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ABSTRACT

The poor favor redistribution and the rich oppose it, but that is not all. Social mobility may make some of today's poor into tomorrow's rich and since redistributive policies do not change often, individual preferences for redistribution should depend on the extent and the nature of social mobility. We estimate the determinants of preferences for redistribution using individual level data from the US, and we find that individual support for redistribution is negatively affected by social mobility. Furthermore, the impact of mobility on attitudes towards redistribution is affected by individual perceptions of fairness in the mobility process. People who believe that the American society offers equal opportunities to all are more averse to redistribution in the face of increased mobility. On the other hand, those who see the social rat race as a biased process do not see social mobility as an alternative to redistributive policies.

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1 Introduction

Amongst the three traditional roles of the government, provision of public goods, stabilization and redistribution, the latter is increasingly important in today's industrial countries. In 1960 the average share of government transfers was about 8 per cent of GDP in OECD countries, versus about 15 percent of provision of public goods and services. Today these two figures are about 16 per cent and 17 per cent. Thus, while the share of social spending and transfers has doubled, that of government consumption has stayed roughly constant: the growth of government of the last few decades is largely due to the growth of the redistributive side of government policies.[1] In order to explain the size of government in industrial democracies one must therefore understand what are the determinants of the demand for redistributive policies.

Since redistribution is intended to go from the wealthy to the poor, one would expect the latter to favor it and the former to oppose it.[2] However, the political economy of redistribution is more complex. To the extent that today's poor may be the wealthy of tomorrow, *social mobility* should affect individual preferences for redistributive policies. Thus, in more socially mobile communities, the support for redistribution should be lower. We find considerable support for this effect in our analysis of United States data: the higher the chance that an individual has to become relatively "rich", the lower her support for redistributive policies. In order to evaluate individual chances of upward mobility, we study both the individual's actual history of social mobility and the degree of social mobility in the state where the individual lives or in the United States as a whole. It would be interesting to explore cross country comparisons of social mobility and redistributive policies, but data limitations are prohibitive at this point.[3]

An important debate in public policy concerns the question of whether equal opportunities for all make redistributive policies unnecessary. We find that, to some extent, people see substitutability between equal opportunities and redistribution: in particular, those who believe that the United States is a land of (equal)

[1] All the data are from OECD. These figures may actually underestimate the amount of redistribution since some of the government wage bill, which is classified as consumption of goods and services, has a redistributive component (see Alesina, Baqir and Easterly (2000) on US data, and Alesina, Denninger and Rostagno (2001) on Italian data).

[2] Sometimes the lower middle class may benefit more than the very poor from redistributive policies, as argued by Peltzman (1980) for the United States, by Van de Walle and Nead (1995) for developing countries, and in a survey by Alesina (1998).

[3] See Atkinson, Bourguignon and Morrison (1992). After a comprehensive review of the literature, these authors conclude that "it is impossible to draw general conclusions" about cross country comparisons of social mobility. The literature that followed has not changed this conclusion significantly, yet.

opportunities for all do not look favorably at government redistribution. Instead, those who believe that the social "rat race" is not a fair game, support government intervention in redistributive matters and do not appreciate social mobility as a substitute for redistribution, precisely because they perceive the social mobility as systematically biased. We also find that altruism and risk aversion make people more sympathetic toward redistribution and that individual characteristics like sex, race and education also matter. Ceteris paribus, the respondents' preferences for redistribution decrease with their level of education; women are more favorable to redistribution, as are racial minorities (in particular, blacks). The latter result is consistent with a vast literature on the racial dimensions of redistributive policies in the US.[4]

Important contributions in this area include Romer (1975) and Meltzer and Richards (1981) who uncovered the basic relationships between income distribution and redistributive policies. More recently, Benabou and Ok (2001) have modelled the "prospect of upward mobility" (POUM) hypothesis. According to their model, when redistributive policies cannot be changed too frequently there can be a range of individuals with income below the mean who oppose such policies because they rationally expect to be above the mean in the future, and the mass of people who oppose redistribution can be a majority in the population.

Several empirical papers have tried to measure social mobility.[5] The relationship between social mobility and demand for redistribution is studied by Ravallion and Lokshin (2000) on Russian data, Corneo and Gruner (2001) using an international survey on several OECD countries, and by Corneo (2000) for Germany and the United States.[6] All these papers use *self-assessments* measures of upward mobility and conclude that the latter significantly affects attitudes towards redistribution. Checchi, Ichino and Rustichini (1999) found that intergenerational social mobility is higher in the United States than in Italy, and redistributive policies are more extensive in Italy than in the US. In a comparison of Sweden and the US, Bjorklund and Jantti (1997) reach inconclusive results. Looking at British data Gardiner and Hills (1999) find mixed evidence on the pattern of income mobility in the U.K. and on whether these patterns can explain the types of redistributive policies adopted. Gottschalk and Spolaore (2000) examine different measures of mobility in Germany and the United States and they conclude that income mobility is higher in the United States. This holds especially for the middle class, which

[4]For extensive discussion and illustration of this point, see Gilens (1999) and Kinder and Sanders (1996).

[5]For a survey and assessment of data problems see Atkinson, Bourguignon and Morrison (1992).

[6]In the paper by Corneo and Gruner (2001), other motivations of the demand for redistribution, along with the political-economic channel, are taken into account, and the results are shown to differ for Eastern European countries and for Western ones.

is particularly important in any voting model where the position of the median voter matters.

This paper differs from the existing empirical literature in several respects. First, while all existing studies relate an individual's attitude towards redistributive policies to *her own* past experience of mobility (e.g., the individual's education, wealth, or social status compared to the parent's), we also consider the role of *general* mobility in society. In fact, someone who lives in a particularly mobile environment may be convinced that she has good prospects of moving up the income ladder regardless of whether this has already happened to her. For this purpose, we match the information contained in the GSS with representative mobility measures at the national or state level constructed from the Panel Study of Income Dynamics (PSID). In other words, while the existing literature has *either* looked at the individual determinants of the demand for redistribution, *or* assessed the extent of general mobility in the United States, we carry out both efforts at the same time because we believe the two sides cannot be disjoint if we are trying to understand who wants redistributive policies and why. Secondly, we do not rely on a generic measure of mobility, but rather we define an index that is as close as possible to what economic theory predicts should be the "rational" measure to employ, either expected future income, or the likelihood moving above a given income threshold –say the mean or the median– thus being a net loser from redistribution. We test these measures against other indexes and find that they have considerably more explanatory power. Thirdly, we investigate the interplay between one's perceptions about "equal opportunities" and the influence of upward mobility on the preference for redistribution: in fact, mobility per se is not enough if some categories of individuals are systematically less likely to benefit from it. Finally, to our knowledge this is the first study on the determinants of preferences for redistribution in the US using individual level data that span two decades, that is the General Social Survey (GSS).

The rest of the paper is organized as follows. Section 2 briefly discusses the determinants of the demand for redistributive policies. Section 3 presents our empirical strategy and data. Section 4 illustrates our econometric results and the last section concludes.

2 The demand for redistribution

Who is in favor of redistributive policies? First of all, *current income* should be a good predictor of individual attitudes towards redistribution, in the sense that the poor should be the main supporters of redistributive policies. The seminal work by Romer (1975) and Meltzer and Richards (1981) provides a useful benchmark. In their framework a proportional tax on income is levied on individuals with

different productivity, and the proceeds are redistributed in a lump sum manner. The lower is the pre-tax income of an individual, the higher is her desired tax rate, that is the extent of redistribution. Anybody with a pre-tax income above the mean would vote for a zero tax, but if the median is below the mean, the median voter would choose a positive tax rate.[7]

Some of today's poor may become rich tomorrow and –to the extent that redistributive policies cannot be changed very frequently– they may oppose redistributive schemes that, although advantageous today, may make them net losers in the future. In other words, the prospect of upward mobility influences preferences for redistributive policies, under the reasonable assumption that once in place these policies are relatively stable over time. Thus, in the context of the "linear tax with lump sum redistribution" model discussed above, *expected future income*, in addition to current income, should influence the preference for the size of redistribution.

In models à la Meltzer and Richards, particularly important is the mobility of the voters close to the median, as a determinant of the equilibrium amount of redistribution. In fact, Benabou and Ok (2000) show that there exists a range of individuals with below-mean income who oppose redistribution if their expected income is a concave function of today's income. This concavity is reasonably realistic: it implies that future income prospects are increasing in today's income but at a decreasing rate, a sort of decreasing return in opportunities.[8]

In reality, redistributive programs are more complex than those implied by the linear tax schedule à la Meltzer and Richards. In particular, one can conceive a political equilibrium in which a majority of voters –say, all those with income below the median– choose to tax very heavily those above the median. In other words, a majority of voters may choose a non linear redistributive scheme. In this case, the *probability* of being above the relevant income threshold should be an indicator of how social mobility influences individual preferences for redistribution.[9] In summary, measures of expected future income and chances of being above some given income threshold (which depends on the nature of redistribution) should

[7] Alesina and Rodrik (1994) and Persson and Tabellini (1994) apply these ideas to dynamic models that link growth, income inequality and the equilibrium level of redistribution, but social mobility plays no role because the relative ranking of individuals is invariant.

[8] This restriction would be satisfied for instance in models with credit constraints in borrowing to invest in education and decreasing returns on investment in human capital. See Benabou (1996) for a survey of these types of models. Another assumption in Benabou and Ok's analysis is that redistributive policies cannot be changed too frequently. In fact, ceteris paribus, the longer is the horizon for which redistributive schemes are fixed, the stronger the effect of the POUM hypothesis. This assumption of stickiness or "status quo bias" is also quite realistic. For models exhibiting status quo bias see Fernandez and Rodrik (1990) and Persson and Tabellini (2000).

[9] An elementary example of this case is one in which the redistributive scheme implies a lump sum tax on all those above the income threshold and a lump sum subsidy to all those below it.

influence individual preferences.

A third factor, beyond current income and mobility, should influence attitudes towards redistribution: *risk aversion.* In fact, for a given degree of mobility, more risk-averse individuals should be more favorable to redistribution because they weigh the possibility of moving below the mean more heavily. For sufficiently risk-averse individuals, even though today's redistributive policies may bring a net loss, they may constitute a desirable means of insuring against future downward mobility.

Piketty (1995) emphasizes that individuals may not know their "true" chances of being upwardly mobile and that, if learning it is costly, differences of opinions about redistribution will persist. From an empirical standpoint, this implies that individuals may extract signals about their prospects of future mobility from their own recent experience of upward (or downward) mobility. In other words, apart from the opportunities that society objectively offers (which are captured by relative upward mobility as discussed above), we can expect one's *personal history of mobility* to affect views about the desirability of redistributive policies.

Even wealthy individuals may be in favor of redistribution purely for a sense of *altruism*, if they see redistributive policies as a substitute to charity. A related point is that observing poverty may have a negative effect on individuals's utility, therefore to some extent rich voters may favor policies that make them net losers on the income front but increase their overall utility by reducing observed poverty.[10]

Finally, in a land of *equal opportunities* redistributive policies may be seen as unnecessary in the presence of mobility. On the other hand, if someone believes that family background or other exogenous factors unduly influence one's position in the income ladder, this person may favor redistribution regardless of her wealth or mobility prospects, simply to correct for "unfair advantages." In fact, for those who believe that opportunities are not really equal, then upward mobility is not an unbiased index of individual success. People with these beliefs may want the government to engage in policies that help the least successful, perhaps precisely to correct the bias or "market failure" that occurs in the social rat race. In this case, one cannot see the "biased" social mobility as an alternative to redistribution.

In summary, theory identifies: a) current income; b) measures of income mobility; c) risk aversion; d) personal history of income mobility; e) altruism; and f) beliefs in the existence of equal opportunities for all, as variables that should influence people's preferences concerning government redistributive policies. In what follows we test the significance of these different channels.

[10]It is also true that observed poverty may have the opposite effect: for somebody who works, the observation of many people who live on welfare may convey the impression of being "exploited" and increase aversion to redistributive policies (see Luttmer (1997) for evidence on the latter point).

3 Empirical strategy and data

In our baseline specification, we assume that the support for redistribution of individual i living in state s at time t can be characterized by a "latent variable":

$$Y^*_{ist} = X_{ist}\beta + M_{ist}\gamma + S\lambda + T\xi + \varepsilon_{ist} \tag{1}$$

where X_{ist} is a vector of individual characteristics such as age, education, etc., which also includes proxies for risk aversion and altruism; M_{ist} is a dummy capturing the individual's personal history of mobility; S is a vector of state dummies; T is a vector of year dummies, and ε_{ist} is an error term. The vectors β, γ, λ, and ξ are parameters.

We do not observe Y^*_{ist} but a variable Y_{ist} taking values 1 to 7 increasing in individual support for redistribution. In particular, we have

$$\begin{array}{ll} Y_{ist} = 1 & \text{if } Y^*_{ist} \leq \mu_1 \\ Y_{ist} = 2 & \text{if } \mu_1 < Y^*_{ist} \leq \mu_2 \\ \ldots & \\ Y_{ist} = 7 & \text{if } \mu_6 < Y^*_{ist} \leq \mu_7 \end{array} \tag{2}$$

where $\mu_1, ..., \mu_7$ are unknown parameters to be estimated with β, γ, λ, and ξ. Assuming that the distribution of the error term is logistic, we estimate an ordered logit model. In order to facilitate the interpretation of the magnitude of the coefficients, we also collapse the dependent variable into a binary variable taking value 1 (support redistribution) if $Y_{ist} > 4$, and 0 (not support) if $Y_{ist} \leq 4$.

We begin by estimating our model using individual level data to assess the relative size and significance of the vector of coefficients β (capturing various determinants of preferences) and of γ (capturing the mobility experienced by the individual). Section 4.1 describes the results of this procedure.

We next move to study the *prospects* of future mobility that the individual may face. In order to do this, we use a long panel to construct indexes of expected income and of upward mobility which vary by state or by year for each decile of the income distribution. We then identify the decile to which each individual belongs and match the individual with the appropriate mobility index. In terms of the above specification, this amounts to replacing (1) with:

$$Y^{d*}_{ist} = X_{ist}\beta + M_{ist}\gamma + R^d_{st}\delta + S\lambda + T\xi + \varepsilon_{ist} \tag{3}$$

where d indicates the decile to which individual i belongs, and R^d_{st} is the relative upward mobility index for the d^{th} decile at time t in state s. In most of our empirical analysis, we will not employ an index that is time and state-varying at the same time, because this would not leave us with enough observations in the transition

matrix to construct a meaningful measure. In other words, we will employ alternatively R_t^d and R_s^d. For the same reason, we cannot construct transition matrices for geographical units smaller than a state. Section 4.2 describes these results.

Finally, we are interested in understanding whether perceptions of fairness affect how individual preferences respond to increased upward mobility. For example, we may conjecture that if one believes that society does not offer equal opportunities to all, this person may desire redistribution regardless of the extent of mobility, while if one believes that the game is fair she may want less redistribution when mobility increases. In order to investigate these effects, we modify the specification in (3) as follows:

$$Y_{ist}^{d*} = X_{ist}\beta + M_{ist}\gamma + R_{st}^d D_{ist}\delta^E + R_{st}^d(1 - D_{ist})\delta^U + S\lambda + T\xi + \varepsilon_{ist} \qquad (4)$$

where D_{ist} is a dummy equal to 1 if the respondent believes in "equal opportunities" and 0 otherwise. The coefficient δ^E captures the role of social mobility for those who believe that society offers "equal opportunities", and δ^U for those who think that opportunities are unequal. If the above conjecture is correct, we should observe that δ^E and δ^U are significantly different, and in particular that δ^E is lower (i.e., more negative) than δ^U. This test is also interesting because it captures a variation across individuals with different beliefs on equal opportunities *within* the same income decile and the same state or year, hence it helps addressing potential concerns of spurious correlation between upward mobility and attitudes towards redistribution in the cross-section. Section 4.3 describes these results.

The data for our regressions come from two main sources. The first is the General Social Survey (from now on, GSS), which since 1974 has interviewed about 1,500 individuals every year from a nationally representative sample, asking questions on individual socio-economic background, but especially on preferences and attitudes towards social and political issues. From this source we draw our dependent variable, which is the response to a question concerning whether "the government should reduce income differences between the rich and the poor." We also draw all the individual controls such as age, sex, education, personal history of mobility, beliefs on fairness, etc. Our final sample covers the years 1978-1991.[11] Definitions and summary statistics of all variables are provided in the Appendix.

[11]The years before 1978 cannot be used because the question identifying our dependent variables was not asked. The survey was not conducted in 1979, 1981, and 1992. Our regressions do not include the years from 1993 onwards because we are restricted by the data availability in the other dataset we use, namely the Panel Study of Income Dynamics (PSID). In fact, the "final release" PSID dataset ends in 1993, and the individuals interviewed in that year are asked questions about their income in 1992, which means that we can only build a social mobility index up to 1992. For detailed information about the GSS, the reader is referred to Davis and Smith (1994).

The second data source is the Panel Study of Income Dynamics (from now on, PSID). This very well known study contains longitudinal data on a representative sample of US individuals from 1968 to nowadays. The initial sample of 5,000 respondents has been interviewed every year, and members of each household have been followed in the new households they may have formed, so that the sample has grown to over 50,000 in recent years. The crucial aspect for our purposes is that the panel nature of the study allows us to follow over time the earnings profile of a fairly large set of individuals, and to construct intragenerational mobility indexes for US states over the sample period or for the US as a whole each year.

We use income variables for the period 1968-93. We measure mobility within any two consecutive years in this period, but we also explore longer horizons for our mobility measure. As for the definition of income, our benchmark specification employs total family income measured by the PSID variable "total taxable income of Head and Wife". This would seem the most appropriate variable, since taxes are levied on this measure of income and many transfer programs are related to it. In any event, we check robustness using alternative measures of income, such as family income including other family members, and earnings of the household head (see below for a detailed description).

3.1 Measuring mobility

The first notion of mobility we are interested in relates to the *history of personal mobility* experienced by the individual. Starting from GSS data we can construct two measures. The first captures the individual's status in terms of job prestige, and is a dummy equal to 1 if the respondent has a higher "occupational prestige score" than his father's.[12] The second measure relates to educational attainment and is the difference between the years of education of the respondent and those of the father.

As for social mobility several considerations guided our choice. First of all, unless we assume generational altruism in the utility function, an individual's support for redistributive policies should respond to the prospects of mobility faced by the individual herself and not by her children. In addition, if one estimates the interval between two generations to be 25 to 30 years, it is unlikely to expect that policies voted upon today will necessarily be in place 30 years from now. This further restricts our attention to measures of *intragenerational*, as opposed to intergenerational, mobility. Also, we choose to discretize the distribution of income and then look at the *transition matrix* between one income category and the other, in order to get mobility measures that are robust to possible data contamination

[12]For a detailed discussion of the GSS occupational prestige scores, the reader is referred to Nakao et al. (1990a,b).

(see Cowell and Schluter (1998) on this point).

[Insert Table 1]

Table 1 shows the average yearly transition matrix between income deciles (measured on family income) for the United States in the period 1967-92.[13] The figures in each cell represent "transition probabilities", that is, p_{ij} in row i and column j is the probability that an individual whose family income is in the i^{th} decile in year t will move to the j^{th} decile in year $(t+1)$.[14] The elements on the principal diagonal contain the probabilities that someone stays in the same decile, i.e. is "immobile". Immobility defined in this sense is highest at the extremes and decreases monotonically from the extreme deciles towards the 4th and 5th deciles.[15] In other words, the "American dream" does not hold for everyone. For instance, individuals whose family income is in the 1st decile have a 40 percent probability of moving to a higher decile, and half of this probability refers to moving to the 2nd decile only. Individuals who start today from the 3rd decile have a 66 percent probability of being in the 3rd or in lower deciles next year, and 34 percent of moving upwards. Conversely, for individuals in the 10th decile of the earnings distribution the total probability of moving below the 9th is less than 10 percent. People in the intermediate deciles have a relatively high likelihood of moving upwards or downwards.

[Insert Table 2]

Table 2 shows a similar matrix, but calculated on a 5 year interval rather than between two consecutive years. Note that, as expected, the elements of the diagonal are significantly smaller in this matrix relative to those in Table 1. Income mobility increases with the time span on which it is calculated. An interesting comparison is that between the two contiguous cells to each diagonal element (to the right and to the left) in table 1 and in table 2. This comparison shows that when we consider mobility between from one year to the next, the probability of staying in the same decile is almost twice that of moving one decile up or down; on the other hand, when we look at five-year mobility the gap reduces significantly and the likelihood

[13]The original PSID data are for the years 1968 to 1993, but interviews in a given year refer to incomes earned during the *previous* year.

[14]Notice that table 1 is reported for expositional convenience, but will not be employed in the econometric analysis. In fact, each value in table 1 is the average of the values in the corresponding cells from 25 separate matrices (one for every couple of consecutive years starting from 1967/68 until 1991/92). In our regressions we will refer to the original time-varying matrixes and match them with the relevant year for each GSS respondent.

[15]Notice that for the 1st and 10th decile the high values on the principal diagonal partly reflect a "truncation" effect: mobility in one direction is in fact impossible by definition.

of moving one decile up or down for people in intermediate deciles (say the fifth or the sixth) is roughly 3 percentage points less than that of being immobile.

Following our previous discussion on the determinants of preferences for redistribution we employ two measures of mobility. One is *expected future income*, defined as follows

$$EXPINC_{d,(t-1)} = \sum_{j=1}^{10} p_{dj}\overline{y}_{j,t} \tag{5}$$

Expression (5) represents the income that an individual who is in decile d at time $t-1$ can expect to have at time t, and is a weighted average of the mean income of all deciles in year t (i.e., $\overline{y}_{j,t}$) where the weights are the probabilities that the individual has to move to those deciles from $t-1$ to t (i.e., p_{dj}). We will also experiment with a similar index constructed for a five-year time span.

Our second measure of mobility isolates the *probability* that the respondent will have a "relatively high" income in the future and bear a "relatively heavy" redistributive burden. We define the following index of "relative mobility":

$$RELMOBJ_d = \sum_{i=J}^{10} p_{dj} \tag{6}$$

Expression (6) is the probability that an individual whose current income is in decile d will move to deciles greater or equal to J in the future. In the empirical work we set $J = 7$ to capture roughly the probability of being above mean income (in fact, in our PSID sample mean income generally falls in the 6th decile or at the boundary between the 6th and the 7th), but we also experiment with different income thresholds. We denote this as an index of "relative" mobility because it captures the chances of being in certain positions of the income ladder *relative to a given threshold.* Strictly speaking, this index captures "upward mobility" for those individuals who start from a decile below J, but can be associated with immobility or even downward mobility for individuals in the top income deciles. However, our goal is not to construct a general mobility measure, but one that is related to the likelihood that the individual will lose or benefit from redistribution.

Knowing the decile to which each GSS respondent belongs, we can match her with the corresponding value for, say, $RELMOB7_d$ in two alternative ways. The first to opt for a "local" notion of mobility and say that an individual's preferences respond to the average degree of mobility of her decile in the State where she lives. In other words, we can compute a State-specific $RELMOB7_d^s$ from a transition matrix that is constructed pooling all the PSID respondents who lived in State s during any two consecutive years between 1967 and 1992.[16] Due to the sample

[16]For the purpose of building State-specific transition matrices, each individual in the PSID is

size, it is not possible to construct meaningful transition matrixes for different years within a State, nor for any geographical area smaller than a State. The second option is to use a time-varying index, say $RELMOB7_d^t$, which amounts to computing $RELMOB7_d$ for the entire US in every year between 1967 and 1992, and assign to each GSS respondent the index for the year before the one in which the individual expresses an opinion about redistribution. Analogously, we can construct a State-varying and a time-varying measure of expected future income.

[Insert Figure 1]

Figure 1 shows the distribution across States of our "relative mobility" index for the median income decile, i.e. $RELMOB7_5^s$. Note that when we have less than one hundred individuals matching the criteria for the State-specific transition matrix in the PSID, we report the index as missing.[17] Generally speaking, the West appears as more "mobile" than the East.

[Insert Figure 2]

Figure 2 shows the time series of our measures of expected income and of relative mobility for the median decile, i.e. $RELMOB7_5^t$ (top panel) and $EXPINC_5^t$ (bottom panel). Not surprisingly, expected income is highly correlated with the business cycle. Relative mobility is not correlated with it.[18] Obviously, in all regressions we shall control for the actual income of the respondent, and for the cycle using time dummies.

In our empirical analysis, we shall also test whether individuals respond to measures of mobility that are less closely linked to the notion of relative gains and losses from redistribution. For example, we shall test whether preferences for redistribution are influenced by the mobility index proposed by Fields and Ok (1996a):

$$(Fields - Ok)_{st} = \sum_{i=1}^{N} \frac{1}{N} \left| y_{s,t+1}^i - y_{s,t}^i \right| \tag{7}$$

counted for the State in which she lived in the second of any two consecutive years. For those who have changed State over the sample period, we have tried dropping them for the sample in the year in which the migration occurred, instead of retaining them with the criterion of the second year explained above (which amounts to attributing their mobility to the State of arrival). None of our results was affected.

[17]The states for which this occurs are Idaho, Montana, Wyoming, North Dakota and New Hampshire.

[18]The variability of $RELMOB7_5^t$ over time may be related to job turnover. Forn an analysis of wage mobility between and within jobs see Gottschalk (2000).

where y_t^i is individual i's income in State s at time t and N is the total number of individuals. An analogous formula can be used substituting the logarithm for the level of income. Broadly speaking, the index (7) captures the aggregate amount of income shifts in a State between one year and the following one, without conveying any information on whether the rank of individuals above and below the mean has changed.

Another general index of mobility can be constructed starting from the Spearman's rank correlation coefficient.[19] In particular, we define the following index:

$$(Spearman\ mobility)_{st} = 1 - \rho_{st} \tag{8}$$

where ρ_{st} is the Spearman correlation coefficient for State s in year t, i.e. it captures the correlation between an individual's rank in the income scale in year $t-1$ and that in year t, within a given State.[20] Though compared to (7) the index (8) does convey information on re-ranking among individual incomes, it does not link mobility to any criterion for losing or gaining from redistribution, hence we expect it to have low explanatory power in our regressions compared to expected income and to our "relative mobility" measure.

Finally, we construct a normative index of social mobility as suggested by King (1983). Let N be the number of individuals living in State s at time t, and denote by y_i the income of individual i and by $\overline{y}$ the mean income in the State. One can evaluate changes in the ranking of individuals between $t-1$ and t in terms of the following scaled order statistic

$$r_i = \frac{|y_{i,t} - y_{i,t-1}|}{\overline{y}}.$$

Clearly, r_i will assume a positive value when an individual rank changes, and 0 when it is unchanged. The index of mobility proposed by King builds on the above statistic and has the following expression:

$$\begin{aligned} King_{st} &= 1 - \left[\frac{\sum_i (y_i \exp(\gamma r_i))^k}{\sum_i y_i^k}\right]^{-1/k} && \text{for } k \neq 0 \\ &= 1 - \exp\left(-\frac{\gamma}{N}\sum_i r_i\right) && \text{for } k = 0 \end{aligned} \tag{9}$$

[19] For a thorough discussion of orderings in two-way contingency tables, see Dardanoni and Forcina (1998).

[20] Notice that, since neither the Fields-Ok index nor that based on the Spearman coefficient are constructed from inter-decile transition matrices, we have anough observations to build mobility indexes that are state and time varying at the same time.

where $\gamma \geq 0$ is the degree of immobility aversion (higher γ means more aversion to immobility) and $k \leq 1$ parameterizes the preference for 'vertical' inequality (the higher is $(1-k)$, the higher is aversion to inequality).[21] As in the case of the Fields-Ok and the Spearman mobility index, King's measure is not closely linked to the relative gains and losses from redistributive taxation, hence we expect it to have low explanatory power in regressions that focus on the political-economic determinants of preferences for redistribution.

3.2 Descriptive statistics

Before estimating the effect of different notions of mobility through multivariate analysis, in Table 3 we report some descriptive statistics.

[Insert Table 3]

Our dependent variable is derived from a GSS question asking whether "the government should reduce income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor". The respondent could choose on a 1 to 7 scale from "should not" (1) to "should" (7).[22] In what follows we use the entire scale in our ordered logit regressions. We also transformed this variable into a binary one coding as 1 (favorable to redistribution) those who gave a score of 5 to 7 in the above question, and coding as 0 (averse to redistribution) the others. We labelled this binary variable $GOVRED$. As we can see from Table 3, this classification breaks the respondents almost exactly in a fifty-fifty split.[23]

This GSS question is quite appropriate for our purposes. In fact it captures the general attitude of the respondent toward the actual redistributive role of government, which is precisely what we are interested in. It also makes clear in its formulation that redistributive policies imply higher taxes on wealthier families and more generous transfers to poorer ones.

Table 3 shows the pattern of the answer to this question over time and across regions. The last column seems to suggest that, when we look at the fraction of people with relatively strong preferences in favor of redistribution, this fraction increased from the mid-eighties until the beginning of the nineties, and then started

[21] King (1983) uses the term 'vertical equity' to refer to the distribution of welfare levels and 'horizontal equity' to refer to the ranking of individuals within the distribution.

[22] More precisely, the scores in the original GSS question were reversed, 1 being the most favorable to redistribution and 7 the least. We have rescaled the variable so that it is increasing in one's support for redistributive policies.

[23] In the empirical section, we also experimented with dropping those individuals who gave a score of 4 (i.e., those with mild preferences or undecided), and none of our results were affected.

to decrease.[24] As for the regional dimension of this variable, support for redistribution is lower in the South and in the West, and higher in the North-East and Midwest. If we relate this with Figure 1 above, it would appear that regions with more mobility display a higher aversion to redistribution. Note also an obvious correlation with voting patterns, in which liberal/Democratic states tend to be in the North East while the South and West are more conservative/Republican.

4 Results

4.1 Preferences for redistribution

Table 4 reports the coefficients of our ordered logit regressions on the individual determinants of preferences for redistribution. In all regressions, standard errors are adjusted for clustering of the residuals at the MSA level. All specifications include state and year dummies (not shown). The different number of observations is due to different coverage of the GSS for the various questions. In this table, we use all the available observations in every regression.

[Insert Table 4]

Not surprisingly, current income matters: wealthier individuals look less favorably to redistribution. Several other individual characteristics are significant. For example, women and blacks are more supportive of redistributive policies. More educated individuals are instead less favorable, even after controlling for income. Age, marital status and the presence of children do not significantly affect the preferences and for redistribution. On the other hand, religious affiliation seems to have limited influence: the coefficient on Protestants is negative and borderline insignificant, that on Catholic and Jewish is insignificant, and that on "other" religions is positive and significant (the omitted category is "no religion").

Let us now turn to risk aversion. Unfortunately, the GSS does not contain any question that would allow us to directly measure it (e.g., information on gambling or on willingness to pay for lotteries). We are thus forced to rely on proxies. The first proxy we consider is self-employment: self-employed individuals may be so because they are more prone to take risks. Our results show that self-employed people are much more averse to redistribution even after controlling for income and all other individual characteristics, possibly because they do not value too highly the "insurance" against negative income shocks provided by redistributive programs. Of course, an alternative explanation of this finding may be that the

[24] Note the sharp drop in 1994 relative to 1993. However, we end our sample at 1993, since we cannot construct the income mobility variable for 1994.

self-employed benefit less from various government programs. Also, self employed individuals may have chosen this type of job because they have a more "individualistic" culture, thus more favorable to a self made person "culture".

Having experienced unemployment in the last few years may both increase risk aversion and directly affect one's view of redistributive policies. For example, a spell of unemployment can be interpreted as a "learning experience", in the sense that by becoming unemployed the respondent may have learned about her need for government intervention and become more sensitive to the risk of future spells of unemployment. The dummy for whether the respondent has been unemployed in the last five years takes a positive and significant coefficient. The interpretation of unemployment as affecting risk aversion is in part supported by the fact that when we use a relative's unemployment experience (as opposed to the respondent's own experience), this variable remains significant at the 5 percent level. This result is also encouraging because a relative's unemployment status is less prone to be endogenous to the respondent's preferences about redistribution. Not surprisingly, though, the respondent's own experience has a larger effect on her views than a relative's experience.[25]

In the next column, we introduce the variable "Help others" to capture the idea that support for redistribution may be due to a sense of altruism. This variable identifies the respondents who answer yes to the question of whether children should be taught that helping others is the most important moral value. This variable has a positive and significant coefficient.[26]

In column (4) we add two measures of personal mobility. The first one is a dummy for whether the respondent's "job prestige" is higher than the father's. The second is the difference between the years of education of the respondent and that of his father. The results are mixed: the prestige variable has a significant coefficient with the expected (negative) sign: people whose job is more "prestigious" than their father's look less favorably to redistributive policies. On the other hand, the coefficient education gap has the opposite sign of what we would expect. This may be due to the fact that the widespread trend of increasing education between generations does not make this variable a meaningful indicator of mobility.

In the last column we report the marginal coefficients from a probit regression in which the left hand side variable is the binary variable $GOVRED$, discussed above. This helps interpret the magnitude of several coefficients in a more straightforward way. One of the most striking results is the very large coefficient on the

[25] All these results are available upon request.

[26] >From the same GSS question we have also constructed a dummy for whether helping others is one of the *two* most important moral values to be transmitted to children. The number of positive answers to this question is very large, however, making it of little significance for our purposes. Results obtained using this variable are consistent with those shown in Table 3.

variable Black. This coefficient is more than twice as large (in absolute terms) than that on the respondent's unemployment experience. It is almost three times as large than that on women and it is larger than the difference in preferences between the maximum and the minimum level of education. Though not direct evidence on the interaction between redistribution and racial conflicts, our result that blacks are significantly more favorable to redistribution is consistent with a vast literature on the subject, as well documented by Gilens (1999) amongst others. According to this literature, wealthy whites are especially averse to redistributive policies if they perceive that the beneficiaries are members of racial minorities. Direct evidence on this point is provided by Poterba (1997) and Alesina, Baqir and Easterly (1999). The former shows that elderly white voters are particularly adverse to public spending on education in communities where a large fraction of children are from minority groups. The latter paper shows that a measure of racial fragmentation is inversely related to welfare spending in United States cities, counties and metropolitan areas.

We next turn to the variables which are the main focus of our investigation.

4.2 Social mobility

In the first four columns of Table 5 we add to the basic specification of column 4 in table 4 our measures of social mobility (5) and (6), computed by state on the entire sample.[27] Both the probability of being above the 6th decile and the expected future income negatively influence individual support for redistribution, and these effects are significant at the 1 percent level. The coefficients on the individual controls remain basically unchanged relative to the previous table.

[Insert Table 5]

Again, for the sake of exposition, the last two columns of table 5 report marginal probit coefficients for the specification in which the dependent variable is the binary one, $GOVRED$. According to our estimates, a change in $RELMOB7$ from the mean for the first decile to the mean for the tenth decile reduces the propensity to favor redistribution by 6.5 percentage points. This effect is almost the same order of magnitude of being self-employed, it is larger than the effect of being female, and is slightly less than half the effect of being black. Looking at expected income, an increase of expected income from the mean for the lowest to the mean for the highest decile reduces the support for redistribution by 12 percentage points, which is almost as large as the effect of being black and almost twice the effect of having been recently unemployed.

[27] In these regressions we drop the "help others" variable and the religious variables because they would restrict significantly the number of available observations.

[Insert Table 6]

In Table 6 we perform some sensitivity analysis. Individual controls, state and year dummies are included in the regressions, though not shown in the table. Each cell refers to a separate regression in which the specification is that of column 1 and column 2 of table 5, respectively, for the first and second row of coefficients in table 6. The first column of table 6 excludes the influential observations using the DFbeta method.[28] Both the coefficient on $RELMOB7$ and that on expected income remain negative and highly significant. In the second column we modify our construction of the mobility indexes dropping from the PSID sample the observations relative to individuals who changed state of residence from one year to the next. Again, the results are unchanged compared to table 5. In the third column we test for nonlinear effects of income by adding a set of dummies for the decile to which the respondent belongs, in addition to controlling for individual income. Our mobility index based on probabilities remains negative and highly significant, while expected income becomes insignificant, possibly because of the high correlation between this variable, actual income, and income deciles. In column 4 we address the issue of noise in year-to-year variation in incomes by using a three-year average instead of a point level income figure. In other words, when constructing mobility matrixes in the PSID, the income of a respondent in year t is replaced by her average income in $t-1, t$ and $t-1$. This obviously leads to a smaller sample size in the PSID, but the results in our regressions are virtually unchanged. Finally, in the fifth column of table 6 we employ mobility measures computed by decile for the whole US that vary year by year. Again, our results are robust to considering the time variation in mobility across deciles rather than the cross-State variation.

We have also experimented with different income thresholds for our "relative mobility" index. In particular, we have computed the index (6) looking at the probability of moving to deciles 6 to 10 ($RELMOB6$) or 5 to 10 ($RELMOB5$). While the former has a coefficient which is borderline (in)significant at standard confidence levels,. the latter has an insignificant coefficient. These results are comforting, since they display a monotonically declining level of significance as we move the threshold lower and lower. It would appear that the threshold that makes respondents significantly averse to redistribution lies somewhere between the sixth and the seventh decile. This is close to the mean income of the population, and probably not much higher than the average income of the electorate, since voters' participation is positively correlated with income.

[28] We calculate the DFbetas from each original regression and drop those observations that lead to significant changes in the coefficients of our mobility indexes. Precisely, we drop those observations for which $abs(DFbeta) > 2/\sqrt{\#obs}$ (see e.g., Belsley et al. (1980), p.28).

[Insert Table 7]

In Table 7 we pursue additional sensitivity analysis, by experimenting with different definitions of income and time horizons. Again, each coefficient in the table is from a separate regression. Column 1 uses family income as defined above, looking at a five year horizon to compute mobility. The second and third columns use mobility measures constructed from the hourly earnings of the head of the household, for both the one year and five year time horizon. The idea is that, while changes in total taxable income may reflect changes in the number of hours worked rather than in 'status', changes in individual hourly earnings are likely to reflect an improvement or a deterioration of job status. We can see from the table that the higher the prospects of upward mobility defined in this sense, the lower is the support for redistribution, consistently with what we found so far. Finally, in the last two columns we broaden the definition of family income by including in the computation of total taxable income all "other family unit members" (OFUMs) together with head and spouse. Our results remain virtually unchanged.

[Insert Table 8]

In Table 8 we consider other measures of mobility that differ from our indexes $RELMOB7$ and expected income in that they capture mobility in a way that is not directly related to the chances of being a winner or loser from redistribution in the near future. These measures are the Fields-Ok index (7), the Spearman mobility index (8), and King's index (9) with parameters $\gamma = 1$ and $k = -0.1$.[29] We compute them both for the one-year and for the five-years time horizon. Interestingly, none of these coefficients are significantly different from zero (Fields-Ok computed with logarithms is significant only at the 10 percent level). This result is encouraging, because it highlights that not any measure of mobility "works." Measures that seem to work are the ones more directly related to expected future income and to the probability of being in the upper deciles, that is, above median and average income. This is consistent with the interpretation that the people who oppose redistribution more are those that are afraid to "loose" in the future, rather than those that are generically "mobile."

[29]There is no clear criterion for choosing parameter values for King's index, and we don't know of any study that has implemented this index empirically. We have computed it for a broad range of parameters and then chosen what seemed to be 'average' values, not too biased in favor or against immobility and inequality. The parameterization used in table 8 can be thought of as 'average' aversion to immobility and to inequality; then we have estimated the model for $\gamma = 0.5$ and $k = 0.2$ (low aversion to immobility and inequality) and for $\gamma = 2$ and $k = -2$ (high aversion). None of the coefficients was significant.

4.3 Equal opportunities

The final point we want to address is how individual preferences respond to increased mobility when the mobility process is regarded as 'biased' or 'unbiased'. The GSS contains several questions regarding whether family background matters for success, and more generally whether there are equal opportunities in society. Unfortunately these questions were asked only in 1984, so the sample size is significantly reduced compared to the above estimates. We try to compensate for the small sample size by exploring robustness using as many questions as possible on this topic.

[Insert Table 9]

The first column in table 9 identifies the question asked, questions which capture the respondent's attitude about "fairness" in society's social ladder. The second column shows how the responses are split in these yes/no questions. Generally, the split is very close to the middle, with a couple of exceptions. The next two columns report the coefficients on one of our measures of "mobility," namely expected income, for those who answered yes and for those who answered no to the question.[30] Results are similar when we use $RELMOB7$. Our conjecture is that those who believe in equal opportunities should be more (negatively) affected by the extent of relative upward mobility in their support for redistribution.

The results in table 9 provide considerable support for this conjecture. In 8 out of 11 answers the difference in the coefficients on mobility between those who are on the two sides of the question are statistically significant with a p-value of 0.05 or less. Different responses point consistently in the same direction: those who think that opportunities are really "equal" see social mobility as a substitute for redistribution, the others do not. Take, for instance, question 7. People who believe that everyone has an opportunity to receive an education display a statistically significant negative coefficient on expected income: they see upward mobility as the result of a "fair game" and when their future income prospects are higher they demand less redistribution. On the other hand, for those who think that not everyone has a chance of receiving an education, the coefficient on expected income is not statistically different from zero. For these individuals, higher mobility does not necessarily translate into higher future income, hence their preferences for redistribution is unaffected. Turning to question 2, those who believe that class differences are due to family background are not sensitive to social mobility in their views about redistribution, while those who believe that family background

[30] Going back to our empirical strategy, we are estimating the parameters δ^E and δ^U in expression (4), except that the time dummies are not included because we only have data for one year.

does not matter are more likely to oppose redistribution when mobility increases (the coefficient under the "No" column is negative and significant). Similarly, the probability of favoring redistributive policies is negatively affected by expected income for those individuals who think that class differences are due to ability and education or that they are justified (see the coefficients under the "Yes" column in lines 1 and 5), but not for those who believe otherwise. Analogous considerations apply to the other questions.

Overall, Table 9 suggests that, if an individual believes in equal opportunities, then an increase in expected income makes her more averse to redistribution. But if one believes that the outcome of social mobility is heavily influenced by family background or other exogenous factors, then attitudes towards redistribution are much less influenced by the degree of social mobility, since the latter is perceived as "biased."

5 Conclusions

The less wealthy should favor redistributive policies. However, people take into account the fact that social mobility may make some of today's "poor" into tomorrow's "rich". We estimate the determinants of individual preferences for redistribution and find that they reflect these intertemporal considerations. In fact, an individual's support for redistributive policies is negatively affected by expected future income and by the likelihood of moving above an income threshold that separates the winners and the losers from redistribution. On the other hand, attitudes toward redistribution are not affected by generic measures of mobility that do not capture well the relative gains and losses from future redistributive policies. We also confirm a "racial effect" well known in the literature: after controlling for many individual characteristics, including income, education, etc., whites are more averse to redistribution than blacks.

We find that the people who are most opposed to government intervention in distributive matters are those who believe that the social "rat race" is fair, that is, everyone has the same opportunities to move up in life. In fact, these individuals feel that the higher is social mobility, the less the government should redistribute: if mobility is high, and everybody can take advantage of it, then the market works as a determinant of the distribution of income and the government should not fiddle with it. On the contrary, those who believe that opportunities are not equal for all, so that income inequality implies also inequality in opportunities, do not believe that social mobility is a substitute for government intervention in redistributive matters.

Our results suggests that to some extent the public sees substitutability between offering equal opportunities and equalizing outcomes, but that the degree of

substitutability depends on the "rules of the game". This may have relevant policy implications when evaluating the desirability of redistributive policies. While on the one hand such policies require complex tax/transfer schemes with well known distortionary effects, on the other hand they are perceived as a desirable means of providing more equal opportunities when the social mobility process is not regarded as fair.

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Appendix

Data sources and coverage

The data sources are abbreviated as follows: GSS stands for "General Social Survey, cumulative file 1972-94"; PSID refers to the Panel Study of Income Dynamics individual or family files, downloaded from *http://www.isr.umich.edu/src/psid/*. In all cases, "no answer", "do not know", "no opinion", and "not applicable" were coded as missing values.

The PSID sample we use is restricted to household heads aged 21-59 between any two consecutive years in the period 1968-93. For these individuals we employ three definitions of income, labelled in the PSID as:

a) Total taxable income of Head and Wife

b) Total taxable income of Head and Wife, including Other Family Unit Members (OFUM)

c) Average hourly earnings of Head

Definitions a) and b) include both labor income (labor part of farm income, labor part of business income, wages, bonuses, overtime, commissions, income from professional practice or trade, labor part of market gardening income, labor part of roomers and boarders income), and income from assets (asset part of farm income, asset part of unincorporated business income, asset part of market gardening, asset part of income from roomers and boarders, alimony, income from rent, interest, dividends, etc.). Definition c) includes labor income of Head, and takes value zero if Head did not work for money.

For all three income definitions we construct inter-deciles transition matrices over a 1-year and a 5-year interval, i.e. we look at the decile to which the income of the Head (or of the Head's family) belongs between t and $t+1$, or between t and $t+5$, respectively. Starting from these matrices, we construct the mobility measures defined in the text. These indices take on different values depending on the decile to which the individual belongs in year t. We therefore need to assign our GSS respondents to the appropriate decile in the PSID.

The matching between GSS and PSID data is done as follows. For each GSS respondent in any give year t we know both the respondent's own "earnings, before taxes" (GSS variable: 'RINCOME') and the "total family income, from all sources, before taxes" (GSS variable: 'INCOME'). For each transition matrix constructed in the PSID from t to $t+1$ we know the thresholds of each decile by row, i.e. the minimum and maximum incomes of the individuals belonging to a given decile in year t. We assign each GSS respondent to the appropriate decile by comparing INCOME to the thresholds of the transition matrices constructed from family income –definitions a) and b) above– and RINCOME to the thresholds of the

transition matrices constructed from individual earnings –definition c).[31]

Variable definition

The following is a list of the variables we use and of their sources, followed by summary statistics. Unless otherwise stated, the source of a variable is authors' calculation on GSS data.

Support for redistribution: Categorical variable varying on a 7 point scale from 1=against redistribution to 7=in favor of redistribution. Original GSS survey question: "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Here is a card with a scale from 1 to 7. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel?". Prompted answers coded in the GSS variable 'EQWLTH' on a scale of 1 to 7, where 1=Government should do something to reduce income differences; 7=Government should not concern itself.; 8=Don't know; 9=No answer. Our variable is rescaled as $(8 - EQWLTH)$, i.e. it is increasing in individual support for redistribution.

GOVRED: dummy equal to 1 if respondent thinks that the government should reduce income differences between the rich and the poor. Original GSS variable 'EQWLTH' (see description of the variable 'Support for redistribution'). GOVRED takes value 1 if EQWLTH<4 and zero otherwise.

Age: age of respondent in years.

Married: dummy equal to 1 if respondent is married.

Female: dummy equal to 1 if respondent is female.

Black: dummy equal to 1 if respondent is African American.

Educ<12 yrs: dummy equal to 1 if respondent has less than 12 years of education.

Educ>16 yrs: dummy equal to 1 if respondent has more than 16 years of education.

Children: dummy equal to 1 if respondent has children.

[31] Though the transition matrix is constructed on average *hourly* earnings, the matching is done on *annual* labor income (PSID variable: Total labor income of Head) because the variable RINCOME in the GSS is on an annual basis. On the other hand, average hourly earnings in the PSID are obtained simply by dividing total labor income of Head for the number of hours worked in a year.

ln(real income): logarithm of respondent's family income (constant 1986 US$).

Self-employed: dummy equal to 1 if respondent is self-employed.

Unemp. last 5 yrs: dummy equal to 1 if respondent has been unemployed in the last 5 years.

Protestant: dummy equal to 1 if respondent is Protestant.

Catholic: dummy equal to 1 if respondent is Catholic.

Jewish: dummy equal to 1 if respondent is Jewish.

Other religion: dummy equal to 1 if respondent is religious but not Protestant, Catholic, or Jewish.

Help others: dummy equal to 1 if respondent says that helping others is the most important value for a child. Original GSS survey question: "If you had to choose, which thing on this list would you pick as the most important for a child to learn to prepare him or her for life?". Prompted answers coded in the GSS variable 'HELPOTH'. Our variable takes value 1 if respondent picks "helping others" as the first most important thing, and zero otherwise.

Prestige>father's: dummy equal to 1 if respondent's prestige score (variable 'PRESTIGE' and 'PRESTG80' in the GSS) is higher than father's (variable 'PAPRES16' and 'PAPRES80'). For a detailed definition of the GSS occupational prestige scores, see Nakao et al. (1990a,b).

Education-father's: years of education of the respondent minus years of education of the father.

RELMOB7: relative mobility index defined by expression (6) in the text on State-specific transition matrices. Value for individual whose income is in decile d in state s is the sum of probabilities of moving to deciles 7 to 10 in year $t+1$, starting from decile d in year t. Source: authors' calculations on PSID.

Expected income: expected future income of the respondent defined by expression (5) in the text on State-specific transition matrices. Value for individual whose income is in decile d in state s is the weighted average of mean incomes for the ten deciles in year $t+1$, with the weights being the probabilities of moving to those deciles in year $t+1$, starting from decile d in year t. Source: authors' calculations on PSID.

Fields-Ok: per capita mobility index proposed by Fields and Ok (1996a) and defined in expression (7) in the text. Source: authors' calculations on PSID.

Fields-Ok (logs): same as Fields-Ok, but uses the logarithm of the relevant income variable.

Spearman mobility: index defined by expression (8) in the text. Source: authors' calculations on PSID.

King: index defined by expression (9) in the text. Source: authors' calculations on PSID.

CLABEDU: dummy equal to 1 if respondent thinks that class differences depend on one's ability and education. Original GSS survey question: "America has an open society. What one achieves in life no longer depends on one's family background, but on the abilities one has and the education one acquires". Prompted answers coded in the GSS variable 'USCLASS3': 1=Strongly agree; 2=Somewhat agree; 3=Somewhat disagree; 4=Strongly disagree; 8=Don't know; 9=No answer. Our variable takes value 1 if USCLASS3<3 and zero otherwise.

CLFAM: dummy equal to 1 if respondent thinks that class differences depend on family background. Original GSS survey question: "In the United States there are still great differences between social levels, and what one can achieve in life depends mainly upon one's family background". Prompted answers coded in the GSS variable 'USCLASS2': 1=Strongly agree; 2=Somewhat agree; 3=Somewhat disagree; 4=Strongly disagree; 8=Don't know; 9=No answer. Our variable takes value 1 if USCLASS2<3 and zero otherwise.

CLOUT: dummy equal to 1 if respondent thinks that class differences depend on factors outside one's control. Original GSS survey question: "What one gets in life hardly depends at all on one's own efforts, but rather on the economic situation, job opportunities, union agreements, and the social services provided by the government.". Prompted answers coded in the GSS variable 'USCLASS4': 1=Strongly agree; 2=Somewhat agree; 3=Somewhat disagree; 4=Strongly disagree; 8=Don't know; 9=No answer. Our variable takes value 1 if USCLASS4<3 and zero otherwise.

CLSTAY: dummy equal to 1 if respondent thinks that class differences persist. Original GSS survey question: "In the United States traditional divisions between owners and workers still remain. A person's social standing depends upon whether he/she belongs to the upper or lower class". Prompted answers coded in the GSS variable 'USCLASS1': 1=Strongly agree; 2=Somewhat agree; 3=Somewhat disagree; 4=Strongly disagree; 8=Don't know; 9=No answer. Our variable takes value 1 if USCLASS1<3 and zero otherwise.

CLJUSTIF: dummy equal to 1 if respondent thinks that class differences are justified. Original GSS survey question: "All in all, I think social differences in this country are justified". Prompted answers coded in the GSS variable 'USCLASS8': 1=Strongly agree; 2=Somewhat agree; 3=Somewhat disagree; 4=Strongly disagree; 8=Don't know; 9=No answer. Our variable takes value 1 if USCLASS8<3 and zero otherwise.

CLACCOPP: dummy equal to 1 if respondent thinks that class differences are justified. Original GSS survey question: "Differences in social standing between people are acceptable because they basically reflect what people

made out of the opportunities they had.". Prompted answers coded in the GSS variable 'USCLASS7': 1=Strongly agree; 2=Somewhat agree; 3=Somewhat

disagree; 4=Strongly disagree; 8=Don't know; 9=No answer. Our variable takes value 1 if USCLASS7<3 and zero otherwise.

OP_EDU: dummy equal to 1 if respondent thinks that not everyone has opportunity to acquire education corresponding to their talent. Original GSS survey question: "Does everyone in this country have an opportunity to obtain an education corresponding to their abilities and talents?". Prompted answers coded in the GSS variable 'EDUCOP': 1=Yes; 2=No; 8=Don't know; 9=No answer. Our variable takes value 1 if EDUCOP=2 and zero otherwise.

OP_HRDWK: dummy equal to 1 if respondent thinks that hard work is very important to get ahead in life. Original GSS survey question: "How important you think hard work is for getting ahead in life?". Prompted answers coded in the GSS variable 'OPHRDWRK': 1=Essential; 2=Very important; 3=Fairly important; 4=Not very important; 5=Not important at all; 8=Can't choose; 9=No answer. Our variable takes value 1 if OPHRDWRK<3 and zero otherwise.

OP_KNOW: dummy equal to 1 if respondent thinks that knowing the right people is very important to get ahead in life. Original GSS survey question: "How important you think it is for getting ahead in life knowing the right people?". Prompted answers coded in the GSS variable 'OPKNOW': 1=Essential; 2=Very important; 3=Fairly important; 4=Not very important; 5=Not important at all; 8=Can't choose; 9=No answer. Our variable takes value 1 if OPKNOW<3 and zero otherwise.

OP_PARED: dummy equal to 1 if respondent thinks that one needs educated parents to get ahead in life. Original GSS survey question: "How important you think it is for getting ahead in life having well educated parents?". Prompted answers coded in the GSS variable 'OPPARED': 1=Essential; 2=Very important; 3=Fairly important; 4=Not very important; 5=Not important at all; 8=Can't choose; 9=No answer. Our variable takes value 1 if OPPARED<3 and zero otherwise.

OP_WLTH: dummy equal to 1 if respondent thinks that one needs to come from a wealthy family to get ahead in life. Original GSS survey question: "How important you think it is for getting ahead in life coming from a wealthy family?". Prompted answers coded in the GSS variable 'OPWLTH': 1=Essential; 2=Very important; 3=Fairly important; 4=Not very important; 5=Not important at all; 8=Can't choose; 9=No answer. Our variable takes value 1 if OPWLTH<4 and zero otherwise.

Table A1: Summary statistics

	Mean	*Std. Dev.*	*No. obs.*
Support for redistribution	4.366	1.952	11237
GOVRED	.485	.500	11237
Age	44.384	17.419	11237
Married	.568	.495	11237
Female	.552	.497	11237
Black	.137	.344	11237
Educ<12 yrs	.260	.439	11225
Educ>16 yrs	.195	.396	11225
Children	.411	.492	11163
ln(real income)	9.919	.954	11237
Self-employed	.115	.319	10599
Unemp. last 5 yrs	.230	.421	11167
Protestant	.638	.480	11221
Catholic	.248	.432	11221
Jewish	.019	.138	11221
Other religion	.020	.140	11221
Help others	.123	.328	5715
Job prestige >father's	.465	.499	9039
Education - father's	2.803	3.862	8274
RELMOB7, t+1	.390	.371	11237
RELMOB7, t+5	.398	.309	11214
RELMOB7, t+1 (hourly earnings of head)	.364	.317	7629
RELMOB7, t+5 (hourly earnings of head)	.374	.266	7196
RELMOB7, t+1 (head+wife+ofum)	.365	.361	11237
RELMOB7, t+5 (head+wife+ofum)	.369	.293	10112
Expected income, t+1	55.555	37.650	11237
Expected income, t+5	61.090	35.682	11214
Expected income, t+1 (hourly earnings of head)	39.401	22.276	7629
Expected income, t+5 (hourly earnings of head)	42.395	21.546	7196
Expected income, t+1 (head+wife+ofum)	56.472	38.035	11237
Expected income, t+5 (head+wife+ofum)	61.710	34.708	10112
Spearman mobility, t+1	.108	.108	10781
Spearman mobility, t+5	.248	.093	10904

Table A1 (continued)

	Mean	*Std. Dev.*	*No. obs.*
Fields-Ok, t+1	9651.87	2412.82	11237
Fields-Ok, t+5	16988.91	4741.59	11237
Fields-Ok (logs), t+1	.323	.078	11237
Fields-Ok (logs), t+5	.500	.121	11237
King, t+1	.182	.043	11213
King, t+5	.277	.061	11213
CLABEDU	.409	.492	1293
CLFAM	.441	.497	1292
CLOUT	.417	.493	1285
CLSTAY	.702	.457	1272
CLJUSTIF	.526	.499	1304
CLACCOPP	.747	.435	1270
OP_EDU	.294	.456	1298
OP_HRDWK	.895	.307	1438
OP_KNOW	.445	.497	1432
OP_PARED	.422	.494	1424
OP_WLTH	.511	.500	1410

deciles	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1st	61.57	22.74	8.28	3.61	1.59	1.03	0.55	0.23	0.17	0.23
2nd	20.91	43.26	20.27	7.87	4.03	1.82	0.80	0.57	0.29	0.17
3rd	7.78	18.53	39.65	18.67	7.98	3.65	1.75	1.06	0.59	0.34
4th	4.06	6.46	18.35	36.62	19.30	08.07	3.80	1.93	0.96	0.46
5th	2.15	3.53	7.05	18.80	35.48	18.92	8.12	3.71	1.54	0.70
6th	1.52	2.03	3.22	7.15	18.81	35.05	20.63	7.75	2.78	1.06
7th	0.99	1.11	2.25	3.82	7.17	19.78	36.63	19.78	6.64	1.84
8th	0.60	0.64	1.15	1.84	3.60	7.29	19.78	41.64	19.48	3.99
9th	0.42	0.22	0.57	0.99	1.37	2.87	6.01	19.44	51.31	16.80
10th	0.43	0.30	0.42	0.49	0.77	0.99	1.91	4.10	16.59	74.00

Table 1: Transition matrix for US (t,t+1), average 1967-92

deciles	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1st	47.16	23.75	11.61	6.05	3.64	2.68	1.92	1.38	1.00	0.83
2nd	21.30	31.69	20.29	9.99	5.95	4.18	2.54	1.99	1.32	0.74
3rd	10.74	19.54	26.32	17.01	10.55	6.31	4.20	2.54	1.75	1.03
4th	5.98	9.62	17.48	22.40	17.30	11.08	7.19	4.54	2.84	1.56
5th	4.54	6.03	9.71	17.79	21.33	17.06	10.60	6.67	4.03	2.25
6th	3.33	3.72	6.07	9.72	17.88	20.88	17.02	11.57	6.77	3.03
7th	2.69	2.22	3.86	6.67	11.31	18.26	22.10	17.80	10.68	4.42
8th	2.19	1.73	2.45	4.30	6.13	11.47	19.32	23.87	19.39	9.14
9th	1.70	1.40	1.84	2.36	3.74	5.99	10.66	20.10	32.33	19.87
10th	1.12	0.97	0.95	1.40	1.97	2.99	4.73	8.95	19.89	57.01

Table 2: Transition matrix for US (t, t+5), average 1967-87

Table 3: Attitudes toward redistribution

Should govt. reduce income differences between rich and poor ?								
	1 NO	*2*	*3*	*4*	*5*	*6*	*7* YES	*Dummy GOVRED*
FULL SAMPLE	.13	.07	.12	.20	.17	.11	.20	.47
BY YEAR								
1978	.12	.08	.11	.21	.17	.11	.19	.48
1980	.16	.07	.13	.20	.17	.09	.17	.43
1983	.15	.08	.11	.18	.16	.11	.20	.48
1984	.12	.08	.13	.17	.15	.12	.21	.49
1986	.12	.06	.11	.21	.17	.09	.23	.49
1987	.12	.06	.12	.21	.17	.09	.23	.49
1988	.12	.08	.12	.20	.18	.10	.20	.48
1989	.11	.07	.11	.20	.20	.13	.18	.50
1990	.11	.06	.09	.22	.18	.12	.21	.52
1991	.09	.08	.12	.20	.17	.13	.20	.51
1993	.12	.08	.12	.18	.19	.12	.18	.49
1994	.15	.08	.15	.21	.16	.09	.15	.40
BY REGION								
West	.16	.09	.13	.18	.17	.10	.16	.44
Midwest	.11	.07	.13	.20	.19	.11	.20	.50
North-Est	.11	.07	.12	.20	.18	.10	.21	.50
South	.14	.07	.11	.21	.15	.10	.20	.46

Table 4: Individual determinants of preference for redistribution

Ordered logit. Dependent variable = support for redistribution

	[1]	[2]	[3]	[4]	[5]
Age	-.005**	-.004**	-.005**	-.007**	-.002**
	(.001)	(.002)	(.002)	(.001)	(.0005)
Married	.037	.044	.039	.005	-.011
	(.036)	(.035)	(.055)	(.038)	(.015)
Female	.223**	.239**	.257**	.225**	.060**
	(.044)	(.047)	(.045)	(.051)	(.012)
Black	.753**	.774**	.776**	.709**	.171**
	(.093)	(.097)	(.096)	(.103)	(.030)
Educ<12	.522**	.519**	.479**	.576**	.105**
	(.036)	(.036)	(.077)	(.048)	(.019)
Educ>16	-.302**	-.310**	-.285**	-.360**	-.044**
	(.050)	(.050)	(.057)	(.055)	(.020)
Children	-.010	-.012	.014	-.019	-.001
	(.033)	(.032)	(.046)	(.035)	(.016)
ln(real income)	-.274**	-.273**	-.264**	-.274**	-.053**
	.018	(.019)	(.028)	(.022)	(.009)
Self-employed	-.316**	-.320**	-.207**	-.335**	-.099**
	(.058)	(.058)	(.054)	(.076)	(.021)
Unemp. last 5 yrs	.230**	.230**	.187**	.258**	.082**
	(.037)	(.038)	(.046)	(.041)	(.015)
Protestant		-.134			
		(.086)			
Catholic		.007			
		(.080)			
Jewish		-.190			
		(.126)			
Other religion		.407**			
		(.133)			
Help others			.250**		
			(.081)		
Job prestige>father's				-.080**	-.007
				(.034)	(.015)
Educ - father's				.029**	.004**
				(.005)	(.002)
No. obs.	11782	11769	6642	8716	5602
Pseudo Rsq	.03	.03	.03	.03	.05

Notes: * denotes significance at the 10 percent level, ** at the 5 percent level.

Standard errors corrected for heteroskedasticity and clustering of the residuals at the MSA level..

Table 5: Preferences for redistribution and future income prospects

Dependent variable = support for redistribution

	Ordered Logit		Probit	
	[1]	[2]	[3]	[4]
Age	-.007**	-.007**	-.002**	-.002**
	(.002)	(.002)	(.0005)	(.0005)
Married	.027	.019**	.011	-.012
	(.042)	(.042)	(.016)	(.016)
Female	.196**	.200**	.054**	.055**
	(.052)	(.052)	(.012)	(.012)
Black	.684**	.687**	.156**	.157**
	(.094)	(.095)	(.031)	(.032)
Educ<12	.534**	.545**	.091**	.094**
	(.052)	(.052)	(.020)	(.020)
Educ>16	-.373**	-.355**	-.048**	-.045**
	(.051)	(.052)	(.020)	(.020)
Children	-.012	-.014	.003	.002
	(.040)	(.039)	(.016)	(.016)
ln(real income)	-.177**	-.100**	-.028*	-.017
	(.033)	(.038)	(.017)	(.019)
Self-employed	-.346**	-.330**	-.102**	-.099**
	(.082)	(.081)	(.023)	(.023)
Unemp. last 5 yrs	.256**	.257**	.077**	.077**
	(.043)	(.043)	(.017)	(.017)
Job prestige >father's	-.074**	-.078**	-.0002	-.001
	(.038)	(.038)	(.017)	(.017)
Education - father's	.031**	.031**	.005**	.004*
	(.005)	(.005)	(.002)	(.002)
Prob(7-10 decile)	-.316**		-.080**	
	(.084)		(.040)	
Expected income		-.005**		-.001**
		.001		(.0004)
No. obs.	7714	7714	4891	4891
Pseudo Rsq	.03	.03	.05	.05

Notes: see notes to Table 4.

Table 6: Sensitivity analysis

Ordered logit. Dependent variable = support for redistribution

	No influential observations	No migrants	Income deciles	Avg. income (t-1,t,t+1)	Transition matrix US by year
	[1]	[2]	[3]	[4]	[5]
COEFFICIENT ON:					
Prob(7-10 decile)	-.287**	-.312**	-.872**	-.314**	-.292**
	(.081)	(.087)	(.220)	(.087)	(.086)
Expected income	-.006**	-.005**	-.001	-.005**	-.005**
	(.001)	(.001)	(.002)	(.001)	(.001)

Notes: see notes to Table 4.

Controls include: Age, Married, Female, Black, Educ<12, Educ>16, Children, ln(real income), Self-employed, Unemp. last 5 yrs, Prestige>father's, Educ-father's, STATES, YEARS.

Table 7: Different income definitions and time horizons

Ordered logit. Dependent variable = support for redistribution

	Family income	Hourly earnings of head		Family income (incl. OFUM)	
	t,t+5	t,t+1	t,t+5	t,t+1	t,t+5
	[1]	[2]	[3]	[4]	[5]
COEFFICIENT ON:					
Prob(7-10 decile)	-.423**	-.282**	-.310**	-.341**	-.493**
	(.110)	(.075)	(.118)	(.091)	(.116)
Expected income	-.005**	-.006**	-.006**	-.006**	-.006**
	(.001)	(.001)	(.001)	(.001)	(.001)

Notes: see notes to Table 4.

Controls include: Age, Married, Female, Black, Educ<12, Educ>16, Children, ln(real income), Self-employed, Unemp. last 5 yrs, Prestige>father's, Educ-father's, STATES, YEARS.

Table 8: Other mobility measures

Ordered logit. Dependent variable = support for redistribution

	t+1	t+5
COEFFICIENT ON:		
[1] Spearman mobility	-.036	.382
	(.322)	(.231)
[2] Fields-Ok	-.011	-.006
	(.013)	(.008)
[3] Fields-Ok (logs)	-.349*	-.115
	(.201)	(.224)
[4] King	.304	-.370
	(.453)	(.244)

Notes: see notes to Table 4.

Controls include: Age, Married, Female, Black, Educ<12, Educ>16, Children, ln(real income), Self-employed, Unemp. last 5 yrs, Prestige>father's, Educ-father's, STATES, YEARS.

Table 9: Equal opportunities and social mobility

Ordered logit. Dependent variable = support for redistribution		*Fraction of Yes*	*Coeff. on Expected income for those who answer*		*Test* $\beta_1 = \beta_0$
			Yes	*No*	*(p-value)*
[1]	Class differences due to ability & educ. (CLABEDU)	.40	-.008**	-.003	.00
			(.003)	(.002)	
[2]	Class differences due to family background (CLFAM)	.45	-.0036	-.007**	.02
			(.0023)	(.003)	
[3]	Class differences due to outside factors (CLOUT)	.43	-.002	-.007**	.01
			(.002)	(.003)	
[4]	Class differences persist (CLSTAY)	.70	-.005*	-.008**	.04
			(.003)	(.003)	
[5]	Class differences are justified (CLJUSTIF)	.52	-.007**	-.0004	.00
			(.003)	(.003)	
[6]	Class differences acceptable, reflect opportunities (CLACCOPP)	.74	-.006*	-.002	.20
			(.002)	(.003)	
[7]	Not everyone has opportunity to get educated (OP_EDU)	.28	-.004	-.008**	.00
			(.003)	(.003)	
[8]	Important hard work (OP_HRDWK)	.89	-.0001	.008**	.00
			(.002)	(.004)	
[9]	Important who you know (OP_KNOW)	.44	.005*	-.001	.03
			(.003)	(.002)	
[10]	Important educated parents (OP_PARED)	.42	.003	-.0005	.14
			(.003)	(.002)	
[11]	Important to come from whlty family (OP_WLTH)	.52	.002	-.0005	.08
			(.003)	(.002)	

Notes: see notes to Table 4.

Controls include: Age, Married, Female, Black, Educ<12, Educ>16, Children, ln(real income), Self-employed, Unemp. last 5 yrs, Prestige>father's, Educ-father's, STATES.

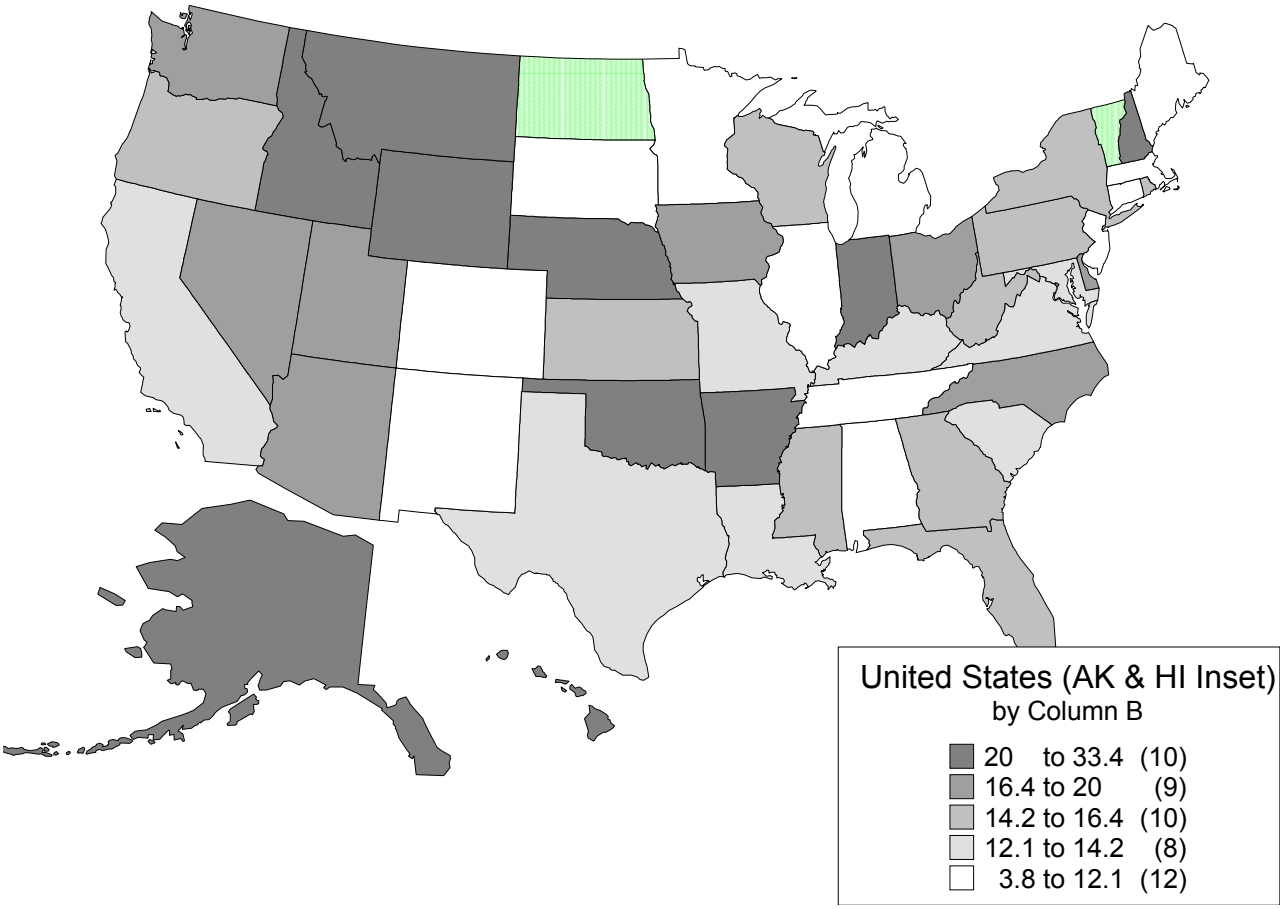
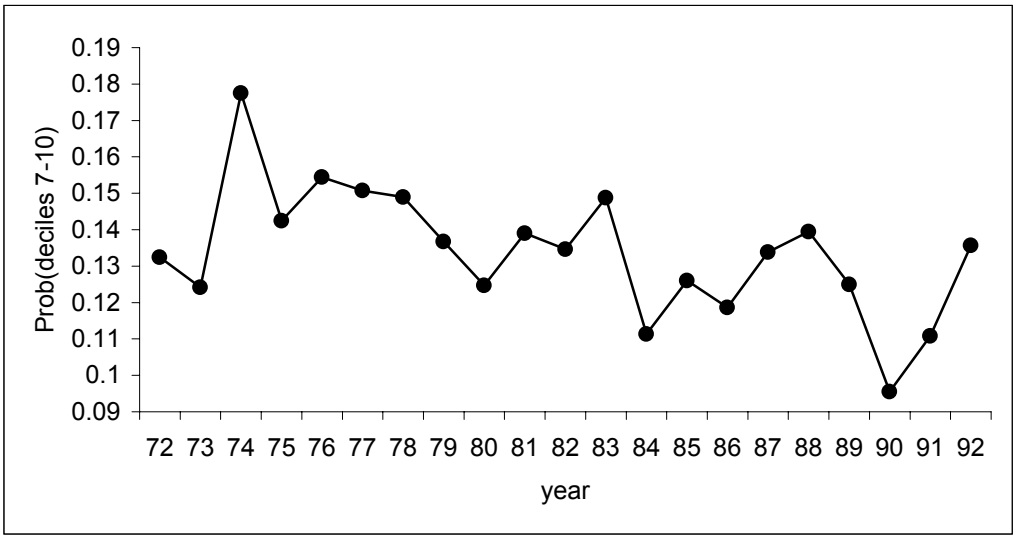
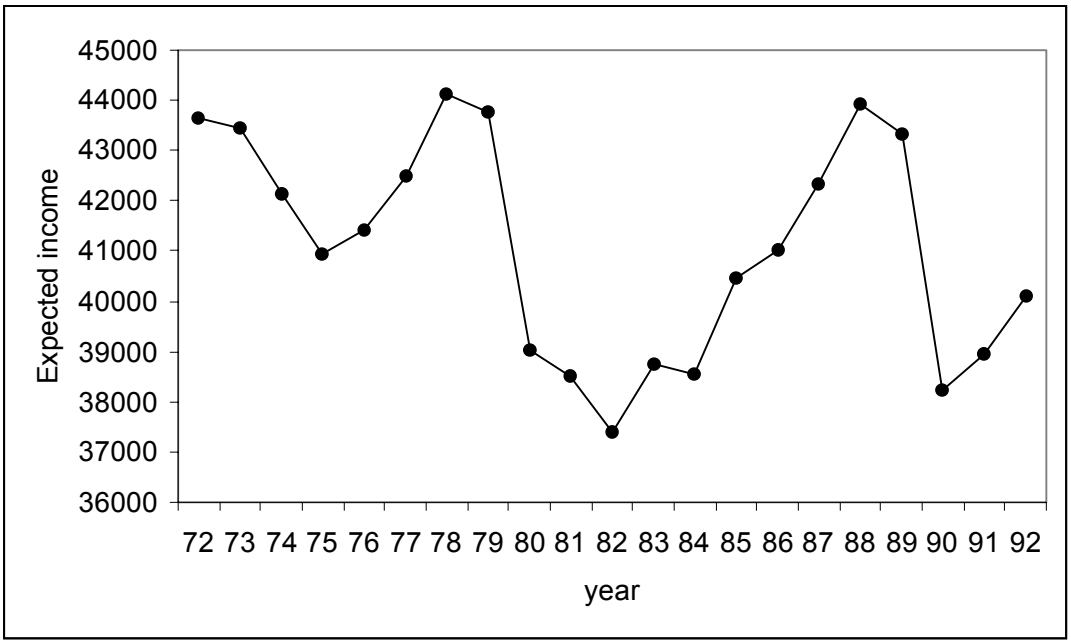


Figure 1: Probability of moving above the 6th decile ($RELMOB7^{s}_{5}$)



(a) Probability of moving above the 6th decile ($RELMOB7_5$)



(b) Expected income, constant US$ 1986 ($EXPINC^t_5$)

Figure 2: Time profile of mobility measures for the median voter