Food Comes First, Then Morals: Redistribution Preferences, Altruism and Group Heterogeneity in Western Europe

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Group Heterogeneity in Western Europe

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Abstract

Altruism is an important omitted variable in much of the Political Economy literature. While material self-interest is the base of most approaches to redistribution (first affecting preferences and then politics and policy), there is a paucity of research on inequality aversion. I propose that other-regarding concerns influence redistribution preferences and that: (1) they matter most to those in less material need and (2) they are conditional on the identity of the poor. Altruism is a luxury good most relevant to the rich, and it is most influential when the recipients of benefits are similar to those financing them. Using data from the European Social Survey from 2002 to 2010, I will show that group homogeneity magnifies (or limits) the importance of altruism for the rich. In making these distinctions between the poor and the rich, the arguments in this paper challenge some influential approaches to the politics of inequality.
1 Introduction

This paper examines a set of assumptions underlying most arguments about the importance of economic circumstances to political outcomes. If inequality matters to individual political behavior, it seems reasonable to assume that it does so through its influence on redistribution preferences. While redistribution preferences are the essential building block of most of our political economy models, however, we simply do not know enough about their determinants. Analyzing the demand for redistribution is therefore an essential first step for an accurate understanding of the supply of redistribution (social policy, the welfare state, etc).

I want to make three related points in this paper. First, I argue for an integration of material self-interest and other-regarding concerns. In terms of the influence of relative income, I adopt a slightly modified version of the model proposed by Romer (1975) and Meltzer and Richard (1981). I argue that a significant determinant of redistribution preferences is the difference between an individual’s income and the mean in her country. The lower below the mean the income is, the more an individual gains from redistribution and the stronger I expect her support for it to be. The higher above the mean, the more an individual loses from redistribution and the stronger I expect her opposition to be. Second, I argue for the importance of something that, for now, I will term “altruism.” I will explain that I consider other-regarding preferences an important motivation for individuals. Moral benefits are derived from the support of redistribution but, I will further argue, these moral benefits are inextricably dependent on the identity of the poor. Altruism is most relevant when the recipients of benefits are similar to those financing them. Third, I argue that moral benefits are a luxury good. I propose that the material benefits of redistribution dominate the preferences of the poor. The rich, on the other hand, can afford to be altruistic. Combining the second and third points above, I will show that group homogeneity magnifies (or limits) the importance of altruism for the rich. In making this distinction about the influence of altruism and group homogeneity on the poor and the rich, the arguments in this paper challenge some influential approaches to the politics of inequality. I will elaborate on this in the pages that follow but I will make two general points here. The
first relates to the role of altruism in the political economy literature while the second addresses population heterogeneity in Europe.

The political economy literature has generally been limited to relatively simple material self-interested motivations: an individual's position in the income distribution determines her preferences for redistribution. Most political economy arguments (one could in fact say most comparative politics arguments) start from this initial assumption and address other factors in more complex causal chains (the role of parties, labor market institutions, the nature of government, federalism, international factors, etc). An increasing amount of convincing evidence indicates, however, that other-regarding concerns are an important motivation for individuals. As argued by Alesina and Giuliano, political economy models “can accommodate altruism, i.e., a situation in which one agent cares also about the utility of somebody else. But altruism is not an unpredictable ‘social noise’ to be randomly sprinkled over individuals” (2011: 94). Altruistic concerns need to be systematized into predictable political economy hypotheses. This paper represents an effort in that direction.

The future of the welfare state has come under increasing pressure from immigration. A comprehensive welfare state, the argument goes, was possible in Western European countries because of homogenous societies. More ethnically heterogeneous societies are expected to display lower levels of support for redistribution (see, for example, Alesina and Glaeser 2004; Freeman 2009). Migration has produced an “Americanization”1 of European welfare politics by making the poor less likely to support redistribution (even though they economically benefit from it) because of non-economic concerns (cultural, values, etc) related to population heterogeneity. The analysis presented in the following pages will challenge these arguments. The significant differences in support for redistribution in Western Europe have little to do with the poor (who consistently support redistribution regardless of population heterogeneity) and a lot to do with the altruism of the rich.

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1This term has been used by Freeman (2009: 61) who argued that migration “has reduced the political clout of those social strata that have traditionally been the chief source of support for welfare state development, and it has contributed to the erosion of the political consensus on which the welfare state rests. It has led to the Americanization of European welfare politics.”
2 Argument

This paper's analysis attempts to integrate three distinct approaches to the formation of preferences for redistribution. The first one relies on the idea that the level of redistribution preferred by a given individual is fundamentally a function of her material self-interest (two different facets of this argument should be distinguished, one dealing with redistribution and the other with insurance, risk and mobility). The second approach maintains that other-regarding concerns matter. Altruistic individuals derive utility not only from their own material gains but also from those of other people. The third approach emphasizes identity and in-group solidarity, arguing that ethnic, national or religious fractionalization reduces overall support for redistribution.

This paper will integrate insights from these three approaches into one argument and focus on the relationship between in-group identity and altruism. In the following pages, I will explore in more detail these general frameworks and elucidate this paper's claims. In essence, I argue for the importance of non-material factors but propose that (1) they matter most to those in less material need and (2) they are conditional on the identity of the poor. Relative income, I will argue, sets the material baseline from which the influence of altruism and identity emerges.

2.1 Material self-interest

Most political economy arguments start from the assumption that an individual's position in the income distribution determines her preferences for redistribution. The most popular version of this approach is the theoretical model proposed by Romer (1975) and developed by Meltzer and Richard (1981). To recapitulate very briefly, the RMR model assumes that the preferences of the median voter determine government policy and that the median voter seeks to maximize current income. If there are no deadweight costs to redistribution, all voters with incomes below the mean maximize their utility by imposing a 100% tax rate. Conversely, all voters with incomes above the mean prefer a tax rate of zero. The RMR model implies that more inequality should be associated with more redistribution. The consensus in the comparative literature on this topic, however, is either that there is no association between market income
inequality and redistribution or, contrary to the prediction of the RMR model, less market inequality is associated with more redistribution (e.g., Lindert 1996, Moene and Wallerstein 2001, Alesina and Glaeser 2004, and Iversen and Soskice 2009).

These findings must be considered with a degree of caution. This is because most of this literature relies on macro-comparative empirical analyses (with redistribution as the dependent variable) and does not pay much attention to individual preferences. When looking at individual data, in fact, there is some support for the argument that relative income influences preferences. Using comparative data, a relative income effect is found in, among others, Bean and Papadakis (1998), Finseraas (2009), and Shayo (2009). Using American data, Gilens (2005), McCarty et al. (2008), and Page and Jacobs (2009) (again, among others) find similar effects.

Moreover, the idea that material self-interest determines redistribution preferences should not be limited to a measure of present income. In the words of Alesina and Giuliano, “(e)conomists traditionally assume that individuals have preferences defined over their lifetime consumption (income) and maximize their utility under a set of constraints” (2011: 94). Because of the potential to define economic material self-interest inter-temporally (as lifetime consumption/income), this approach opens the door to arguments about social insurance and risk (Moene and Wallerstein 2001; Iversen and Soskice 2001; Mares 2003; Rehm 2009) and about social mobility and life-cycle profiles (Benabou and Ok 2001; Haider and Solon 2006; Alesina and Giuliano 2011).

While agreeing that insurance, risk and mobility are linked to redistribution, in the following pages I evaluate whether there is a connection between present relative income and redistribution preferences. Like other authors emphasizing material self-interest as a determinant of redistribution preferences, I argue that income affects preferences for redistribution across the entire income distribution. I expect that an individual in, say, the 10th percentile of the income distribution benefits more from the RMR redistributive scheme (lump-sum payments financed by a linear income tax)

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2Even the macro-comparative is less unambiguous that the consensus in the literature suggests. Milanovic (2000) and Kenworthy and Pontusson (2005) show that rising inequality tends to be consistently associated with more redistribution within countries.
than an individual in the 30th percentile. As a result, I expect the former individual to have stronger preferences for redistribution than the latter.  

2.2 Altruism

The possibility that other-regarding concerns influence redistribution preferences has received increasing amounts of attention in the recent political economy literature. There is neural evidence that individuals have a dislike for unequal distributions, independent from social image or potential reciprocity motivations. Tricomi et al. (2010) use functional magnetic resonance imaging to test directly for the presence of inequality-averse social preferences in the human brain. In laboratory experiments, individuals have been shown to have concerns for the welfare of others (see, for example, Charness and Rabin 2002 and Fehr and Gächter 2000). A number of alternative models have been presented to analyze different kinds of other-regarding concerns (for reviews, see Fehr and Schmidt 2006 and DellaVigna 2009). As I will document below, support for redistribution is widespread in Western Europe and extends into income groups whose support for redistribution could not possibly be motivated by short-term income maximization. Altruism constitutes one plausible reason why affluent individuals might support redistribution even though its effect is to reduce their disposable income and their share of total income.

The dimension of altruism that is most relevant to this paper’s argument pertains to the willingness of individuals to make sacrifices in order to realize welfare gains for those in society who are worse off. The kind of altruism I am interested in, therefore, is not characterized by unconditional kindness (which would imply that an individual’s utility increases as the material gains received by any other individual increase). It is a conditional form of altruism that has been defined as positive inequity aversion.  

Fehr and Schmidt argue that an “individual is inequity averse if, in addition to his material self-interest, his utility increases if the allocation of material payoffs...\[4\]

2.3 Identity and in-group altruism

I also build on a significant recent literature exploring the role of identity on the formation of preferences for redistribution. There are material self-interest reasons why identity could matter to redistribution preferences. Group homogeneity could promote information sharing, the identification of free riders, and communication. In this paper, however, I emphasize the connection between altruism and group homogeneity. Much of the literature on altruism emphasizes that other-regarding considerations are bounded by racial, ethnic or religious cleavages or, in other words, take the form of “in-group solidarity” or “parochial altruism.” Habyarimana et al. aptly summarize this line of argument by recognizing that “individuals may attach positive utility to the welfare of fellow ethnic group members but no utility (or negative utility) to the welfare of non-group members” (2007: 710).

There is a clear relationship between this identity approach and the altruism arguments analyzed in the previous section. While positive inequity aversion implies that an individual’s utility will increases as the poor benefit from more redistribution, identity arguments emphasize that this may be dependent on who the poor are. Perceiving the poor as different, these arguments suggest, detracts from altruism. There can be little doubt that racism has served as an obstacle to redistributive politics in the American case (Luttmer 2001 and Gilens 2009). Alesina and Glaeser (2004) argue persuasively that the US is not an exceptional case in this respect.

While the arguments about self-interest presented in the previous section imply that support for redistribution will decrease with income, conceptions of altruism and identity imply there are “moral” benefits attached to the promotion of equality within in-group members. The implications of these arguments are reflected in Figure 1.

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5For an analysis of the mechanisms underlying these effects, see Habyarimana et al. (2007).
6For an analysis of parochial altruism, see Bernhard et al. (2006).
7The crucial variable of interest in this literature is not fractionalization per se, but rather the concentration of minorities among the poor. In Alesina and Glaeser’s words, the focus is on whether “there are significant numbers of minorities among the poor,” in which case “the majority population can be roused against transferring money to people who are different from themselves” (2004: 134).
The solid lines represent the relationship expected in models proposing that altruism promotes redistribution (for example, Alesina and Glaeser 2004). In the figure, all individuals (poor and rich alike), obtain moral benefits from supporting redistribution when group homogeneity is high, which means that altruism pushes preferences for redistribution upwards.

Alternatively, some of the existing literature posits that ethnic, religious or national cleavages matter more to the preferences of the poor than to the preferences of the affluent or, in other words, that “identity politics” diverts the poor from the pursuit of material self-interest. This effect is shown in Figure 1 with a dotted line for the scenario with less group homogeneity. Perhaps the most well-known example of these arguments is its application to the US and the contention that second-dimension issues (particularly cultural and social ones) outweigh economic ones for the American working class. More comparatively, the important contribution to the political economy of identity formation in Shayo (2009) follows a similar logic. In these arguments, altruism does not matter. But, to the extent that these second-dimension concerns are correlated with population heterogeneity, they would...
lead us to expect that the poor in heterogenous countries have weaker redistribution preferences (not because of lack of altruism, but because they are distracted from their material self-interest). Redistribution preferences would then converge as income grows (as suggested by the dotted line in Figure 1).

2.4 Altruism as luxury good

The sections above suggest that both material self-interest and altruism should matter to redistribution preferences. To integrate the arguments about these two distinct dimensions, however, I will argue that a hierarchy of preferences exists. I propose that poor people value redistribution for its material consequences. The redistributive preferences of the rich, on the other hand, are less significantly affected by their immediate material self-interest. For the rich, altruism can become more relevant.

I conceive of the moral benefits of altruism as a luxury good that will be more likely to be consumed when the need for other basic goods has been satisfied. The idea that altruistic concerns will be trumped by material ones for the poor is compatible with previous political economy work on material and non-material incentives. Levitt and List construct a model in which individuals maximize their material gains but, when wealth-maximizing action has a moral cost, they deviate from that action to one with a lower moral cost (2007: 157). More importantly, they also argue that, as the stakes of the game rise, wealth concerns will increase in importance relative to moral concerns. I argue in this paper that higher stakes (i.e., the poor’s need for the benefits of redistribution) increase the importance of relative income as a determinant of redistribution preferences. Lower stakes for the rich (there are material costs to increasing redistribution, but for the rich they do not involve dramatic consequences comparable to those for the poor) mean that altruistic concerns will be more important.

The implications of this paper’s argument are summarized in Figure 2. I expect population heterogeneity to be associated with less support for redistribution. Since I argue that for the poor altruism is trumped by material incentives, redistribution preferences converge regardless of group homogeneity as income declines. I expect group homogeneity to promote altruism only for the rich.

To explore the theoretical alternatives summarized above, I will consider the
effects of income distance at the individual level and of the macro level of population heterogeneity. Income distance is meant to capture the effects of material self-interested preferences and the macro measure of heterogeneity the influence of in-group altruism. The first expectation is that income distance will be a significant determinant of redistribution preferences. I also expect, however, that decreasing levels of heterogeneity will make the rich (and only the rich) more supportive of redistribution.

Exploring the importance of altruism and group heterogeneity by looking at the interaction of income distance (and the individual level) and heterogeneity (at the country-year level) is a good first test of this paper’s hypotheses. It is, however, vulnerable to an important criticism: a macro measure of group heterogeneity does not capture altruism directly. To address this weakness, I complement the analysis with an exploration of the effects of an individual-level measure of altruism. I come back to this issue in the pages below.
### 3 Data

The analysis in this paper draws on individual-level data from the European Social Survey (ESS) in 2002, 2004, 2006, 2008 and 2010. Relative to similar survey data from the International Social Survey Programme (ISSP), there are two noteworthy drawbacks to using the ESS: the ISSP covers a longer time period than the ESS and includes the US and other non-European advanced democracies of interest. On the other hand, the advantage of the ESS is that the surveys use consistent measures of income. By contrast, income measures reported by the ISSP vary not only between countries within each wave, but also for many countries between waves. As a reliable measure of income is essential for this paper’s purposes, this feature outweighs the aforementioned disadvantages of the ESS relative to the ISSP.

I restrict the analysis to the following West European countries (although data are not available for all years in some of them): Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom.

#### 3.1 Dependent variable

Like other work using ESS data (see, for example, Rehm 2009), I use a question asking respondents if they strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with the following statement: “the government should take measures to reduce differences in income levels.” Discarding don’t-knows and non-responses (as I also do in the empirical analysis), Table 1 shows the overall distribution of responses in all the countries and years included in the analysis.

The high level of overall support for redistribution among West Europeans is surely

### Table 1: Redistribution preferences

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
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<td></td>
<td>26.14</td>
<td>43.89</td>
<td>14.87</td>
<td>12.34</td>
<td>2.49</td>
</tr>
</tbody>
</table>

Notes: Average percentages per category. ESS, Rounds 1-5.
the most striking feature of Table 1. While 70% of the respondents either agree or strongly agree with the statement that the government should take measure to reduce income differences, only about 15% explicitly express opposition to redistribution. Given the apparent consensus in support of redistribution, however, it seems quite appropriate to interpret neutrality (“neither agree not disagree”) as another, less overt, expression of opposition.

While Table 1 is informative, it does not illustrate the two things this paper’s argument is about: the existence of national variation in support for redistribution and the differences between rich and poor. Figure 3 shows the general level of support (i.e., the percentage of agrees and strong agrees) for redistribution in each of the countries in the sample, and the level of support for redistribution among the poor (those individuals with household incomes at most 20,000 PPP-adjusted 2005 US dollars below the country-year mean) and among the rich (those with household incomes at least 40,000 PPP-adjusted 2005 US dollars above the mean).  

10 More on this measure of income below.
Figure 3 reflects a remarkable amount of cross-national variation. Support for redistribution is generally high in countries like Spain, France, Greece, Ireland, Italy and Portugal. It is generally low in countries like Denmark, Great Britain and the Netherlands. The support of redistribution among the rich and the poor mirrors these general trends, but the differences between poor and rich are quite interesting. For example, in Sweden and Norway, where the general support for redistribution is relatively high, the difference between rich and poor is large (around 23 percentage points). In Austria, where the general support for redistribution is again relatively high, the difference between rich and poor is low, only around 7 percentage points (in Portugal the difference is even smaller). There are countries with large differences between the rich and poor that have high general levels of support (like Finland) and that have low levels of support (like the Netherlands). The analysis below will help explain these patterns.

3.2 The measure of relative income

To capture material self-interest, the key variable in the analysis is the distance between the income of respondents and the mean income in their country (at the time of the survey). I construct this measure based on respondents’ answers to the following survey question: “Using this card, if you add up the income from all sources, which letter describes your household’s total net income? If you don’t know the exact figure, please give an estimate. Use the part of the card that you know best: weekly, monthly or annual income.”11 Two different cards are shown to respondents, depending on the year of the survey. In the surveys from 2002 to 2006, the card places the respondent’s total household income into 12 categories with different ranges. The surveys for 2008 and 2010, on the other hand, offer only 10 categories which capture the deciles in the country income distribution.

This scheme poses several challenges for this paper’s purposes. To begin with, the 2002-2006 income bands identified above cover very different income ranges. While category R, for example, contains a range comprising €2,400 (€1,800 to €3,600),

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11 The wording of this question in 2008 and 2010 is a bit different, but the meaning remains the same. In these surveys, “after tax and compulsory deductions” replaces “net.”
the range for category U is €30,000 (€90,000 to €120,000). The same can be said about the income deciles used in 2008 and 2010. There is an additional problem. The argument about the effects of relative income implies the appropriate measure for income is the difference between an individual’s income and the country mean income but, if I was to use these categories (whether income bands or deciles), this measure would be difficult to interpret.

To address these issues, I transform the income bands into their midpoints. For the 2002-2006 surveys, for example, this means that category J (Less than €1,800) becomes mid-point €900 and category R (€1,800 to under €3,600) becomes €2,700. For the 2008 and 2010 surveys I do the same (even though this is slightly more complicated since the categories are now country- and survey-specific deciles). Using midpoints has been recognized for some time as an appropriate way to create scores for income categories. They have been used extensively, for example, in the American politics literature analyzing General Social Survey (GSS) data.\(^{12}\) For each respondent, therefore, I calculate the distance between her household income (i.e., the mid-point of her income category) and the mean income of her country-year survey.\(^{13}\)

This still leaves us with one remaining problem, namely that the purchasing power of a certain amount of income varies across the countries included in our analysis. Simply put, it could be argued that the meaning of being €10,000 below the mean is different in Switzerland than in Greece. I address this by converting Euros or national currencies into PPP-adjusted 2005 US dollars.\(^{14}\)

\(^{12}\)There is an additional complication: defining a midpoint for the open-ended top category (since this category has no upper limit). In this paper I extrapolate from the next-to-last category’s midpoint using the frequencies of both the next-to-last and last (open-ended) categories, using the formula suggested in Hout (2004).

\(^{13}\)This represents a simple centering, which leaves the distribution of incomes unchanged. However, it takes into account that mean incomes differ over countries. Note that using untransformed income yields the same pattern of substantive results.

\(^{14}\)I also use an alternative measure of relative income, the distance between an individual’s income and the mean in her country-year as a percentage of the mean in her country-year. This is measured in local currency (and not PPP-adjusted dollars). The income distribution for the countries in the sample is, for obvious reasons, quite different when using this alternative measure. But the substantive results are the same as those reported below. These results are available from the author.
3.3 Macro variables

The analysis in the following pages includes the percentage of foreign-born population as the variable capturing population heterogeneity. A large literature in political economy has focused on immigration (and ethnic diversity) as a determinant of redistribution preferences. Much of this work is based on the observation that more ethnically heterogeneous societies display lower levels of support for redistributive welfare programs (see Alesina and Glaeser 2004, Finseraas 2008, or Freeman 2009).

I use the stocks of foreign-born population from the OECD migration database.15 While it is reasonable to expect foreign-born individuals to be concentrated among the poor in most European countries,16 an ideal measure would capture this concentration directly. It is in fact possible to use the ESS surveys to assess the percentage of self-defined foreign-born individuals below the income mean. This survey-based measure of foreign-born population among the poor is highly correlated with the OECD measure (the correlation coefficient is .80). Because the number of foreign-born individuals below the mean income in the ESS surveys is low for most countries (and the percentages vulnerable to change if a few more individuals were included in the surveys), I stick with the OECD variable.

Figure 4 illustrates a high degree of cross-national variation in the levels of foreign-born population. There are countries with very high levels of foreign-born population (around 15%) like Austria, Ireland Spain and Sweden in 2010. The lowest levels are found in Italy and Finland in 2002 (significantly less than 5%). The figure also shows that change over time is equally (if not more) significant. Foreign-born population increases dramatically in Spain and Ireland from 2002 to 2010, but it stays the same in the Netherlands and it decreases in Portugal.

It is important to mention that all results in this paper are confirmed by using an alternative macro measure of population heterogeneity capturing religious diversity

15OECD International Migration Outlook 2012 statistical annex Table A.4. Because of missing data, the observation for Belgium 2010 is from 2009, for Italy 2002 is from 2001, for Italy 2010 is from 2009, for Germany 2002 is from 2000, and for Greece 2002 is from 2001.

16The two countries where this might not be the case (Switzerland and Luxembourg) are not part of the sample. These countries would also be clear outliers regarding the levels of foreign-born population. While the average in the sample is 10%, in Switzerland it is 24% and in Luxembourg is 35%.
among the poor. While there is a significant literature on the importance of religion on redistribution preferences (see, for example, Scheve and Stasavage 2006, De La O and Rodden 2008 or Huber and Stanig 2011), we know much less about religion as one of the dimensions that can affect group heterogeneity. It is however clear that the same logic used to analyze the effects of ethnic diversity should apply to religious diversity. Religion is a significant dimension of identity in Europe and the concentration of religious minorities among the poor should mitigate the effect of parochial altruism just as the concentration of ethnic minorities does.\footnote{I construct religious diversity among the poor by first defining the modal religion for each country-year and then calculating the percentage of religious people within the poor (defined as those below the country-year income mean) who do not share this modal denomination. A critical reader may suspect that the two macro variables described above pick up the same kind of heterogeneity. So it is important to point out that levels of foreign-born population and religious diversity are not highly correlated (the coefficient in only 0.38). I do not report this analysis in the paper but all results are available from the author.}

This paper’s analysis of support for redistribution also controls for actual levels of redistribution in the country where— and at the time when—a particular survey was
conducted. Previous research indicates that average support for redistribution tends to fall when the existing levels of redistribution are high. The idea that there is some threshold at which the disincentives effects of redistribution become more severe (see for example Tanzi and Schuhknecht 2000) provides a possible explanation for this relationship. Arguably, people who live in countries with large redistributive welfare states are more concerned about, and more aware of, the disincentive effects of redistribution. It also seems likely that some respondents take actual levels of redistribution into account when expressing their preferences, i.e., that they are expressing agreement or disagreement with the proposition that the government should do more to reduce income differences. While these considerations make controlling for the effect of existing levels of social policy generosity essential, it is important to emphasize that the results I will describe below are robust to the exclusion of this variable.

3.4 Individual-level control variables

In what follows, I present the results of estimating two different models. The first one includes only relative income, the macro variables identified above and the micro-macro interactions. The second one is the main model and it includes the most commonly used individual-level control variables in analyses of redistribution preferences. This model includes age (measured in years), gender (a dummy for female), education (a dummy for more than a secondary education), union membership, and church attendance (a dummy equal to 1 if respondent attends religious services at least once a week).

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18 In this regard, I follow Luttmer (2001) who has a similar empirical strategy. I use one of the measures of social benefits provided by Eurostat (total expenditure in social protection, in €1,000, per inhabitant).

19 Previous analyses of individual preferences using more or less the same battery of controls include Corneo and Grüner (2002), Blekesaune and Quadagno (2003), Cusack et al. (2006), Iversen and Soskice (2001), and Rehm (2009).
4 Results

As mentioned above, the dependent variable used in this paper’s analysis takes the value of 1 if the respondent indicates that she either “agrees” or “strongly agrees” that “the government should take measures to reduce differences in income levels” (and zero otherwise). I estimate a logistic model and report odds ratios. The odds ratio should be interpreted as the probability of supporting redistribution. I also report significance tests for the odds ratios.

The data used in the analysis has a multi-level structure (one level, the individual, is nested within the other, the country-year). To address potential complications (clustering, non-constant variance, underestimation of standard errors, etc), I estimate logit random intercept multilevel maximum likelihood models. In these models, an individual-specific random intercept is included in the general equation as a function of the macro variables (foreign-born population as the measure of heterogeneity and the level of social benefits).\textsuperscript{20}

4.1 Relative income and heterogeneity

Table 2 reports the results of the multilevel logistical analyses. The most important finding in the analyses concerns income distance (and its interaction with foreign-born population). I will analyze what these results mean in more detail below but, at this stage, suffice it to say that the distance between an individual’s household income and the country-year mean (measured in thousands of 2005 PPP-corrected dollars) and its interaction with the macro measure of population heterogeneity are highly significant.

Although not the focus of this paper’s analysis, the results in Table 2 also show some of the individual control variables to be significant determinants of redistribution preferences. Age, being a woman and union membership are positively associated with support for redistribution while having more than a secondary education and attending religious services is associated with a decrease in the likelihood to support redistribution. The existing levels of redistribution (measured as social spending per

\textsuperscript{20}For more details about maximum likelihood estimation of random intercept multilevel models, see Rabe-Hesketh et al. (2005).
Table 2: The determinants of redistribution preferences

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<td>Attends Religious Services</td>
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</tr>
</tbody>
</table>

Notes: Logit results. Numbers are odds ratios. * if statistically significant at 95% level of confidence, ** at 99% level (two-tailed tests). See text for details.

inhabitant, the only control variable measured at the macro level) have a negative effect over redistribution preferences, confirming the idea that there is a threshold at which the disincentives effects of redistribution become more severe.\(^{21}\)

To illustrate the effects of relative income, I calculate the average predicted probability that an individual with a particular income has preferences in favour of redistribution. “Simple” predicted probabilities are calculated by setting the variables of interest to some chosen values (e.g., rich or poor) while holding all other variables at one observed value (e.g., the mean values). The average predicted probabilities reported below, however, are calculated by setting the variables of interest to some chosen values (i.e., different levels of income) while holding all other variables at all their observed values. The reported estimates are the average of these predictions.\(^{22}\)

Figure 5 presents the average predicted probabilities (and 95% confidence in-

\(^{21}\)Social spending and the measure of heterogeneity included in the analysis (foreign-born population) are picking up very different things. It is simply not the case that those countries with low social spending have high levels of foreign-born population and that those countries with high social spending have low levels of foreign-born population. The correlation between these macro variables is very low (the coefficient is only 0.03).

\(^{22}\)I will use the estimates from the second model in Table 2 (column 2).
The estimates control for the level of heterogeneity (foreign-born population) and they make clear that support for redistribution is at its highest when an individual is poor. The likelihood to agree or strongly agree that governments should reduce income differences for those at the lowest level of income is close to 80%. As income goes up, support for redistribution is dramatically reduced. For those individuals with incomes at the mean, the likelihood to support redistribution is around 71%, for those $44,000 above the mean it is slightly above 60%, and for those $95,000 above the mean it is around 50%. Material self-interest receives a remarkable amount of support from the results in Figure 5. The first message in this paper, therefore, is that the MRM logic explains a great deal when

Figure 5: Income Distance Effects

23The x-axis marks the 10th percentile in the sample's relative income distribution ($23,000 below the mean), the 25th percentile ($15,000 below the mean), the median ($5,000 below the mean), the mean (0), the 75th percentile ($9,000 above the mean), the 90th percentile ($24,000 above the mean), the 95th percentile ($44,000 above the mean), and the 99th percentile ($95,000 above the mean).
we want to understand the determinants of individual redistribution preferences.

I went on to argue that the effects of income distance interact with the effects of altruism, and that the effects of altruism are affected by in-group identity. To address these claims I turn to the effects of population heterogeneity. Figure 6 presents average predicted probabilities conditional on income levels when the levels of foreign-born population are high or low. In this case, I vary both the individual income distance and the macro-level of heterogeneity (while holding the rest of the variables at all their observed values). I select 4.5% and 14.5% to represent low and high levels of foreign-born population. Figure 4 showed that 4.5% of foreign-born population was close to the level of Finland in 2010 and 14.5% was similar to Ireland in 2006. Neither of these chosen levels are close to the extreme values in the sample.

The results in Figure 6 show that increasing levels of population heterogeneity decreases the support for redistribution. Both the poor and the affluent have a higher likelihood of agreeing or strongly agreeing that the government should reduce income differentials when they are in a low heterogeneity country (in blue in Figure 6).
The more interesting finding in Figure 6, however, is that the difference between preferences with high and low heterogeneity levels gets much larger as income grows. The affluent and rich are much less likely to support redistribution when there is a high level of heterogeneity (in red).

To better illustrate the effects in Figure 6 and to test systematically the significance of the probability differences, I calculate the average marginal effects of population heterogeneity (measured as foreign-born population) on the likelihood of supporting redistribution for the “poor” and “rich.” I define the poor as those in the 10th percentile of the sample’s income distribution (23,000 PPP-corrected 2005 dollars below the country-year mean) and the rich as those in the 95th percentile (44,000 PPP-corrected 2005 dollars above the country-year mean).

The calculations in Table 3 make clear that the poor have very high support for redistribution no matter whether they are in countries with high or low heterogeneity. The average predicted probabilities for the poor decrease only by 0.002 (from around 0.80) with each 1% increase in foreign-born population. This difference is in fact not statistically significant. This relationship is quite different for the rich. The average probability of the rich supporting redistribution decreases by a much larger (and statistically significant) 0.012 (from around 0.60) when we move from a country-year with low levels of foreign-born population to a country-year with high levels.

### Table 3: Support for Redistribution

<table>
<thead>
<tr>
<th>Foreign-Born Population</th>
<th>Poor</th>
<th>Rich</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.002</td>
<td>-0.012**</td>
</tr>
</tbody>
</table>

Notes: Numbers are change in average predicted probabilities of agreeing or strongly agreeing that government should reduce differences in income levels associated to a one-unit increase in population heterogeneity. The poor are 23,000 PPP-corrected 2005 dollars below the country-year mean income (10th percentile of the total sample). The rich are 44,000 PPP-corrected 2005 dollars above the country-year mean income (95th percentile). * if statistically significant at 95% level of confidence, ** at 99% level (two-tailed tests).
4.2 Robustness tests

While the previous section provides convincing evidence in support of this paper’s hypotheses, there are alternative arguments in the existing literature with implications about the relationship between income and redistribution preferences that need to be taken into consideration. Several robustness tests are reported in Table 4, they use the model including control variables from Table 2 and focus on our variables of interest, the marginal effects of population heterogeneity for the rich and the poor.

Class: It is common in political sociology to think about redistribution demands as related to social class, rather than income (see, for example, Svallfors 2006). Test (1) in Table 4 is designed to assess whether the results regarding relative income and population heterogeneity are robust to controlling for the effects of class. To this end, I rely on the six-category version of the Erikson-Goldthorpe social class scheme (Erikson and Goldthorpe 1992). In addition, this model includes dummy variables for being a student and being retired, which Jæger (2006) refers to as “transfer classes.” The model including class does not modify the main substantive effects described above.

Insurance: An influential literature in comparative political economy has argued that redistribution preferences are affected by the demand for insurance against an uncertain future (Moene and Wallerstein 2001; Iversen and Soskice 2001; Rehm 2009). To address this, I introduced an explicit measure of risk into the analysis. An important component of the demand for insurance and redistribution has to do with the risk of becoming unemployed. In test (2) in Table 4, I operationalize risk as specific skills. Iversen and Soskice (2001) argue that individuals who have made risky investments in specific skills will demand insurance against the possible future loss of income from those investments. Following Rehm (2009), the variable in Table 4 measures skill-specific risk as occupational unemployment rates. Controlling for insurance motivations again makes no difference to the substantive effects discussed in the paper.

Within-country temporal variation: Test (3) is designed to check the robustness of the results when we focus on within-country temporal variation. Figure 4 makes
Table 4: Support for Redistribution: Robustness Tests

<table>
<thead>
<tr>
<th>Average Marginal Effects of Population Heterogeneity</th>
<th>Change in Predicted Probabilities for Poor and Rich</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>(1) Class</td>
<td>-0.003</td>
</tr>
<tr>
<td>(2) Skill-specificity</td>
<td>0.002</td>
</tr>
<tr>
<td>(3) Country-centered heterogeneity</td>
<td>0.002</td>
</tr>
<tr>
<td>(4) Pre-crisis years</td>
<td>-0.005</td>
</tr>
</tbody>
</table>

Notes: Numbers are change in average predicted probabilities of agreeing or strongly agreeing that government should reduce differences in income levels associated to a one-unit increase in population heterogeneity. The poor are 23,000 PPP-corrected 2005 dollars below the country-year mean income (10th percentile of the total sample). The rich are 44,000 PPP-corrected 2005 dollars above the country-year mean income (95th percentile). * if statistically significant at 95% level of confidence, ** at 99% level (two-tailed tests).

It is clear that the amount of cross-sectional variation is as significant (if not more so) than within-country variation. To focus on this within-country variation, I transform the macro variable capturing population heterogeneity into the difference between its present value and the country mean. Having centered population heterogeneity on the country mean, I then re-run the analysis with random effects and a year time trend. This different estimation weakens the average marginal effects of population heterogeneity but not in a way that affects this paper's substantive conclusions.

**Pre-crisis years:** It could be argued that survey interviews conducted in 2010 are affected by the global economic downturn (and that the crisis makes redistributive preferences idiosyncratic). To check for this possibility I drop this entire wave from the analysis and use only interviews conducted until 2008. Results in Table 4 show that this does not affect the results.

5 Relative income, heterogeneity and altruism

While exploring the importance of altruism by looking at the interaction of income distance and population heterogeneity is a good test of this paper's hypotheses, the results are vulnerable to the criticisms that the macro measure does not capture altruism.
directly. To address this criticism, I complement the analysis with an individual-level measure of altruism.

There are two ways of thinking about altruism or other-regarding preferences in the political economy literature. The first one understands other-regarding concerns to be affected by a “situational” logic. In the previous sections, I referred to one of the most common expressions of this approach: inequity aversion. In these arguments, other-regarding preferences are inevitably linked to macro levels of inequality. When altruism is significant, as the allocation of material payoffs become more equitable, the utility of individuals increases (see, for example, Fehr and Gächter 2000).

The second approach to other-regarding concerns takes its inspiration from work in psychology. There is a significant literature on altruism as a personality trait. This research has often taken the form of a self-reported measure (the Self-Report Altruism, SRA, Scale) aggregating different items capturing an individual’s engagement in altruistic behaviours (pushing a stranger’s car out of the snow, giving money to a charity, etc).

In this section, I focus on the role of altruism as personality trait in determining redistribution preferences. I do this for two main reasons. First, because, as argued by Almlund et al. (2011), for many economic outcomes, personality measures are as predictive as cognitive ones. Second, also as argues by Almlund et al., because an extreme “situational logic” (arguing that constraints and incentives exclusively determine behavior) is no longer generally accepted in psychology (2011: 9). Most psychologists now accept the notion of a stable personality as defined in this section.

Measuring altruism is a complicated affair, and the effort in this paper should be considered a preliminary one. The European Social Survey employs a version of the Portrait Values Questionnaire (Schwartz 2003). It measures values indirectly by asking respondents to listen to a description of different kinds of persons and to declare whether these persons are (or are not) like them. The descriptions address the values specified in the Schwartz (1992) model of basic individual values. Each

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24 See, for example, the research on altruistic personality by Rushton et al. (1981).
25 Personality traits have also been found to significantly affect political behavior. See, for example, Blais and St-Vincent (2011) and Gerber et al. (2011).
26 Schwartz (1992) develops a model of 10 individual values that form two dimensions. The dimension
portrait describes a person’s goals and aspirations addressing implicitly or explicitly the importance of a value. For altruism, the portrait used in the analysis below is as follows:

“She/he thinks it is important that every person in the world should be treated equally. She/he believes everyone should have equal opportunities in life.”

Respondents can then decide whether this person is “Very much like me,” “Like me,” “Somewhat like me,” “A little like me,” “Not like me,” or “Not like me at all.” Those answering “Very much like me” are coded as altruistic.

It is natural to expect that altruistic individuals will, in general, have higher redistribution preferences, but this is not an issue of primary importance to this paper’s analysis. I am interested in the question of whether altruism contributes to the differential effects observed in the results in the previous section. More concretely, I want to explore two hypotheses. First, if this paper’s arguments are correct, altruism will promote higher redistribution preferences for the rich than for the poor. Second, altruism will promote higher redistribution preferences (particularly among the rich) when population heterogeneity at the macro level is low.

To examine the effects of altruism, I reproduce the main analysis in this paper (column 2 in Table 2) including the new altruism measure (and its interaction with the macro measure of population heterogeneity). This analysis provides us with estimates for the effects of relative income conditional on heterogeneity, and the effects of altruism also conditional on heterogeneity. The results for all estimates are available from the author but, in the interest of brevity, I will only report the difference in predicted probabilities between altruistic and non-altruistic individuals (when they are poor or rich) conditional on high or low levels of heterogeneity among the poor.

The values selected to represent low and high levels of heterogeneity are the same as those in Figure 6. Table 5 presents the increases in predicted probabilities of supporting redistribution for the poor (those in the 10th percentile) and the rich that matters to the topic of this paper, captures the two extremes of “self-enhancement” (personal success, self-interest, control of resources and people) and “self-transcendence” (valuing the welfare of close and distant others and the environment, tolerating differences, and transcending selfishness).
Table 5: Support for Redistribution, Altruism Effect

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Rich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Foreign-Born Population</td>
<td>0.105**</td>
<td>0.132**</td>
</tr>
<tr>
<td>High Foreign-Born Population</td>
<td>0.064**</td>
<td>0.083**</td>
</tr>
</tbody>
</table>

Notes: Numbers are change in average predicted probabilities of agreeing or strongly agreeing that government should reduce differences in income levels associated to a one-unit increase in population heterogeneity. The poor are 23,000 PPP-corrected 2005 dollars below the country-year mean income (10th percentile of the total sample). The rich are 44,000 PPP-corrected 2005 dollars above the country-year mean income (95th percentile). * if statistically significant at 95% level of confidence, ** at 99% level (two-tailed tests).

Those in the 95th percentile due to being altruistic. The table provides support for both hypotheses about the effects of altruism. The predicted probability of supporting redistribution goes up by more than 13% due to altruism if an individual is rich in a country-year with low foreign-born population. But it only goes up by 6.4% if an individual is poor in a country-year with high foreign-born population. These are substantive increases in the likelihood as we know from the previous discussion that the probability of supporting redistribution for the rich in a country-year with low foreign-born population is 72% when we don’t make a distinction between altruistic and non-altruistic individuals.

More importantly, Table 5 makes clear that altruism promotes higher increases in the redistribution preferences of the rich than of the poor and that this is particularly so when homogeneity is high. In the table, the increases in predicted probabilities for the rich due to altruism are always greater than those for the poor (and these differences are statistically significant). It is also the case that altruism promotes higher redistribution preferences when heterogeneity is low (particularly among the rich). The increases in predicted probabilities for the rich due to altruism are always greater when heterogeneity is low (again, these differences are statistically significant).

I mentioned above that there are material self-interest reasons why group ho-

Estimates for the statistical significance of the differences between marginal effects are available from the author.
mogeneity could matter to redistribution preferences. I am not concerned about the most commonly emphasized mechanisms linking group identity to redistribution preferences (the possibility that material benefits are extracted from group homogeneity or that externalities result from group heterogeneity). They would imply a homogeneous income effect (both the rich and the poor would experience the benefits or pay the costs) and therefore not be a convincing alternative explanation for the differential effects for poor and rich we observe above. There is, however, a possible alternative explanation of the results in this paper having to do with insurance against risk. The basic intuition in this approach is that identity groups are linked with particular profiles regarding risk, mobility, etc (as in Piketty 1995 or Benabou and Ok 2001). Consequently, where the poor are different from the rich, the rich may feel less vulnerable to risk. The effect we find in Figure 6 would reflect the affluent perceiving less risk (and demanding less insurance) when heterogeneity is high, not their higher levels of altruism. To some extent, this alternative is already addressed in the direct test of the effects of altruism in Table 5. However, it is also possible to introduce the measure of risk explained in detail in the robustness test of the previous section as an alternative to altruism. I do this in a separate analysis and the results (available from the author) provide little support for the hypothesis relating identity and insurance to the main findings in this paper.

6 Conclusion

Most analysts would agree that an individual’s relative income (i.e., whether she is rich or poor) affects her political behavior. Income differentials and the increase in inequality experienced in recent years seem to be an important part of the electoral politics of industrialized democracies in very diverse circumstances. In political science, there is an influential literature on how pocketbook issues (Downs 1957; Key 1966; Fiorina 1981) and class (Lipset 1983; Evans 1999; Brooks and Manza 1997), both strongly related to relative income, influence voting choice.

We don’t know enough, however, about how material self-interest and other-regarding concerns affect individual redistributive preferences. And we don’t know
enough, in particular, about these effects in contexts of high and low population heterogeneity. In the discussion of altruism and identity that is the main thrust of this paper, I suggested that lower stakes mean that altruistic concerns are more important for the rich. I also argued that altruism would be conditional on the identity of the poor. This paper’s results show that “moral” gains from supporting redistribution are most obvious to the rich in countries characterized by low levels of heterogeneity, measured as foreign-born population.

These findings regarding group heterogeneity are important in two respects. First, in some ways they confirm the conventional wisdom about the effects of heterogeneity. More heterogeneous countries do exhibit less aggregate support for redistribution. Second, and more important, they question the logic behind this conventional wisdom. As I mentioned above, many of these arguments rely on the assumption that heterogeneity diverts low-income individuals from pursuing their material self-interest. The poor know that they gain from redistribution, but they may not support it if they do not share an identity with other poor individuals (this is the argument underlying much of the “welfare chauvinism” literature about Europe and also underlying Shayo 2009 and other influential recent analyses). I have argued for an alternative explanation that integrates identity considerations into a general altruism logic. In doing so, I have also offered evidence showing that these differences have little to do with the poor. It is the altruism of the rich that is affected by heterogeneity. As issues related to population heterogeneity (immigration, ethnicity, race) come to dominate electoral politics in industrialized democracies, this paper’s argument and findings should transform the way we think about the demand for redistribution in industrialized democracies.
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