographics

Demographic Variables	*Mean*	*Regression results*
Log relative household income	0.029	-0.300
	(0.67)	(0.012)**
Intermediate non manual	0.17	0.184
	(0.37)	(0.020)**
Junior non manual	0.19	0.142
	(0.39)	(0.020)**
Skilled manual	0.19	0.266
	(0.39)	(0.020)**
Semi-skilled manual	0.17	0.316
	(0.37)	(0.022)**
Unskilled manual	0.05	0.392
	(0.023)	(0.030)**
Other occupation	0.002	-0.307
	(0.047)	(0.122)*
Degree	0.12	0.250
	(0.33)	(0.024)**
Higher education below degree	0.14	-0.137
	(0.35)	(0.021)**
A levels or equivalent	0.11	-0.173
	(0.32)	(0.022)**
O levels or equivalent	0.19	-0.172
	(0.39)	(0.019)**
CSE or equivalent	0.09	-0.106
	(0.29)	(0.022)**
Foreign/other qualification	0.01	-0.120
	(0.1)	(0.054)*
Employed	0.56	0.012
	(0.49)	(0.029)
Other status	0.39	-0.017
	(0.48)	(0.030)
Male	0.45	0.139
	(0.49)	(0.013)**
Age	47.6	0.015
	(17.03)	(0.002)**
Age^2	2562.63	-0.0001
	(1746.1)	(0.00002)**
Black	0.014	0.112
	(0.11)	(0.049)*
Asian	0.016	0.173
	(0.12)	(0.046)**
Mixed/other race	0.007	0.131
	(0.08)	(0.069)
Living as married	0.067	0.102
	(0.25)	(0.025)**
Separated	0.11	0.234
	(0.31)	(0.019)**
Widowed	0.1	0.181
	(0.3)	(0.023)**
Single	0.16	0.201
	(0.37)	(0.019)**
No. of children	0.09	-0.036
	(0.2)	(0.007)**
Year dummies		Yes
No. of observations	34341	34341
R^2		0.09

Notes: The dependent variable in the regression reported in the second column is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level. Regional dummies are also included but parameter estimates are not reported.

Table 3: Regressions explaining redistribution with preferences variables

Independent Variables	**(1)**	**(2)**
Preferences		
Big business benefits owners at the expense of workers	0.389 (0.008)**	0.36 (0.014)**
One law for rich and one for poor	0.248 (0.008)**	0.21 (0.013)**
Union member	0.051 (0.018)**	0.021 (0.03)
Racial prejudiced	-0.140 (0.013)**	-0.16 (0.02)**
No religion	0.052 (0.015)**	0.045 (0.025)
People who live in need have been unlucky		0.088 (0.036)*
People who live in need have been lazy		-0.078 (0.03)**
There are people who live in need due to social injustice		0.28 (0.03)**
Demographic variables	Yes	Yes
Year dummies	Yes	Yes
No. of observations	19046	6257
R^2	0.32	0.32

Notes: The dependent variable is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level. The demographic variables are those used in Table 2.

Table 4: Regressions explaining redistribution with misperceptions variables

Independent Variables	**(1)**	**(2)**	**(3)**
Misperceptions			
Log of ***actua*l** pay of unskilled worker relative to skilled worker	-0.144 (0.105)	-0.630 (0.124)**	-0.62 (0.11)**
Log of **actual** pay of chairman of big corporation worker relative to skilled worker	-0.007 (0.039)	0.173 (0.046)**	0.18 0.04)**
Log of **actual** pay of a doctor relative to skilled worker	-0.080 (0.081)	0.046 (0.106)	
Log of **actual** pay of cabinet minister relative to skilled worker	0.149 (0.054)**	0.171 (0.062)**	0.20 (0.05)**
Log of **desired** pay of unskilled worker relative to skilled worker		0.808 (0.126)**	0.77 (0.10)**
Log of **desired** pay of chairman of big corporation relative to skilled worker		-0.353 (0.056)**	-0.42 (0.05)**
Log of **desired** pay of doctor relative to skilled worker		-0.122 (0.107)	
Log of **desired** pay of cabinet minister relative to skilled worker		-0.090 (0.068)	-0.11 (0.06)
Demographic variables	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
No. of observations	1448	1386	1409
R^2	0.10	0.17	0.17

Notes: The dependent variable is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level.. The demographic variables are those used in Table 2.

Table 5: Regressions explaining redistribution with incentive variables

Independent Variables	**(1)**	**(2)**	**(3)**
Incentives			
Welfare state makes people less willing to look after themselves	- 0.091 (0.009)**		-0.044 (0.049)
If benefits weren't so generous people would learn to stand on their own feet	-0.095 (0.009)**		-0.131 (0.052)**
Unemployed people could find a job if want to	-0.077 (0.009)**		-0.021 (0.051)
Large differences in income are necessary for Britain's prosperity		-0.238 (0.020)**	-0.254 (0.044)**
No one would study for years to become a lawyer or doctor unless they expected to earn a lot more than ordinary workers		0.067 (0.020)**	-0.055 (0.044)
Demographic variables	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
No. of observations	18809	3012	654
R^2	0.12	0.12	0.17

Notes: The dependent variable is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level. The demographic variables are those used in Table 2.

Table 6: Regressions explaining redistribution with trust and fraud variables

Independent Variables	**(1)**	**(2)**	**(3)**
Trust			
How much trust gov to place nation's needs above that of their own party	-0.031 (0.022)	-0.022 (0.020)	
MPs lose touch with people quickly	0.006 (0.020)	0.007 (0.018)	
Parties are interested in people's votes not their opinions	0.025 (0.020)	0.027 (0.018)	0.037 (0.014)**
People like me have no say in what gov does	0.003 (0.015)		
Gov and politics are so complicated	0.009 (0.015)		
Fraud			
People on the dole fiddle	-0.104 (0.015)**	-0.088 (0.014)**	-0.084 (0.014)**
Many people falsely claim benefits	-0.14 (0.017)**	- 0.141 (0.016)**	-0.137 (0.015)**
Demographic variables	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
No. of observations	5285	6021	6807
R^2	0.10	0.10	0.10

Notes: The dependent variable is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level. The demographic variables are those used in Table 2.

Table 7: Pooled regressions explaining redistribution with selected variables

Independent Variables	(1)	(2)
Preferences		
Big business benefit owners at the expense of workers	0.429 (0.020)**	0.423 (0.014)**
One law for rich and one for poor	0.217 (0.019)**	0.231 (0.014)**
Union member	0.018 (0.043)	
Racial prejudiced	-0.125 (0.034)**	-0.096 (0.023)**
No religion	0.025 (0.036)	
Incentives		
Welfare state makes people less willing to look after themselves	-0.064 (0.019)**	-0.065 (0.014)**
If benefits weren't so generous people would learn to stand on their own feet	-0.039 (0.021)	-0.041 (0.014)*
Unemployed people could find a job if want to	-0.053 (0.020)**	-0.059 (0.014)**
Trust		
Parties are interested in people's votes not their opinions	-0.016 (0.018)	
Fraud		
People on the dole fiddle	-0.036 (0.021)	
Many people falsely claim benefits	-0.048 (0.018)*	-0.055 (0.013)**
Demographic variables	Yes	Yes
Year dummies	Yes	Yes
No. of observations	3047	5802
R^2	0.34	0.36

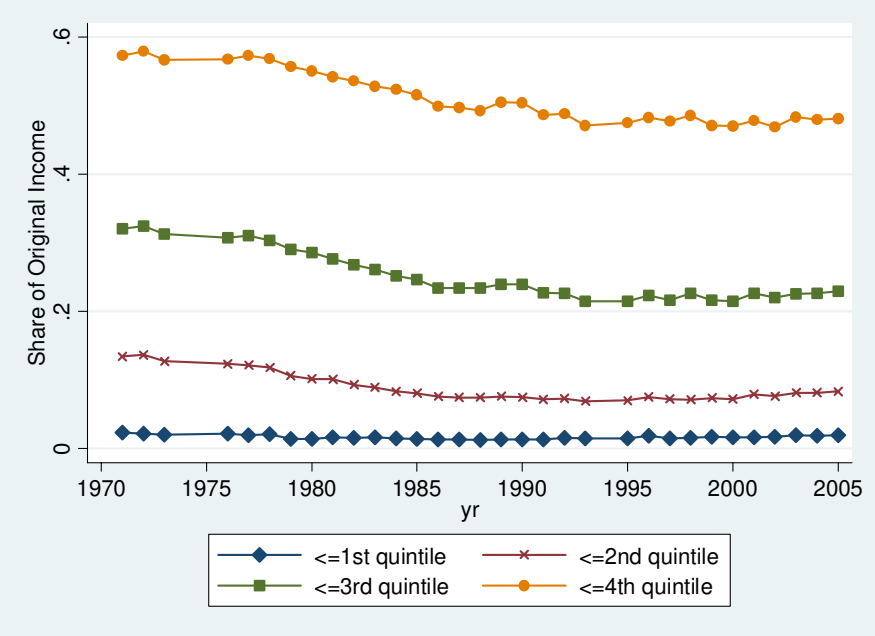
Notes: The dependent variable is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level. The demographic variables are those used in Table 2.

Table 8: Oaxaca decomposition of changes in the demand for redistribution over time

	1986/87-2003/04		**1986/87-1994/96**		**1994/96-2003/04**	
	1986/87 estimated coefficients	*2003/04 estimated coefficients*	*1986/87 estimated coefficients*	*1994/96 estimated coefficients*	*1994/96 estimated coefficients*	*2003/04 estimated coefficients*
Total Difference	-0.166	-0.166	0.156	0.156	-0.323	-0.323
Unexplained	-0.054	-0.043	0.065	0.041	-0.143	-0.11
Explained	-0.112	-0.123	0.091	0.115	-0.18	-0.213
Contributions in explained difference						
Demographics	-0.013	0.016	-0.018	-0.011	0.029	0.022
Preferences	-0.005	-0.0001	0.105	0.125	-0.11	-0.093
Big business benefit owners at the expense of workers	0.033	0.028	0.087	0.108	-0.066	-0.044
One law for rich and one for poor	-0.05	-0.046	0.012	0.01	-0.052	-0.057
Racial prejudiced	0.011	0.017	0.005	0.007	0.007	0.009
Incentives	-0.079	-0.108	0.008	0.007	-0.083	-0.12
If benefits weren't so generous people would learn to stand on their own feet	-0.034	-0.06	0.004	0.001	-0.017	-0.068
Unemployed people could find a job if want to	-0.045	-0.047	0.004	0.005	-0.066	-0.052
Fraud	-0.013	-0.03	-0.003	-0.005	-0.014	-0.022
Many people falsely claim benefits	-0.013	-0.03	-0.003	-0.005	-0.014	-0.022

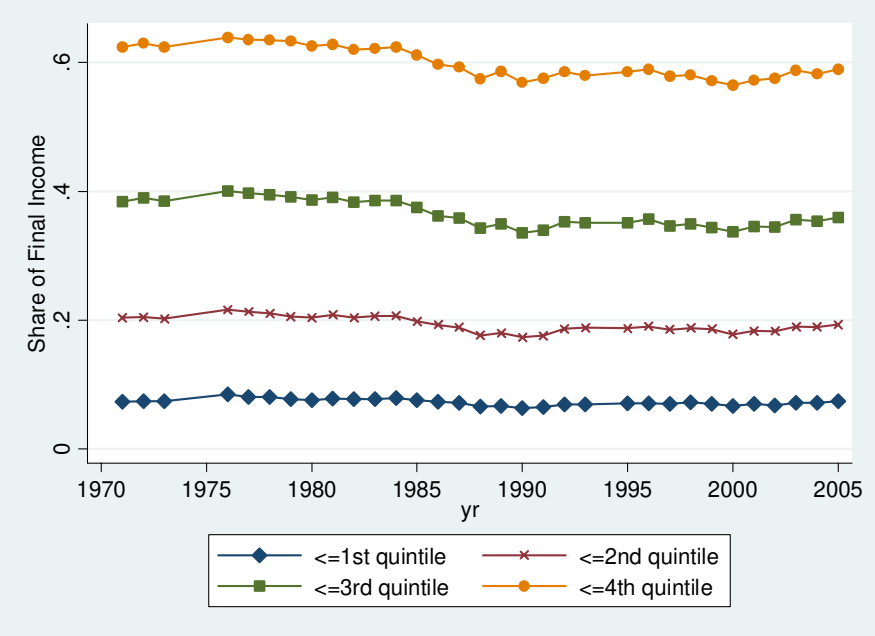
Notes: Contribution of individual demographic variables not reported in the interests of space. These details are available from the authors on request.

Figure 1
The Shares of Original Income by Cumulative Quintile



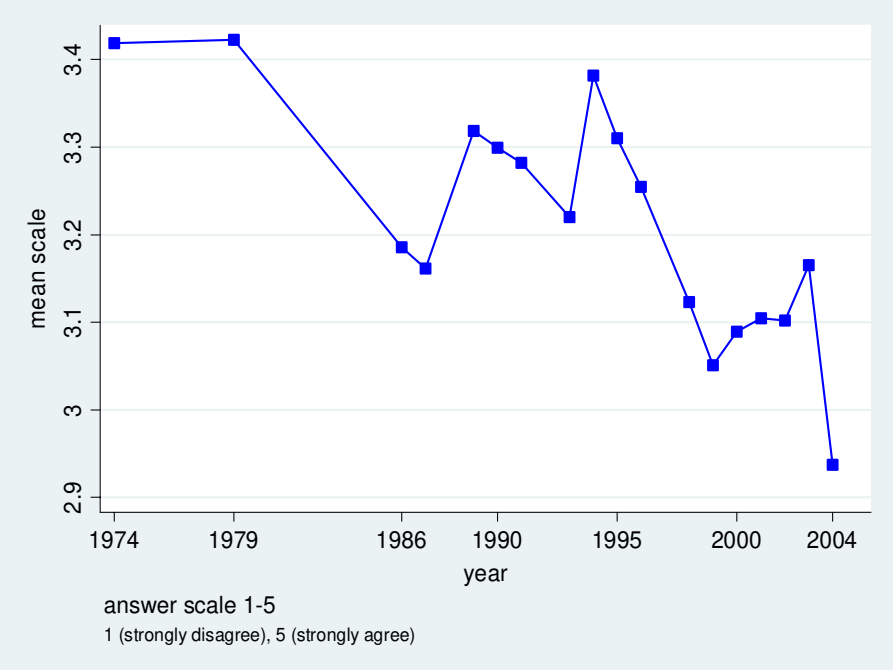
Source: ONS data in Jones (2006) and equivalent for earlier years.

Figure 2
The Shares of Final Income by Cumulative Quintile



Source: ONS data in Jones (2006) and equivalent for earlier years.

Figure 3
The Changing Demand for Redistribution



Notes: this is the mean value of REDISTRIBUTE ("government should redistribute income from the better-off to those that are less well-off").

Table A1: Regression results for early, middle and late sample periods

Independent Variables	1986-87	1994-96	2003-2004
Demographics			
Log relative household income	-0.119	-0.140	-0.168
	(0.078)	(0.047)**	(0.049)**
Intermediate non manual	-0.015	0.032	-0.062
	(0.119)	(0.076)	(0.079)
Junior non manual	-0.017	0.100	-0.111
	(0.118)	(0.075)	(0.093)
Skilled manual	-0.026	0.092	-0.049
	(0.114)	(0.077)	(0.089)
Semi-skilled manual	0.153	0.165	-0.100
	(0.126)	(0.083)*	(0.097)
Unskilled manual	0.115	0.137	-0.125
	(0.173)	(0.108)	(0.147)
Other occupation	-0.135	-0.003	-0.868
	(0.416)	(0.439)	(0.652)
Degree	0.215	0.114	-0.000
	(0.152)	(0.097)	(0.100)
Higher education below degree	-0.050	0.062	-0.097
	(0.117)	(0.082)	(0.096)
A levels or equivalent	-0.114	-0.036	-0.129
	(0.128)	(0.084)	(0.094)
O levels or equivalent	-0.178	-0.000	-0.017
	(0.099)	(0.072)	(0.081)
CSE or equivalent	-0.037	0.063	-0.007
	(0.122)	(0.095)	(0.092)
Foreign/other qualification	-0.435	-0.174	-0.087
	(0.382)	(0.224)	(0.231)
Employed	-0.023	0.182	0.148
	(0.174)	(0.105)	(0.153)
Other status	-0.035	0.118	0.101
	(0.180)	(0.106)	(0.154)
Male	0.050	0.052	0.123
	(0.082)	(0.052)	(0.056)*
Age	-0.021	0.000	-0.000
	(0.015)	(0.009)	(0.010)
Age^2	0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
Black	-0.066	0.598	0.087
	(0.506)	(0.169)**	(0.215)
Asian	0.085	-0.120	0.211
	(0.338)	(0.172)	(0.188)
Mixed/other race	-1.976	0.108	0.397
	(1.005)*	(0.237)	(0.280)
Living as married	-0.238	0.107	0.118
	(0.195)	(0.099)	(0.098)
Separated	0.068	0.121	0.095
	(0.141)	(0.071)	(0.074)
Widowed	0.044	0.025	-0.069
	(0.151)	(0.093)	(0.101)
Single	0.055	0.054	0.109
	(0.128)	(0.077)	(0.080)
No. of children	-0.026	0.000	0.007
	(0.041)	(0.028)	(0.032)
Scotland	0.147	0.096	0.034
	(0.131)	(0.093)	(0.095)
North East England	0.085	0.178	-0.119
	(0.152)	(0.104)	(0.121)
North West England	0.087	0.068	0.174
	(0.129)	(0.085)	(0.101)

York & Humber	0.072	0.141	-0.027
	(0.130)	(0.094)	(0.099)
West Midlands	0.056	-0.065	0.061
	(0.137)	(0.087)	(0.099)
East Midlands	0.063	0.022	0.049
	(0.137)	(0.094)	(0.100)
Eastern England	-0.217	-0.146	-0.106
	(0.169)	(0.120)	(0.130)
South West England	0.050	0.040	-0.024
	(0.132)	(0.084)	(0.102)
London	0.187	0.038	0.041
	(0.139)	(0.086)	(0.103)
Wales	-0.186	0.115	0.092
	(0.161)	(0.120)	(0.123)
Preferences			
Big business benefit owners at the expense of workers	0.388 (0.036)**	0.483 (0.027)**	0.326 (0.032)**
One law for rich and one for poor	0.255 (0.036)**	0.210 (0.025)**	0.231 (0.030)**
Racial prejudiced	-0.079 (0.057)	-0.106 (0.043)*	- 0.124 (0.049)*
Incentives			
Unemployed people could find a job if want to	- 0.060 (0.035)	-0.082 (0.025)**	- 0.064 (0.032)*
If benefits weren't so generous people would learn to stand on their own feet	-0.077 (0.034)*	-0.033 (0.026)	-0.134 (0.029)**
Fraud			
Many people falsely claim benefits	- 0.034 (0.032)	-0.053 (0.024)*	-0.080 (0.031)**
Observations	980	1523	1378
R-squared	0.37	0.39	0.29

Notes: The dependent variable is the REDISTRIBUTE variable. Standard errors in parentheses, * significant at 5% level; ** significant at 1% level.

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