



HCEO WORKING PAPER SERIES

Working Paper



HUMAN CAPITAL AND
ECONOMIC OPPORTUNITY
GLOBAL WORKING GROUP

The University of Chicago
1126 E. 59th Street Box 107
Chicago IL 60637

www.hceconomics.org

Intergenerational Mobility and Preferences for Redistribution*

Alberto Alesina Stefanie Stantcheva Edoardo Teso

December 30, 2016

Abstract

Using newly collected cross-country survey and experimental data, we investigate how beliefs about intergenerational mobility affect preferences for redistribution in five countries: France, Italy, Sweden, U.K., and U.S.. Americans are more optimistic than Europeans about intergenerational mobility, and too optimistic relative to actual mobility. Our randomized treatment that shows respondents pessimistic information about mobility increases support for redistribution, mostly for equality of opportunity policies. A strong political polarization exists: Left-wing respondents are more pessimistic about intergenerational mobility, their preferences for redistribution are correlated with their mobility perceptions, and they respond to pessimistic information by increasing support for redistribution. None of these apply to right-wing respondents, possibly because of their extremely negative views of government.

Keywords: Redistribution, Intergenerational Mobility, Taxation, Online Experiment, Fairness.

JEL Codes: D31, D72, H21, H23, H24, H41

*Alesina: Harvard, IGIER and NBER (e-mail: aalesina@harvard.edu); Stantcheva: Harvard, CEPR, and NBER (e-mail: sstantcheva@fas.harvard.edu); Teso: Harvard (e-mail: eteso@fas.harvard.edu). We thank Andreas Peichl, Thomas Piketty, Daniel Waldenström, Matthew Weinzierl, Gabriel Zucman, and numerous seminar participants at Bocconi, Capri, Harvard, and PSE for feedback and comments. We thank Antonio Coppola and Nina Roussille, and especially Matteo Ferroni for outstanding research assistance. Stantcheva and Alesina are grateful to the Foundations of Human Behavior Initiative, the Pershing Square Foundation, and the Russell Sage Foundation for generous support.

If you believe that hard work pays off, then you work hard; if you think it's hard to get ahead even when you try, then why try at all?

J.D. Vance, *Hillbilly Elegy: A Memoir of a Family and Culture in Crisis*, (2016).

1 Introduction

John Steinbeck conjectured in 1966 that there may not be much support for redistribution in America because the working poor saw themselves as “temporarily embarrassed millionaires.”¹ Are people truly willing to accept more inequality if they think that everyone has a shot at making it? Is tolerance for inequality of outcomes intrinsically linked to belief in equality of opportunity in different countries? Understanding support for or opposition to redistribution is key given the rise in income and wealth inequality. In this paper, we work toward two goals. We want to, first, document what people think about intergenerational mobility across countries using new detailed and quantitative survey data, and, second, study the effect of social mobility perceptions on support for redistribution.

The stereotypically documented views on social mobility distinguish between “American” and “European” attitudes. Americans are thought to consider the market system relatively fair, and to believe in the “American dream,” i.e., the notion that one can make it from rags to riches provided one works hard enough. They supposedly view wealth as a reward for ability and effort, and poverty as the result of inability to take advantage of opportunity. On the contrary, Europeans tend to believe that the economic system is unfair, and that wealth is the result of family history, connections, and sticky social classes. Poverty is perceived to be the result of bad luck and the inability of society to take care of the needy regardless of their effort.

However, while the idea of the American dream may be more cherished in the U.S., it may over time have become more accurately described by the green light at the end of Daisy’s dock that Gatsby in *The Great Gatsby* likes to contemplate and reaches for relentlessly: the embodiment of a “dream” that seems “so close that [we] could hardly fail to grasp it,” that provides Gatsby with profound motivation to work hard and succeed, and yet ends up being out of reach and unattainable. Indeed, new data (Chetty et al., 2014) suggests that intergenerational mobility in the U.S. may, in fact, not be systematically higher than in Europe.

To document the anatomy of people’s beliefs about intergenerational mobility and the fairness of their economic system, we collect new survey and experimental data for five countries (France, Italy, Sweden, the U.K., and the U.S.). We compare people’s perceptions of mobility to recent data on actual intergenerational mobility in these countries to assess to what extent people’s perceptions are realistic. We highlight the heterogeneity in perceptions by socioeconomic background, political views, one’s own experience of mobility, or place of residence.

We then turn to the link between perceived intergenerational mobility and redistributive policies. We propose a simple theoretical model of how a person may choose their preferred policies. Theoretically, the correlation between mobility views and support for redistribution is ambiguous

¹John Steinbeck, *American and Americans*, 1966.

and depends on the role of perceived individual effort vs. luck, redistributive motives, and the efficiency, trustworthiness, or desirability of government intervention. This motivates our survey design with detailed, quantitative questions on respondents' views on these issues. Thanks to them, we can study the empirical correlations between views on mobility and support for redistributive policies, across countries and political affiliations.

To get at the causal link between perceptions of mobility and redistributive preferences, we implement a randomized information treatment, through which we aim to make respondents' perceptions of mobility more pessimistic by telling them that children from poor families have very little chance of making it to higher income levels, while children from rich families are likely to remain rich. Importantly, the treatment makes no mention of policies or of the government.

Our survey design is one of our contributions. We collect standardized, representative data from five countries, with detailed and quantitative questions on government, a variety of policies, and perceptions, which we believe improve upon earlier surveys. We are careful to ask policy questions which reflect a realistic trade-off, e.g. by imposing that taxes raise a certain amount of revenue, or that the budget allocation is consistent with a certain spending. We also provide experimental evidence and we randomize the order of several questions in an informative way. The questions are carefully designed to attract respondents' attention and are visually appealing and some of them interactive or animated. The online survey tools used in this paper can easily allow us to collect additional data on more countries, expand the set of questions asked, or run additional experimental treatments.

Our key findings are as follows. Americans are more optimistic than Europeans about inter-generational mobility, and they are too optimistic relative to actual mobility in the U.S., especially about the probability of a child from a family in the bottom quintile making it to the top quintile—the probability that most embodies the “American dream.” We show that, paradoxically, optimism is particularly high in U.S. states where actual mobility is particularly low. Europeans are not only more pessimistic, they are also too pessimistic relative to the true degree of mobility, and have particularly gloomy views about the probability of staying stuck in the bottom quintile or making it to the middle class. Both Americans and Europeans believe that hard work increases the chances of making it out of poverty and to the middle class, but few believe that individual effort can make a large difference for making it to the very top, or that hard work can completely make up for a poor family background.

While many respondents agree that the government can not be trusted and disagree about the optimal level of government intervention, they still think the government *a priori* has the tools to reduce unequal opportunities, and that unequal opportunities are a serious problem. Views on mobility are significantly correlated with policy preferences across all countries: more pessimistic respondents tend to favor more generous redistributive policies and higher levels of government involvement. The correlation is consistently stronger for direct “equality of opportunity” policies (e.g., public education or health spending) than for equality of outcome policies (e.g., progressive taxation or safety net policies).

Our experimental treatment has a large and significant first stage effect on mobility perceptions, making them more pessimistic. This increased pessimism persists one week later during a follow-up

survey. The treatment effects on policies are consistent with the correlations found, i.e., respondents who become more pessimistic following the treatment are more likely to support redistribution, especially through equality of opportunity policies.

There is a very strong political polarization in the views on mobility, fairness, policies, and government more generally. Left-leaning individuals are more pessimistic about social mobility and the fairness of the economic system, and are more likely to think that chances of making it are low even if one works very hard. This polarization appears especially strong in the U.S., but is significant in all countries.² It is striking that, within left-wing respondents, those who are more pessimistic about the level of intergenerational mobility support more aggressive government intervention and more redistribution, while those who are more pessimistic among right-wing respondents do not.³

Our findings indicate that, even if one could make people agree on the actual degree of social mobility, there would be no consensus on what to do about it. Indeed, left-wing respondents who are treated significantly shift their policy preferences in the expected direction of supporting more redistribution. On the other hand, although right-wing respondents exhibit an even stronger first-stage effect on their perceptions of mobility, there is barely any effect at all on their support for redistribution. The treatment is either “preaching to the choir” or “preaching to the deaf.” Left-wing respondents who were already convinced that low social mobility was a problem continue to believe in policy intervention to correct it, and the treatment further increases their support. They stand in contrast to right-wing respondents who do not favor extensive government intervention, who believe that the government does not have the tools or capacity to correct this problem, or even that excessive government is the source of the problem.⁴

Related literature. Our work builds on the theoretical literature on the link between intergenerational mobility and support for policies. [Piketty \(1995\)](#) argues that individuals’ views about social mobility and their support for redistribution depend on their own personal experience of mobility and that heterogeneous beliefs can persist because of differing private experiences. [Bénabou and Ok \(2001\)](#) discuss why the median voter may prefer lower redistribution if he considers the prospects of upward mobility in the future or for future generations. [Alesina and Angeletos \(2005\)](#) provide models with two equilibria. In the “American” equilibrium people believe that effort is the main source of income, and accordingly support low redistribution. As a result, agents do indeed put in a lot of effort and the expectation is self-fulfilling. The “European” equilibrium has the opposite features. Empirical work by [Alesina and La Ferrara \(2005\)](#) and [Alesina and Giuliano \(2011\)](#) (and the references cited therein,) confirms that views about fairness are critical determinants of preferences for redistribution.

Our work builds on many papers that have studied actual intergenerational mobility across or within countries, such as [Solon \(2002\)](#), [Björklund and Jäntti \(1997\)](#), [Jäntti et al. \(2006\)](#), [Blanden](#)

²Italy may be the exception, with a recent blurring of party lines and political turbulence.

³The only belief related to social mobility that is predictive of policy support among right-wing respondents is if they are pessimistic about the chances of children from the bottom quintile to make it to the very top despite putting in a lot of effort.

⁴Right wing respondents are more likely to say that lowering taxes to free the economy is the right way to deal with unequal opportunities.

(2013), and Roine and Waldenström (2015). Peichl and Ungerer (2016) compare intergenerational mobility in Eastern and Western Germany. Technical work on the measurement of mobility is done by Niehues and Peichl (2014).⁵ Intergenerational mobility in Sweden has been studied by Roine and Waldenström (2009), Björklund, Roine, and Waldenström (2012), and Waldenström (2016). In the U.S., Hilger (2016a) and Hilger (2016b) document long-run trends in intergenerational mobility, including among minorities. Recent research based on new IRS tax data has highlighted strong geographical disparities in opportunities (Chetty et al. (2016), Chetty and Hendren (2016)). Chetty et al. (2014) provide new local measures of mobility which we build on.

Intergenerational transmission of income and wealth has become a key issue, not the least because of several recent papers highlighting the rising inequality and concentration in wealth (Piketty and Zucman (2014), Piketty and Zucman (2015), and Piketty, Saez, and Zucman (2016)).

Also related are papers on the effects of standard redistributive policies on equality of opportunity such as Peichl et al. (2011), who focus on Europe, and Gelber and Weinzierl (2016) who study optimal policy design when parents can influence their children’s opportunities.⁶

Our paper is most closely related to the literature on how people form preferences for redistribution. Lockwood and Weinzierl (2016) and Lockwood and Weinzierl (2015) study alternative preferences for redistribution that go beyond utilitarianism. Weinzierl (2014) and Weinzierl (2016) also use online survey tools similar to ours to elicit respondents’ social welfare judgments. Ashok, Kuziemko, and Washington (2016), Charite, Fisman, and Kuziemko (2016), and Buell, Kuziemko, Norton, and Reich (2014) use experimental designs through online platforms to understand people’s fairness views and redistributive preferences.⁷ Cruces et al. (2013) study how people form their perceptions of the income distribution and how this shapes their support for redistribution. Ariely and Norton (2011) also document the biased perceptions of the income distribution. Kuziemko et al. (2015) show that shifting respondents’ perceptions of inequality only mildly increases support for redistribution.

The rest of the paper is organized as follows: Section 2 proposes a conceptual framework to interpret our empirical results. In Section 3, we describe data on and patterns of actual social mobility. Section 4 explains our survey methodology. In Section 5 we describe the perceptions of intergenerational mobility and turn to their correlation with redistribution in Section 6. Section 7 analyzes the informational experiment. The last section concludes.

2 Conceptual Framework

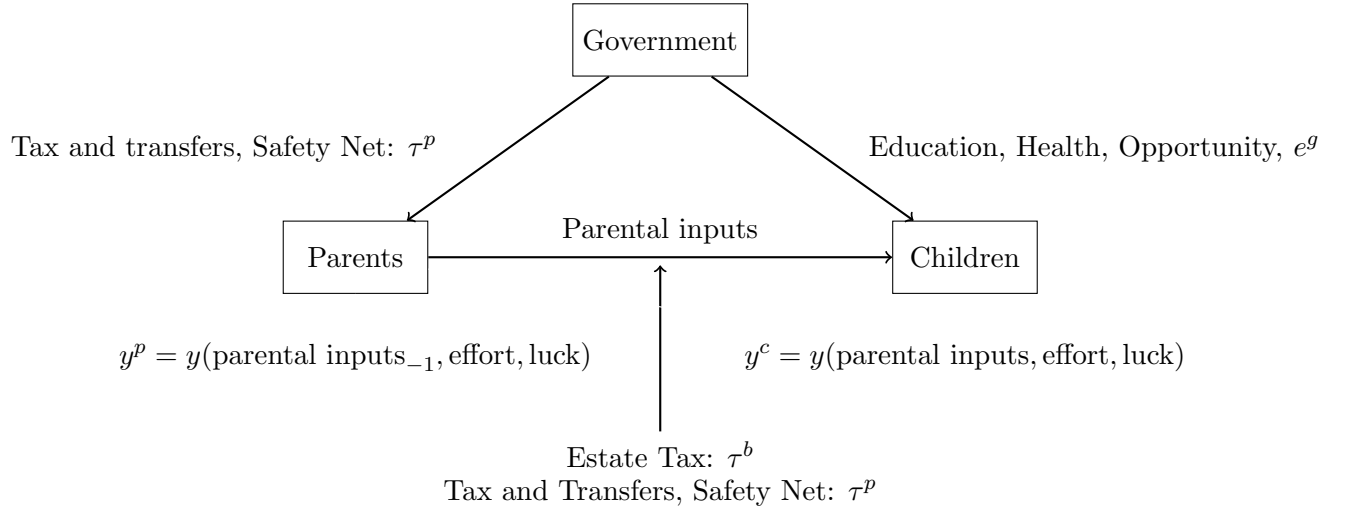
In this section, we present a simple conceptual framework through which we interpret our empirical results on respondents’ views on mobility and preferences for redistribution. The variables presented

⁵See also Gottschalk and Spolaore (2002).

⁶More generally, this work speaks to how such policies should take families rather than only individuals agents into account, as in Kleven, Kreiner and Saez (2009) or Landais, Kleven, and Sogaard (2016).

⁷In the social psychology literature, Chambers and Swan (2015) confirm that perceptions of social mobility in the U.S. are deeply divided across party lines. Davidai and Gilovich (2015) show, using survey tools, that U.S. respondents have biased perceptions about mobility relative to reality, a finding we confirm here and extend to other countries. None of these papers have an experimental component or study the link to redistributive preferences.

FIGURE 1: LINK BETWEEN PERCEPTIONS AND POLICY PREFERENCES



here have counterparts in the various questions in our survey.

2.1 Setting

The goal is to model how respondents (or voters), indexed by j , decide on their preferred policies. Figure 1 illustrates families in the economy, indexed by i , which consist of two generations, “parents” and “children.” Agents’ incomes when adult are the result of parental inputs, individual effort, and luck. Each respondent j believes in a different model of the economy that is as follows:

Earnings potential: Parents and children each have an exogenous component to their earnings potential, θ . A higher θ decreases the disutility cost of producing any given level of income. It may capture, e.g., intrinsic ability, intelligence and talent, social connections, health, or labor market shocks, i.e., the “luck” component of earnings. Respondent j believes that the distribution of earnings potential of children, conditional on the earnings potential θ^p of parents is $f^j(\theta|\theta^p)$. Thus, earnings potential may be perceived to be persistent across generations, inducing some correlation between parents’ and children’s earnings.

Government policies: The government can tax parents’ incomes at a rate τ^p , children’s incomes at rate τ^c , and bequests at rate τ^b . The government can also directly invest in children through “equality of opportunity policies,” e^g , e.g., public investments in children’s human capital through education and health policies, which can substitute at least to some extent for parental investments. Total inputs received by a child are the weighted sum of parental and governmental inputs, $e_i :=$

$\beta^j e^g + e_i^p$. According to respondent j , the importance of governmental inputs relative to parental inputs, or the rate of substitution between governmental and parental inputs, is β^j . Tax revenue finances a lump-sum transfer T and public spending on equality of opportunity policies.

Parents and children: For each family i , c_i^p is the consumption of parents, y_i^p is the income of parents. c_i^c and y_i^c are the consumption and the income of the children. e_i^p are parents' investments in their children, such as education or health expenses. b_i are the bequests left by parents, which yield a generational return R . Parents have utility:

$$U_i^p = u^p(c_i^p, y_i^p, Rb_i(1 - \tau_B), e_i, \theta_i^p)$$

which is decreasing in income earned and increasing in consumption, net-of-tax bequests left, total public and private investments e_i that their child receives, and their own earnings potential θ_i^p (because a higher θ_i^p reduces the utility cost of earning a given y_i^p , all else equal). Hence, parents have warm-glow benefits from bequests and investments in their children. Children have utility:

$$U_i^c = u^c(c_i^c, y_i^c, e_i, \gamma^j \theta_i^c)$$

which is decreasing in income earned, and increasing in consumption, total education, and earnings potential. γ^j is the perceived importance of the exogenous earnings potential or luck component by individual j . The wage could, e.g., be $w_i = w(\gamma^j \theta_i^c, \beta^j e^g + e_i^p)$; effort required to produce income y_i^c is y_i^c/w_i , decreasing in earnings potential θ_i^c and in effective governmental and parental inputs $\beta^j e^g + e_i^p$. Parents' budget constraint is:

$$c_i^p = (1 - \tau^p)y_i^p + T - b_i - e_i^p$$

while the budget constraint for children is:

$$c_i^c = (1 - \tau^c)y_i^c + T + Rb_i(1 - \tau^b)$$

The budget constraint of the government, in future value, as perceived by respondent j , is:

$$\int_i (T(1 + R) + e^g) di \leq \int_i \alpha_j (R\tau^p y_i^p + \tau^c y_i^c + R\tau^b b_i) di \quad (1)$$

$\alpha_j < 1$ is the perceived inefficiency of government for voter j : the smaller α_j , the more of tax revenue collected is dissipated and cannot be used to fund redistributive policies.

Policy preferences of respondent j : The social judgements of respondent j are embodied in the collection of marginal social welfare weights, which measure how much a respondent values \$1 of transfer to the parent or child of family i . Let g_i^j (respectively, ω_i^j) be voter j 's marginal social welfare weight on the parent (respectively, child) of family i .⁸ Respondent j 's preferred policies,

⁸For a formal presentation of social welfare weights, see Saez and Stantcheva (2016).

derived in Proposition 1, are obtained by maximizing his social welfare objective W_j given by:

$$W_j = \int_i g_i^j U_i^p di + \int_i \omega_i^j U_i^c di \quad (2)$$

subject to the government's and families' budget constraints, and taking into account families' responses to policies.

2.2 Preferred Policies of Each Respondent

Each respondent j 's different perceptions about the economy are summarized in the vector of characteristics $X^j = (\alpha^j, \beta^j, \gamma^j, f^j(\cdot), \{g_i^j\}_i, \{\omega_i^j\}_i)$. Our survey questions attempt to elicit these perceptions and their correlations with preferred policies.

Let λ be the multiplier on the government's budget constraint in (1). Let $y^p = \int_i y_i^p di$ be average parental income (which will depend on the tax policies), $b = \int_i b_i di$ be average bequests, and $y^c = \int_i y_i^c di$ be the average income of children. Denote the elasticity of variable x to tax rate τ^m for $m = \{c, p, b\}$ by $e_{x,1-\tau^m} := \frac{d \log(x)}{d \log(1-\tau^m)}$. Finally, let $\bar{y}^p := \frac{\int_i g_i^j y_i^p u_{ci}^p}{\lambda \int_i y_i^p}$ be the distributional impact of parental income: it measures how concentrated parental income is among parents with high welfare weights. We similarly define $\bar{y}^c := \frac{\int_i g_i^j y_i^c u_{ci}^c}{\lambda \int_i y_i^c}$ and $\bar{b} := \frac{\int_i g_i^j b_i u_{ci}^p}{\lambda \int_i b_i}$.

Proposition 1. Preferred Policies of Respondent j :

The preferred policies of respondent j are functions $\tau_j^p = \tau^p(X^j)$, $\tau_j^c = \tau^c(X^j)$, and $e_j^g = e^g(X^j)$ of his perceptions $X^j = (\alpha^j, \beta^j, \gamma^j, f^j(\cdot), \{g_i^j\}_i, \{\omega_i^j\}_i)$, such that:

(i) The preferred income tax rate on parents is:

$$\tau_j^p = \frac{1 - \frac{\bar{y}^p}{R\alpha_j} - \tau^b e_{b,1-\tau^p} \frac{b}{y^p}}{1 - \frac{\bar{y}^p}{R\alpha_j} + e_{y^p,1-\tau^p}} - \frac{1}{1 - \frac{\bar{y}^p}{R\alpha_j} + e_{y^p,1-\tau^p}} \frac{\int_i \omega_i^j \mathbb{E} (u_{ci}^c R(1 - \tau^b) e_{b,1-\tau^p,i} b_i + u_{ie}^c e_{e^p,1-\tau^p,i} e_i^p)}{R\lambda \alpha_j y^p} \quad (3)$$

(ii) the preferred income tax rate on children is:

$$\tau_j^c = \frac{1 - \frac{\bar{y}^c}{\alpha_j}}{1 - \frac{\bar{y}^c}{\alpha_j} + e_{y^c,1-\tau^c}} \quad (4)$$

(iii) the preferred bequest tax rate is:

$$\tau_j^b = \frac{1 - \frac{\bar{b}}{R\alpha_j} - \tau^p e_{y^p,1-\tau^b} \frac{y^p}{b}}{1 - \frac{\bar{b}}{R\alpha_j} + e_{b,1-\tau^b}} - \frac{1}{1 - \frac{\bar{b}}{R\alpha_j} + e_{b,1-\tau^b}} \frac{\int_i \omega_i^j \mathbb{E} (u_{ci}^c R(1 - \tau^b) e_{b,1-\tau^b,i} b_i + u_{ie}^c e_{e^p,1-\tau^b,i} e_i^p)}{R\lambda \alpha_j b} \quad (5)$$

(iv) The preferred equality of opportunity policy e_j^g is set such that:

$$\int_i g_i^j u_{ei}^p + \int_i \omega_i^j \mathbb{E}(u_{ei}^c) \left(1 + \frac{de_i^p}{de^g}\right) + \int_i \omega_i^j R(1-\tau^b) \mathbb{E}(u_{ci}^c) \frac{db_i}{de^g} = \lambda \left(1 - \alpha_j \int_i \left(R\tau^p \frac{dy_i^p}{de^g} + \tau^c \frac{dy_i^c}{de^g} + R\tau^b \frac{db_i}{de^g}\right)\right) \quad (6)$$

Respondent j 's preferred tax rates and equality of opportunity policies e_j^g balance the following three considerations:

Redistributive benefits: Redistributive policies are more pronounced when respondent j is more concerned with equity. For instance, the income tax rate on parents, τ^p decreases in \bar{y}^p . \bar{y}^p is smaller when weights g_i^j are more concentrated on low-income families or when there is more income inequality. The same goes for the other policies.

Efficiency concerns: Redistributive policies have efficiency costs because they cause distortions in agents' behaviors. The elasticities $e_{y^p, 1-\tau^p}$, $e_{b, 1-\tau^b}$, or $e_{y^c, 1-\tau^c}$ capture agents' responses to policies. The cross-elasticities (e.g., $e_{b, 1-\tau^p}$ or $e_{y^p, 1-\tau^b}$) capture the fiscal spillovers from one tax on another tax base. For instance, parental income taxation may affect their chosen bequests, which in turn has a fiscal spillover on the bequest tax base. Similarly, more governmental equality of opportunity policies may increase labor supply of children, and may reduce parental bequests and labor supply, and, hence, the tax revenues associated with each of these.

Spillovers on children: The preferred policies also depend on the perceived spillover on children. When parents change their bequests and human capital investments in response to taxes or governmental investments e^g , there is a first-order impact on children's utilities. How parents change those investments following policy changes depends on the balance of income and substitution effects. It is likely that for low income parents, there is a positive income effect from taxes and the lump-sum rebate. Since children's education and bequests are normal goods, they will leave more of them. On the other hand, parental inputs for high income families would be reduced.⁹ Because of parental inputs, policies that equalize parental income can act indirectly to equalize parental inputs in their children. Governmental equality of opportunity policies may crowd out parental investments, which has a direct spillover effect on children. Again, it is likely that for lower income families, the crowd-out effect is very small relative to the direct benefit from governmental inputs into children.

2.3 Predictions

We now describe some patterns we may expect to find in the survey.

1) *Perceptions of mobility and support for redistribution:* The transition function $f^j(\theta_i^c | \theta_i^p)$ shapes the persistence of earnings potential. Respondents may believe this process exhibits high persistence, if, e.g., parental connections are needed to get a good job. A higher degree of intergenerational

⁹The tax rate on bequests is set according to the same logic. The tax rate on children is also similarly determined, except that absent more than two generations, there are no spillovers to the bequest tax base or to the next generation. In fact, the formula for τ^c would also apply for the preferred tax rate on parents for a respondent who does not consider parental investments in human capital or bequests.

persistence, i.e., lower intergenerational mobility, would tend to increase the preferred tax rates on income and bequests of parents as the marginal benefit from improving low income parent’s inputs in their children through tax-financed transfers would then be higher. Moreover, if marginal social welfare weights concentrate on children from poor parental backgrounds, a higher persistence will increase the distributional concerns (i.e., will lower \bar{y}^c) and hence also increase the tax rate on children. Finally, it will tend to increase equality of opportunity policies (e^g) if children from poor backgrounds have a higher marginal return from them (u_{ei}^c higher for poor background children). We document these mobility perceptions in Section 5.1, and their correlations with policies in Section 6.3.

2) *Equality of opportunity or equality of outcome policies:* The model shows that the distinction between equality of outcome and equality of opportunity policies may not be very sharp: equality of outcome policies on the parents’ generation (e.g., parents’ income tax τ^p) are in fact equality of opportunity policies for the children’s generation because of the spillovers through parental investments. Whether a respondent prefers tax-financed transfers or direct government investments in education depends on the perceived pass-through of transfers made to the parents onto their children, on the substitutability between parental and government inputs, and on the efficiency of governmental direct inputs. In Section 6.3 we will show that mobility perceptions are more strongly correlated with equality of opportunity policies than with equality of outcome policies.

3) *Views on the role of effort:* Views on mobility are a composite of what people believe about the role of parental inputs, luck, and effort. Thus, even conditional on the same perceived social mobility, people may have very different responses in terms of policy preferences depending on whether they see low mobility as a result of low effort or the direct result of birth and unequal opportunities. In the model, respondents assign different importance to “luck” relative to individual effort, measured by γ^j . If individual effort matters less, respondents should support more redistribution, all else equal. We describe perceptions of the role of individual effort in Section 5.4 and show that correlations of perceptions conditional on effort with support for redistribution are even stronger in Section 6.3.

4) *Views on redistribution:* Respondents differ in their redistributive preferences, captured by the marginal social welfare weights on children and parents, $\{g_i^j, \omega_i^j\}_i$, which can directly depend on characteristics of family i . For instance, the weights on children can depend on whether they come from a disadvantaged background. In that case, \bar{y}^c would be the income weighted fraction of children from a poor background at each income level (Saez and Stantcheva, 2016). Rawlsian weights would concentrate on the least well-off agent. Constant weights lead to a utilitarian objective. More generally, the more a respondent cares about those with low income or low parental investments, the more redistributive his preferred policies are. We elicit views on this by asking respondents, among others, whether they think unequal opportunities are a problem.

5) *Views on government:* Respondents also differ in their perceptions of government. These are captured, first, by the scaling factor $\alpha_j \leq 1$, which measures to what extent resources are dissipated by the government, either through administrative waste, inefficiencies, rents, or outright corruption.

A more negative view of the government will tend to reduce a respondent’s preferred level of government intervention across the board. Second, respondents may have differing views on the efficiency and importance of governmental inputs relative to parental inputs, as embodied in the scaling parameter β^j . It could thus be that, while respondents perceive the government to be overall quite wasteful or untrustworthy, they still think that governmental direct inputs such as through public schools or public goods have a large impact on children. They may, hence, still support equality of opportunity policies, but not, for instance, general tax redistribution. Views of government are documented in Section 6.1, and their correlations with policies in Section 6.4.

Cross-sectional heterogeneity: In principle, the perceptions in the vector X^j may be uncorrelated and there may be many different types of respondents. One respondent may be very favorable to redistribution, but have abysmal views of the government (low α^j and β^j), and, thus, on balance, support low levels of redistributive policies. Another one may think that, in spite of government inefficiency, equality of opportunity policies are still worthwhile (high β^j despite a low α_j). Yet, another respondent may be pro-redistribution and have very positive views of government efficiency, but be very optimistic about intergenerational mobility (a low persistence of the $f^j(\theta^c|\theta^p)$ process) and the role of individual effort (small γ^j). We document in Sections 5 and 6 that these perceptions are, in fact, significantly correlated and very well-predicted by the respondent’s political affiliation.

Within-respondent changes and treatment effects: Exogenously shifting perceptions of mobility, as we will do in our treatment, may have different effects on different respondents. First, if we see a respondent’s perceptions of mobility shift, it may be that they have updated their beliefs on the persistence of earnings potential, on how hard children from low income families work, or on the role of effort. To disentangle these reasons, we also ask respondents about their views on mobility conditional on effort. Second, policies will not change in response to changes in perceptions about mobility, the role of effort, or even redistributive preferences if the views of government in α^j , or β^j (or both) are very poor. Consistent with this idea, we will show fundamentally different treatment effects on left and right wing respondents.¹⁰

3 Actual Intergenerational Mobility Across Countries

We start by describing actual intergenerational mobility across the countries in our study, against which we will compare perceptions of mobility. We use the best currently available data on intergenerational mobility; data on actual mobility is still not perfect and future research may improve it. Our own data collected through our surveys and experiment will remain valid and could be compared to updated data, should it become available.

¹⁰Other explanations exist and are possibly partially at play. Respondents may already believe that mobility is very low, so that the marginal impact of further perception changes on preferred policies is small. In addition, although perceptions may change, policies may be less sensitive to them if they are already at high levels. Further increases for redistributive concerns may be prevented by beliefs about the behavioral responses and the efficiency costs: there is a level above which policies cannot be more generous without destroying resources (i.e., there is a “Laffer curve” effect).

Our choices of countries is driven by the desire to cover a wide range of social experiences and political environments. In addition to the U.S. we picked what are typically considered to be (i) a “well functioning” welfare state (Sweden),¹¹ (ii) an unstable Southern European economy (Italy), (iii) the country with one of the largest-sized governments among developed countries (France), and (iv) a liberal Anglo-saxon European country (the U.K.).

3.1 Data Sources

To describe the data sources, we refer to the first generation as the “parents” and to the second generation as the “children.”

U.S.: Information on intergenerational mobility for the U.S. is from [Chetty et al. \(2014\)](#), based on administrative tax records covering the universe of taxpayers 1996-2012. The income of parents is measured as average total pre-tax household income over the years 1996-2000. Children belong to the 1980-85 cohorts and their family income is measured in 2011 and 2012.

Italy: Information on intergenerational mobility for Italy is from [Acciari et al. \(2016\)](#). It is based on administrative tax records covering the universe of all taxpayers aged 35-55 in 1998-99. The children’s income is measured in 2011-2012, when children are 37 or older.

Sweden: Information on intergenerational mobility for Sweden is from [Jäntti et al. \(2006\)](#). It is based on administrative data from the Statistics Sweden Register, and consists of a 20% random sample of all male children born in 1962. For the parents’ generation, only fathers’ earnings are measured in 1970, 1975 and 1980. The sons’ earnings are measured in 1996 and 2000, when the sons are 34 and 38, and are averaged over these two years.

U.K.: Information on intergenerational mobility for the U.K. is from the British Cohort Study on fathers and sons. The children sample is composed of 2806 males, all born in a single week in 1970. Their earnings are measured in 2004, when they are 34 years old. For fathers, income is the average income in 1980 and 1986, when the children were 10 and 16.

France: Information on intergenerational mobility for France is based on the 1977, 1985, and 2003 waves of the survey “Formation et Qualification professionnelle.” Since the surveys do not link individuals to their parents, we cannot directly measure parents’ income. We compute the expected income of parents based on information on their education, profession, year of birth, and region of residence, and we use income information from earlier waves to calculate the transition probabilities. Appendix A.6 provides a detailed description of this procedure.

3.2 Findings on Actual Mobility

Table 1 displays actual intergenerational mobility, based on the data just described. Row i in column j shows the actual probability that an individual born in the bottom quintile ($Q1$) of the income distribution in country j will be in quintile i as an adult.

¹¹See [Kleven \(2014\)](#).

Social mobility is on average lower in the U.S. than in other countries.¹² The probability of a child from the bottom quintile remaining in the bottom quintile is highest in the U.S. (33.1%), lower in Continental Europe (below 30%), and lowest in Sweden (26.7%). The probabilities of moving from the bottom to the fourth or to the fifth quintiles are also lowest in the U.S.. The probability of moving to the top quintile is 7.8% in the U.S., but close to 11% on average in Europe.

4 Survey Data and Methodology

We now turn to presenting our data collection and survey methodology. The questions we chose to ask are informed by the model in Section 2 of what determines respondents’ preferred policies.

4.1 Data Collection

We collected data in two waves between February and October 2016. Appendix Table A1 reports the date and sample size of the survey waves that we carried out for each country. The first wave was a smaller pilot survey, without any experimental treatment, of around 500 respondents per country. We append it to the second (main) wave for the purpose of the descriptive analysis (on the control groups only), since the questions asked were identical. The U.S. has a larger sample size because we conducted a third wave there, for the purpose of increasing the sample size for the state-level analysis in Section 5.5 and to add very few additional questions. Overall, the total sample sizes for each country are 4712 for the U.S., 2152 for the U.K., 2150 for France, 2151 for Italy, and 1498 for Sweden.¹³ We also conducted a follow-up survey (without any randomized treatment) one week after each wave on U.S. respondents to test for the persistence of the treatment effects.

U.S. respondents were reached through the survey company C&T Marketing. European countries’ data was collected through the panel company Respondi. We collected samples that were representative along the gender, age, and income dimensions by imposing specific quotas.

With the new online platforms we use for our surveys and informational experiments, larger samples or answers to different questions can very easily be collected at any time. Thus, the persistence, robustness, or sensitivity of our results can readily be studied further. We already do many checks in that direction, as described in the paper.

4.2 Survey Structure and Content

The entire text of our survey in the four languages used is reported in Appendix A.4. We worked with native speakers so as to get translations that fit well with the local culture and understanding.¹⁴ All surveys had the following general structure.

¹²Although one needs to bear in mind the enormous spatial heterogeneity in the U.S., as described in Chetty et al. (2014) and that we consider in Section 5.5.

¹³The price per respondent was higher in Europe, especially in Sweden, which explains why we had to collect slightly smaller samples there.

¹⁴The authors themselves are natives in only two of the four languages, and, hopefully, fluent in English.

Socioeconomic background and own experience of mobility: We start with questions about individuals’ socioeconomic backgrounds, such as gender, income, education, ethnicity, state and zip code, marital and family status, and political leanings. We also ask questions to assess a respondent’s own experience of mobility: we ask about their parents’ education (which we can compare to their own education), ask them to assess the level of status of their job relative to that of their father and mother, to compare their family income when growing up to that of other families at that time, and to compare their family income now to that of other families.

Views on fairness: Respondents are asked two similar (but intentionally not identical) questions about their views on the fairness of the economic system, one before the treatment and one after the treatment.¹⁵ Before the treatment, they are asked whether they perceive the economic system in their country to be “basically fair” or “basically unfair.” After the treatment, they are asked whether they believe that everyone in their country gets a chance to succeed (our so-called “American dream” question). We also ask whether they believe the main reason for being poor (respectively, rich) is the lack of effort (respectively, hard work) or rather circumstances beyond one’s control (respectively, advantages).

Randomized information treatment: The treatment is described in detail in Section 7.

Perceptions of mobility: The core part of the survey are a series of questions to elicit respondents’ beliefs about upward mobility. We ask both precise quantitative and more general qualitative questions.

The main question used to elicit respondents’ beliefs about mobility uses a picture with two ladders (see Appendix Figure A1) that represents, to the left, the parents’ income distribution, split into five quintiles, and, to the right, the children’s income distribution split into the same quintiles. Respondents have to fill out the empty fields to indicate their views on how many out of 100 children from the bottom quintile can make it to each quintile when they grow up. The answers are constrained to sum up to 100. More specifically, respondents are told:

For the following questions, we focus on 500 families that represent [THE COUNTRY’S] population. We divide them into five groups on the basis of their income, with each group containing 100 families. These groups are: the poorest 100 families, the second poorest 100 families, the middle 100 families, the second richest 100 families, and the richest 100 families.

In the following questions, we will ask you to evaluate the chances that children born in one of the poorest 100 families, once they grow up, will belong to any of these income groups. Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of 100 children coming from the poorest 100 families will grow up to be in each income group.

Respondents in the control and treatment groups are then each asked one of two additional questions (the question is randomly assigned): the first asks about the chances of very hard-working people

¹⁵Questions asked before the treatment can serve as covariates to study differential treatment effects. Questions asked after the treatment serve as outcome variables, potentially affected by the treatment.

making it. The second asks about very talented people. Specifically, we rephrase the above question, replacing the first paragraph with one of the following two options:

[Perceptions conditional on “effort”:] *Consider 100 children coming from the poorest 100 families. These children are very determined and put in hard work both at school and, later in life, when finding a job and doing that job.*

[Perceptions conditional on “talent”:] *Consider 100 children coming from the poorest 100 families. These children are very talented.*

We also ask the following qualitative versions of these questions to elicit respondents’ beliefs about mobility. Although they are less precise and cannot be compared well to actual data (as we will do with the quantitative answers), they serve as robustness checks on the quantitative ones.

Do you think the chances that a child from the poorest 100 families will grow up to be among the richest 100 families are: [Close to zero, Low, Fairly Low, Fairly High, High].

and repeat this same question for the chances of growing up to be among the second richest families.

Policy preferences: To ask about policy preferences, we split questions into three groups, namely on: 1) the overall level of government intervention that people would like (through a series of questions presented below); 2) how a fixed level of revenues should be raised; and 3) how a fixed amount of budget should be allocated to various categories of spending. This split is key to be able to distinguish respondents’ preferred total size of government from who they think should bear the costs and benefits from it.

First, respondents are asked to choose average income tax rates on four groups ranked by income: the top 1%, the next 9%, the next 40% and the bottom 50%. They are constrained to set taxes so as to raise the current level of revenue in their country, i.e., to split the current level of the tax burden in their country among the four income groups in a way that they view fair (see Appendix Figure A2).¹⁶

Second, we ask respondents to rate their support for the estate tax. Finally, we ask them to allocate 100% of the budget to six spending categories: 1) Defense and National Security, 2) Public Infrastructure, 3) Spending on Schooling and Higher Education, 4) Social Security, Medicare, Disability Insurance, and Supplementary Security Income, 5) Social Insurance and Income Support Programs, and 6) Public Spending on Health (see Appendix Figure A3).

To get a sense of the desired level of intervention, we ask respondents whether they would be in favor of “more policies to increase the opportunities for children born in poor families and to foster more equality of opportunity, such as education policies,” alerting them that these policy expansions would have to be financed through either higher taxes or reduced spending on other policies.¹⁷

¹⁶To do so, while respondents choose the average tax rates on each group using sliders (see Appendix Figure A2), a fifth slider at the bottom adjusts to show what fraction of the target revenue has been raised, and alerts the respondents when the target revenue has been met.

¹⁷This question hence imposes a budget constraint in a milder way than the aforementioned budget allocation question.

Views on government: We ask respondents about their desired scope of government intervention on a scale from 1 to 7, where 1 means “that the government should not concern itself with making the opportunities for children from poor and rich families less unequal,” and 7 means “that the government should do everything in its power to reduce this inequality of opportunities.” They are also asked whether they think that lowering taxes to stimulate growth or raising taxes to expand programs for the poor would do more to foster equal opportunities.

We ask three additional questions in a randomized way: some respondents see these before the treatment, while others see them after. For respondents who see them before, the responses are used as pre-existing characteristics to study the heterogeneous effects of the treatment among groups delimited by these characteristics. For respondents who see these after the treatment, they are treated as outcomes potentially influenced by the treatment. These three questions are, first, about the trust in the government (“How much of the time do you think you can trust the government to do what is right?”), how much people think that the government can do about unequal opportunities for children from poor and rich families, and whether they believe that if opportunities are unequal among children from poor and rich families, this is a problem. The latter question is at a general level about whether people care about unequal opportunities and perceive them as something to be eliminated. Importantly, it does not ask about whether people think that opportunities in their country are currently too unequal or not.

There are therefore three randomizations in place, which create 8 treatment or control groups, summarized in Appendix Table A2: 1) the main informational treatment (see Section 7), 2) whether respondents are asked about the chances of very-hard working children or talented children, and 3) whether respondents are asked the three questions on government (described in the previous paragraph) before or after the questions eliciting mobility perceptions.

The definition of the variables used in the tables and based on the answers to these questions is in Appendix A.2.

4.3 Ensuring Data Quality

Overall, the quality of the answers in terms of consistency and internal logic was excellent. Respondents did not express unrealistic views—i.e., levels of policies that would be difficult to justify under reasonable economic assumptions—about mobility and policies. We took several steps to ensure the best possible data quality. First, in the start and consent page of the survey (see Appendix Figure A4), we warn respondents that “*responding without adequate effort may result in [their] responses being flagged for low quality.*” At the same time, we appeal to respondents’ sense of social responsibility by saying that we are non-partisan researchers who seek to improve knowledge on social issues and add that “*it is very important for the success of our research that you answer honestly and read the questions very carefully before answering.*” We also keep track of the time that respondents spend on each survey page so as to be able to flag respondents who spend an unreasonably short amount of time on some question. We drop the few respondents (7.6% across all waves and countries) who spend less than 5 minutes on the full survey or less than 30 seconds on the main mobility question.

After the section with background questions and before we show the treatment, we ask respondents whether they have “*devoted [their] full attention to the questions so far*” and whether they think, in their honest opinion, that we should use their responses for the study. Only 0.78% of respondents answered that we should not use their responses for our study. The goal of this “attention check” question has been shown by Meade and Craig (2012) to stimulate respondents to pay extra attention for the subsequent questions (rather than to truly detect dishonest replies). We strategically placed this question right before one of the most important questions eliciting views on intergenerational mobility.

For the “ladder” question that elicits views on social mobility, we constrain the answers to sum up to 100 and tell respondents that they need at least one minute to read and think through this question. We check for careless or strange answer patterns by tabulating the response distributions and flagging responses such as “0” or “100.” Appendix Table A3 reports the tabulations of such cases of which there are, fortunately, very few. In separate survey waves, we tested different formulations of this question, e.g., asking the questions in an ascending vs. a descending order (if one is worried that the quintile that is put last at the bottom will mechanically receive the “residual” probability that does not truly reflect the respondent’s opinion), asking about the quintiles on different survey pages (rather than one below the other) and constraining the answers to sum to 100 vs. not constraining them. These variations did not fundamentally affect our results and are all available on demand. We also ask about mobility in a more qualitative way as described in Section 4.2.

Finally, at the end of the survey, we ask respondents for feedback and whether they believe the survey was politically biased. Only 17.7% of respondents say they felt that it was. 11.4% felt it was left-wing biased, while 6.3% felt it was right-wing biased.

4.4 Sample Characteristics

Tables A4 and A5 show the demographic characteristics of all samples collected. By construction, they are representative along the gender, age, and income dimensions. The other non-targeted respondent characteristics are broadly representative as well. Table A6 shows that the three layers of randomization were balanced along observable characteristics.

5 Mobility Perceptions and Misperceptions

In this section, we document the anatomy of mobility and fairness perceptions across countries. We only use the control groups of each wave, who did not see the informational treatment. The perceptions documented here inform the parameters for each respondent (X^j) from Section 2.

5.1 Mobility Perceptions Across Countries

Table 2 shows the perceived intergenerational mobility for respondents in different countries. Row i in column j reports the average probability respondents assign to a child from a family in the bottom quintile (Q_1) in country j to move to quintile i when adult. Table 3 provides a more

detailed account of policy perceptions, including by political affiliation, by country, as well as based on the qualitative questions.

Overall, U.S. respondents are more optimistic than Europeans. The former believe the chance of a child from the bottom quintile of making it to the top quintile is 11.72%, while the other countries’ respondents believe this number to be between 9.1% and 10.14%. Symmetrically, U.S. respondents think there is a lower chance of staying stuck in the bottom quintile (32%), while European respondents think this chance is higher (up to 38% in the U.K.).

To compare these perceptions to the actual data in a more systematic way, we construct the following measure of optimism. Let $p_c(1, j)$ be the true probability (reported in Table 1) of moving from quintile 1 to quintile j in country c , and let $\pi_c^i(1, j)$ be the corresponding perceived probability by respondent i . The average over all respondents from country c is $\bar{\pi}_c(1, j)$ (as reported in Table 2). The degree of optimism is then defined as:

For $j \geq 3$:

$$\frac{\bar{\pi}_c(1, j) - p_c(1, j)}{p_c(1, j)}$$

and for $j = 1, 2$ as:

$$\frac{p_c(1, j) - \bar{\pi}_c(1, j)}{p_c(1, j)}$$

In other words we measure optimism as an over-prediction of the probability of moving up in the ladder (to the third, fourth or fifth quintiles), or an underprediction of remaining in the bottom quintile or moving only to the second quintile. Pessimism is defined as the opposite.

Figure 2 plots the degree of optimism or pessimism for all countries. In general, Europeans are not only more pessimistic than Americans, they are also too pessimistic relative to reality, while Americans are too optimistic. Three additional facts stand out. First, Americans vastly over-estimate the probability of making it to the top of the ladder for children starting from the bottom. This is the embodiment of the idea of the “American dream.” Second, Europeans are too pessimistic about the chances of getting out of poverty, i.e., the chances of getting out of the bottom quintile. Third, Europeans are also too pessimistic about the probability of making it to the upper middle class (the fourth quintile). The answers to the qualitative questions are highly correlated with those of the quantitative questions and paint a very similar picture.

5.2 Heterogeneity in Perceptions

Table 3 also shows that, in all countries, left-wing respondents are more pessimistic about mobility than right-wing respondents.¹⁸ We defined “left-wing” respondents as those who say they are “liberal” or “very liberal” on economic issues. “Right-wing” respondents are those who report to be “conservative” or “very conservative” on economic issues.¹⁹ The difference between left and right wing respondents is especially striking for the U.S., where there is an 8 percentage point gap in the

¹⁸Traditional political lines seem to recently have been somewhat blurred in Italy, as we also see in our data.

¹⁹Focusing our survey question exclusively on economic issues allows us to better compare political orientations across countries, where different parties sometimes mix traditionally liberal and traditionally conservative elements depending on whether one considers economic or social issues.

perceived probability of remaining in the first quintile between left and right wing respondents.

We now turn to a systematic analysis of which individual characteristics are most correlated with perceptions of mobility. Table 4 compares the mean perceptions of mobility among respondents with different characteristics. Appendix Table A7 provides the corresponding partial correlations, regressing the perception of mobility on a full set of respondent-specific characteristics and country fixed effects, which are complementary to the raw correlations.

We observe several interesting correlations of respondent characteristics with pessimism, i.e., with a higher perceived probability of remaining in the bottom quintile and a lower perceived probability of moving to or above the fourth quintile. Men, those without children, the higher income respondents, the college-educated, and left-wing respondents are more likely to be pessimistic. Those who believe that being rich or being poor are mostly the result of individual effort, who believe the economic system is fair, and who believe that unequal opportunities are not a problem are much more optimistic. One of the strongest predictors of mobility perception is political orientation, as already alluded to.

Also significant, but less so, is whether one has experienced upward mobility during one’s life,²⁰ and whether one is the child of immigrants, with both of these predicting more optimism. The young have more polarized views and tend to lend more probability to the tail outcomes: they are both more pessimistic about the likelihood of being stuck in the bottom quintile and more optimistic about the likelihood of making it to the top quintile. The qualitative measures are generally consistent with the quantitative ones.²¹

Appendix Tables A8 - A12 repeat the equivalent of Table 4 for each country separately. Three facts stand out. Right-wing respondents systematically hold more optimistic views. In the U.S., both left and right-wing respondents are too optimistic about the chances of moving to the top quintile. In Europe, the gap between left and right wing respondents in terms of their perceptions of mobility is less wide than in the U.S..

5.3 Views on Fairness

Table 5 describes respondents’ views on fairness. The first column shows the fraction of respondents who think the system is “basically fair, since all [members of country X] have an equal opportunity to succeed.” On average, U.S. respondents have a much higher tendency to agree with this statement than European respondents, excluding Swedish ones. Nevertheless, the image that emerges is one of widespread discontent. Just about half of U.S. and U.K. respondents agree with this statement, while the fraction of respondents who agree is abysmally low in France and Italy, at respectively 19% and 10%. Only Swedes seem content on this issue – 65% believe in the fairness of the Swedish economic system.

The second column shows the fraction of respondents who agree with the statement that “in [country X] everybody has a chance to make it and be economically successful.” This is the idea of

²⁰This is consistent with the idea in Piketty (1995) that a personal experience of mobility leads to an update of one’s beliefs about the underlying social mobility mechanism.

²¹The significance levels are not always perfectly aligned, as may be expected given that one variable is continuous and the other is categorical or binary.

the “American Dream.” U.S. respondents are by far the most likely to agree with this statement (53% of respondents agree). But gloom is widespread on this issue as well: only about 8% of Italian respondents and 16% of French respondents agree with this statement.

The last two columns focus on whether respondents believe the main determinant of being poor or rich is effort or luck. This informs the parameter γ^j in our model. Column 3 shows the fraction of respondents who believe that a person is poor first and foremost because of a lack of effort rather than due to “circumstances beyond his or her control,” while column 4 shows the fraction of respondents who believe that a person becomes rich mostly because she “worked harder than others” and not because she “had more advantages than others.” U.S. respondents believe more strongly in the role of effort, both in getting out of poverty and in becoming rich. Italians believe the least in the effect of effort on economic outcomes.²²

The table also shows that left-wing respondents hold more pessimistic views on fairness. Only 26% of them (as opposed to 49% of right wing respondents) think that the system is “basically fair” (column 1), only 24% think that everybody gets a fair shot, and only respectively 19% and 18% (as opposed to 46% and 46% for right-wing respondents) think that effort or lack thereof is the main reason for being poor or rich. The political polarization of views on fairness is most prevalent in the U.S. and the U.K.. However, the political polarization on the role of effort is prevalent in all countries.²³

5.4 Perceived Role of Individual Effort and Hard Work

Key elements in the debate about social mobility are the scope for individual responsibility and the extent to which individual effort pays off. They are also some of the main determinants of a respondent’s preferred policies in the model in Section 2. We try to address this issue thanks to our specifically designed questions.

Table 6 Panel A, and Figure 3 show the perceptions of respondents in the U.S. and Europe when respondents are asked to think about a group of “very hard-working” children from poor families. Panel B shows the percent change in the perceived transition probabilities when asked to think conditional on effort relative to the unconditional case. Three findings stand out.

First, the perceived probabilities of moving up the social ladder are higher and the probability of staying stuck in the bottom quintile are much lower conditional on effort, which implies that respondents do believe that effort matters. Second, although effort affects the chances of moving up, people seem to believe that it does less to reach the top quintile (in percent terms). Finally, even conditional on effort, respondents perceive intergenerational mobility to be far from perfect. This means that they must still think the chances of making it in life depend in a nontrivial way on luck, parental background, or both, and that one can not necessarily pull oneself up by one’s bootstraps from the bottom to the top quintile. This is the case even though the question was intentionally phrased in a strong way to make respondents think about a “best case scenario” for poor children.

²²These differing perceptions in the role of effort versus luck are at the core of the multiple equilibria (called the “U.S.” and the “European” equilibria) in Alesina and Angeletos (2005).

²³Except in Italy where pessimism seems to reign across the political spectrum.

Table 7—described in more detail right below—shows these answers to be consistent with respondents’ self-reported world views: respondents who answered that the main reason for being poor or rich is individual effort (or lack thereof) update their belief about staying stuck in the bottom quintile by more when asked to think conditional on effort.

Some respondents are instead randomly asked about transition probabilities, but conditional on talent, rather than on hard work. Figure 3 and Appendix Table A13 compare the baseline, unconditional perceptions of respondents to those conditional on talent or effort. Effort and talent seem to have almost identical effects on people’s perceptions of mobility.

Which groups are more optimistic conditional on individual effort? Table 7 compares the means across groups in perceptions conditional on effort.²⁴

When asked to think conditional on effort, young people are more optimistic about children from families in the bottom quintile making it to the fourth and top quintile. The same goes for right-wing respondents, for children of immigrants, for those who have experienced upward mobility themselves, for those who believe that the main reason for being poor is lack of effort, that the main reason for being rich is individual effort, that the economic system is broadly fair, and that unequal opportunities are not a problem. Hence, the groups which we found to be more pessimistic (respectively, optimistic) in general (i.e., unconditional on effort) are also more pessimistic (respectively, optimistic) conditional on effort. Appendix Table A15 shows these heterogeneous effects for mobility perceptions conditional on talent, and shows very similar patterns.

Who believes more in the impact of individual effort? In addition, some groups update their beliefs significantly more positively than others when asked to think about social mobility conditional on effort. The last two columns of Table 7 and Appendix Table A14 show the difference between the perceived probability of making it conditional on effort and the unconditional probability. We say that a respondent believes more in the effect of effort on social mobility if he updates more his probability of a child from the bottom quintile moving to the top quintile when asked to think conditionally on effort and hard work.

Groups which believe more in the role of effort for improving the chances of moving out of the bottom quintile are the college educated, and, understandably, those who believe the reason for being poor is lack of effort. Those who believe more in the role of effort for improving the chances of making it to the very top quintile are the young, the college educated, the right-wing, those who believe that the main reason for being either rich or poor is effort, and those who think that the system is broadly fair. Those who believe that unequal opportunities are in principle a problem do not update their beliefs conditional on effort more or less strongly (although they are, as with their unconditional beliefs, significantly more pessimistic about mobility conditional on effort).

It is interesting that left and right wing respondents do not update in a significantly different way their belief about the chances of staying stuck in the bottom quintile. This means that, across the political spectrum, respondents agree by how much individual effort improves the chances of

²⁴Appendix Table A14 provides the partial correlations in a multivariate regression that includes individual covariates and country fixed effects.

escaping the bottom quintile. However, the difference lies in how left and right wing respondents update their beliefs about making it to the top quintile conditional on effort: right-wing respondents believe much more in the impact of effort.

5.5 Geography of Perceptions in the U.S.

The work by Chetty et al. (2014) has shown that the degree of social mobility in the U.S. varies dramatically across regions. In our data, we can explore the geographical variation in *perceptions* of mobility.²⁵

The top left panel of Figure 4 represents actual mobility at the state level. It is here measured by the probability of a child from a family in the bottom quintile making it to the top quintile. In general, mobility is higher (as indicated by darker colors) in the North and North West and lower in the South and South East. The top right panel replicates this map, but now plots the perceptions of respondents from a particular state. Even a cursory look shows a negative correlation between the two maps. The bottom left panel of Figure 4 shows the ratio of the perceived transition probability from the bottom to the top quintile over the actual probability. Overoptimism seems higher in places with lower mobility. Formally, the correlation between actual and perceived mobility at the state level is -0.3 (p-value of 0.04).²⁶

The bottom right panel of Figure 4 shows that the degree of overoptimism relative to the national average in the U.S., not relative to the mobility in the state. The same patterns are apparent, which suggests that the same states which are more overoptimistic relative to the state-level mobility are also more overoptimistic relative to the national mobility level.

Are perceptions of mobility geographically correlated with other key socio-economic variables?²⁷ We explore this systematically at the commuting zone (CZ) level, assigning respondents to CZs using their zip codes, and using actual mobility numbers and several key covariates from Chetty et al. (2014).²⁸ Appendix Table A16 considers the effect on perceived mobility of measures of racial segregation, income segregation, social capital, the Gini coefficient, the share of employment in manufacturing, and the college graduation rate controlling for the respondent’s gender, age, number of children, income, political affiliation, educational attainment, personal mobility experience, and immigrant status. Perceptions are more optimistic when there is more racial segregation, less income segregation, and more social capital. The latter two correlations are as one may expect: with a lot of income segregation, one may never see people who “made it” out of poorer families, since poor and rich families do not live together. The sign of the effect of racial segregation may seem odd at first. It could be that people affected by low mobility and who one may expect to be pessimistic (i.e., segregated minorities) do not appear in our sample enough. But we actually

²⁵Newman et al. (2015) document the link between local inequality and the belief that the U.S. is a meritocracy.

²⁶Excluding South Carolina, North Carolina, Virginia, West Virginia, Tennessee, Kentucky, Georgia, Alabama, Mississippi, and Florida from the calculation yields a correlation of -0.34 with a p-value of 0.06.

²⁷Regressing the perceived transition probabilities from the bottom quintile to the top quintile on the actual probabilities, controlling for our standard individual-level covariates shows a significant negative effect of -0.396 (standard error 0.136), similar to the one at the state level.

²⁸We could in principle go into even finer detail at the zip code level since we know respondents’ zip codes, but we do not have data on actual mobility at the zip code level.

tend to find that, although a small share of the sample, minority groups are more optimistic about mobility on balance. This may be consistent with a large body of evidence from the social psychology literature (see the survey paper by Jost et al. (2004)) on “system justification” that emphasizes that, somewhat paradoxically, particularly bad social and economic situations tend to be self-justified by respondents to avoid cognitive dissonance and to lend some legitimacy to the suffering it causes.

Overall, the geographical patterns in perceptions, and their correlations with other key socio-economic variables raise many interesting questions that could be explored further in future work.

6 Perceptions of Mobility and Policy Preferences

Do these perceptions of mobility correlate with policy preferences? In the model in Section 2, we saw that the answer to this question is ambiguous depending on a respondent’s underlying perceptions of government, redistributive preferences, and the role of individual effort. We will see in this section that, indeed, the link between mobility perceptions and support for redistribution will be very different depending on the political views of the respondent. We start by documenting the patterns of views on government and support for policies across countries and political affiliations, and then turn to their correlations with mobility perceptions.

6.1 Views of Government

Views of government are complex and multi-faceted. This is why our survey asked five different questions on government, the answers to which are summarized in Table 8. The questions seek to understand whether respondents think that their government can be trusted to do the right thing (column 1), whether it has the capacity and tools to reduce unequal opportunities (column 2), whether government intervention is desirable to reduce unequal opportunities (column 3), whether starting from the status quo the right way to go is towards more government intervention, i.e., “raising taxes” or less government intervention, i.e., “lowering taxes” (column 4). Column 5 inquires about whether people perceive unequal opportunities to be a problem to start with, and, hence, a potential area for government intervention.

The first fact that stands out is that many respondents are reluctant to say that they trust the government. The fraction of people who feel they “can trust the government to do what is right” “most of the time” or “always” (as opposed to “never” or “only sometimes”) is low overall, both on the left and the right. It is particularly low in the countries currently (October 2016) undergoing a crisis, such as the U.K. after the Brexit vote, or which have had stagnant growth and poor economic outcomes like France and Italy. The only exception is Sweden. At the same time, when asked whether in principle the government has “the ability and tools” to “reduce the inequality of opportunities between children born in poor and rich families”, most respondents answer that the government can do “some” or “a lot.”

When asked to designate the optimal scope of government intervention to reduce unequal opportunities on a scale of 1 to 7 (increasing in the desired strength of intervention), U.S. respondents

express a wish for lower government intervention intensity than European countries. This does not mean that respondents support further expansions of the role of government starting from their current status quo. Indeed, when respondents are asked about “what [they] think would do more to make the opportunities for children from poor and rich families less unequal” the fraction of respondents who think that “lowering taxes on wealthy people and corporations to encourage more investment in economic growth” would be better than “raising taxes on wealthy people and corporations to expand programs for the poor” is 32% in the U.S. but even higher in France and Italy. Given that the answer to this question depends on the starting level of taxes in a country, this may not be surprising, as the U.S. has less heavy taxes than either of the European countries.

A particularly striking agreement across countries and political orientations is on the view that unequal opportunities for children from poor and rich families – should they exist – would be a problem (column 5).²⁹ We could, hence, in principle, expect that more pessimism about the fairness of opportunities would be correlated with support for policies to equalize opportunities.

Left and right wing respondents’ views on government: Left-wing respondents are significantly more likely to believe that the government has the tools and capacity to address unequal opportunities and are more likely to think that unequal opportunities are a problem. They support significantly higher levels of government intervention than right wing respondents. The starkest contrast is that right-wing respondents are much more likely to think that scaling back the involvement of government in the economy is the better way to improve unequal opportunities. Overall, close to 60% of right-wing respondents believe that less government involvement, and freeing the economy is the key to address unequal opportunities, as opposed to just 20% of left-wing respondents.

A respondent may oppose more redistribution if he has a negative view of the government on *any* of the dimensions we ask about. The last two columns of Table 8 show the fraction of such respondents, split by political affiliation. Column 6 reports the fraction of respondents who answer that they can “never” trust the government, or that, to reduce the inequality of opportunities between children born in poor and rich families, the government has the ability and the tools to do “nothing at all” or “not much,” that they support little government intervention (less than 4 on the scale of 1 to 7), or that “lowering taxes on wealthy people and corporations to encourage more investment in economic growth” would be the better way to equalize opportunities. Column 7 reports the fraction of respondents who believe either of the above or also that effort is the main determinant of being poor or rich, or that if opportunities are not unequal, this is not a problem or a small problem.

The polarization between left-wing and right-wing respondents and its consistency across all countries is striking.³⁰ The fraction of right-wing respondents who hold a negative view of the government along at least one of the dimensions we ask about is staggeringly high, up to 90%. On the other hand, even according to the most stringent measure of government distrust, left-wing

²⁹Recall that this question is about respondents’ general attitude towards unequal opportunities and does not specifically ask about their perceptions of the extent of mobility in their own country.

³⁰The one exception is France, where, views of government are abysmal across the full political spectrum.

respondents have a much more favorable opinion of government, its role, its desirability, and its capacities.

6.2 Preferred Tax Policies and Public Spending

Table 9 summarizes the preferences on taxes and public spending across countries and along the political spectrum.

Tax policies: We report the answers to the tax questions in two informative ways. Recall that respondents were asked to set their preferred average tax rates on four income groups (the top 1%, the next 9%, the next 40%, and the bottom 50%) so as to raise the current revenue in their country. U.S. respondents have the lowest preferred average tax rates for all groups. We also report the share of total tax revenue that respondents think each income group should pay, which indicate how respondents want to split the total tax burden, and filters out the size of that tax burden. According to this measure, U.S. respondents have the most progressive desired tax system with the top 1% paying the largest and the bottom 50% the lowest share of taxes. This may in part be a reflection of the fact that the top 1% in the U.S. has a higher share of (an also higher) national income and that the size of the tax burden as a share of GDP is smaller. Respondents may have different views on who should share the tax burden if the U.S. had a twice larger tax revenue requirement for instance. In all regressions below, we include country fixed effects to filter out these differences.

Within country, the comparisons are straightforward. Left-wing respondents naturally support more progressive tax systems, with significantly higher tax rates on the top 1% and significantly lower tax rates on the bottom 50% (and, correspondingly, a much higher tax share shouldered by the top income group).

Public spending: Spending categories have been grouped into three broader sets: “Safety Net” includes social insurance and income support programs (category 5 in the survey question, as described in Section 4), “Opportunities” includes spending on schooling and higher education, as well as public spending on health (categories 3 and 6). The “Residual” category (not shown in Table 9) includes public spending on defense, national security, public infrastructure, pensions, Medicare, and disability insurance.³¹ The patterns on the desired budget allocations that stand out are that, first, support for safety net policies is remarkably consistent across countries. Second, support for equality of opportunity policies (education and health) is in general quite high, while support for the estate tax is very low, especially in France, Italy, and Sweden.³² U.S. respondents are willing to allocate a lower share of the budget to equality of opportunity policies than European respondents. Consistent with these quantitative answers about the budget allocation, support for

³¹We grouped the variables in this way for the analysis, but respondents only saw the six categories as described in Section 4 and in Appendix A.4.

³²France has had, since 2011, a tax on wealth above 1.3 million euros, which is unpopular. Sweden abolished its inheritance tax in 2004. Italy has a low rate of estate and inheritance taxes.

equality of opportunity policies on a scale of 1 to 5 is lower for U.S. respondents.³³ It is worth noting, however, that the survey was taken only a few months after several major terrorist attacks in Europe and in a climate of on-going terrorist threat, and that perhaps the residual category which included defense was especially high at this time. This effect may have slightly reduced the difference in the desired spending allocation between European and U.S. respondents.

Left-wing respondents are more likely to want to spend more on the safety net and equality of opportunity policies. These differences between left and right in terms of preferred policies are substantial, but not surprising. What will be more surprising is that the left and right wing respondents are also very different in terms of their correlation between their perceptions about mobility and their views about policy.

6.3 Correlation Between Policy Preferences and Views on Mobility

Let us call “pessimism” a higher perceived probability of a child from a family in the bottom quintile remaining in the bottom quintile and “optimism” a higher perceived probability of moving to the top quintile. We regress the policy preferences presented in Section 6.2 on the perceived transition probabilities, including all individual level controls and country fixed effects. Hence, we capture the residual effect of pessimism or optimism on policy preferences, conditional on many individual characteristics, including political views.

The first panel in Table 10 shows the results in the full sample.³⁴ Pessimism is significantly positively correlated with support for redistribution, i.e., with a higher tax rate on the top 1%, a lower tax rate on the bottom 50%, a higher share of the budget allocated to equality of opportunity policies or to safety net policies, and stronger support for spending more on equality of opportunity policies (qualitative question). Optimism is significantly negatively correlated with these same policies, except with the spending on the safety net. Overall, support for equality of opportunity policies is much more sensitive to pessimism and optimism than support for equality of outcome policies such as safety net policies. For instance, an increase in the perceived probability of remaining in the bottom quintile of 1 percentage point increases desired spending on equality of opportunity policies by 0.03 percentage points, but increases spending on the safety net by only 0.01 percentage points. The estate tax is not at all affected by views on mobility.

6.3.1 Policy preferences, views on mobility, and individual effort

Table 10 also shows the correlations of policies with the perceived probability of remaining in the bottom quintile and the perceived probability of moving to the top quintile, but they are now based on the question that asks respondents to think about a very hard-working child who later in life also becomes a hard-working adult. The correlations of optimism and pessimism with redistributive policies are consistently highly significant and at least weakly stronger than the ones unconditional on effort. For instance, if a respondent thinks that one less child out of 100 from the bottom

³³Recall that we tell respondents that other policies may have to be cut or taxes raised in order to finance an expansion of these policies so that respondents internalize that these policies are costly.

³⁴For the corresponding binscatters, see Appendix Figure A7.

quintile can make it to the top quintile, unconditional on effort, this leads to a 0.04 percentage points increase in the top tax rate, while conditional on effort it would lead to a 0.07 percentage points increase. The estate tax is significantly correlated with pessimism conditional on effort, while it was not correlated with unconditional pessimism. This is very consistent with respondents perceiving the situation as being “worse” and in more dire need of redistribution if, even conditional on effort, the probabilities of poor children making it are low. This was also emphasized by the model in Section 2 where a bigger perceived role of luck versus effort (captured by γ^j) leads to more redistribution.

6.3.2 Contrast between left and right wing respondents

The lower two panels of Table 10 split the sample according to political orientation. Left-wing respondents are very sensitive to pessimism and optimism. It increases their support for all types of redistributive policies. When asked to think conditional on effort, they keep supporting more redistribution consistently. However, overall, their redistributive preferences do not change drastically when asked to think conditionally on effort relative to the unconditional case.

On the other hand, right-wing respondents are less sensitive to either optimism or pessimism. The only policy that is mildly correlated with mobility perceptions is the bottom 50% tax rate. It appears as if right-wing respondents simply do not want much redistribution, regardless of their views on mobility. However, right-wing respondents’ policy preferences do seem to be correlated with their beliefs conditional on effort. The key belief for them that is most strongly correlated with redistributive preferences seems to be whether one can make it to the top quintile conditional on effort: respondents who hold a stronger such belief want significantly less progressive taxation (higher taxes on the bottom 50%), support significantly less equality of opportunity policies and significantly less spending on the safety net.

To sum up, right-wing respondents not only do not want much redistribution to start with, they do not want more redistribution even if they are more pessimistic or optimistic, unless they think that despite the maximal effort, a poor kid is doomed to not make it out of the bottom quintile, but especially and most importantly, is not able to make it to the top quintile.

6.3.3 Differences between countries

Appendix Table A17 provides these same correlations of pessimism and optimism with policy preferences, but split by country. While broadly confirming what has already been described so far, this table also shows some interesting new patterns for different countries. First, in all countries, the budget allocated to opportunities and the support for opportunities is very significantly correlated with optimism or pessimism (conditional on effort or not), while the budget allocated to safety net policies or support for the estate tax are not very correlated with perceptions. Second, in Europe, pessimism and optimism, both conditional and unconditional on effort is correlated with respondents’ preferences on both taxes and public spending. In the U.S., it appears to be mostly perceptions conditional on effort that matter, consistent with the larger perceived role of individual effort in the U.S., documented in Section 5.4. In addition, optimism and pessimism in the U.S. are

mostly correlated with the public spending side (how to spend a given budget), and not as much with the tax side of policy (how to split a given tax burden).

6.4 Correlation Between Policy Preferences and Views on Government

Worse views of the government are negatively correlated with support for redistribution. Table 11 shows the correlation of a higher trust in government with the main policy variables. More government trust is consistently associated with more support for redistribution, especially in the U.S. The correlation across all countries and more particularly for the U.S. is highest for right-wing respondents. Their redistributive policy support seems particularly sensitive to their views on government.

Appendix Table A18 shows the broader correlations between support for policies and all the measures of views of government. The effects all go in the same expected direction: the worse the view of government, the less redistributive support.

Thinking back of the model in Section 2, we can see that the preferences for redistributive policies, and perceptions of mobility, fairness, and government, i.e., all the components of the respondent-specific vector X^j , are correlated across types of respondents. Appendix Table A19 shows this formally, by providing the strongly positive and significant correlations between the answers of respondents to the different questions. To summarize, there are two types of respondents, that can be called “left-wing” and “right-wing.” Left-wing respondents have pessimistic views on mobility and believe the government has the tools to act against unequal opportunities, that more government involvement is the better way to address unequal opportunities, that unequal opportunities are a serious problem, and that spending on equality of opportunity policies should be expanded. Right-wing believe the opposite on each of these issues. We will keep these correlations in mind when interpreting the results from our experimental treatment.

7 Randomized Information Experiment

The previous section presented the correlations between mobility perceptions, views on government, and support for redistribution across countries and political affiliations. In this section, we study the causal effect of perceptions on preferences for redistribution through a randomized information treatment.

7.1 The Experiment

The treatment’s goal is to shift people’s perceptions of mobility. While designing it, four important constraints had to be taken into account. First, the perceptions of all respondents had to be shifted monotonically in the same direction, i.e., either in the direction of more pessimism or more optimism. We chose to make people more “pessimistic.” Second, mobility perceptions needed to be shifted *without* shifting respondents’ perceptions of policies or the government. We may otherwise fear that we mechanically prime people to respond in a certain way to the policy questions. We thus

tried to exclusively provide information on mobility without any appeal to government intervention or economic policies. Third, the treatment had to be factual and avoid emotional manipulation. Fourth, the treatment needed to be homogeneous across countries and show all respondents the exact same information. This requirement precluded showing actual data about mobility per country (since they are heterogeneous).³⁵ Therefore we gave high-level, general information instead of precise numbers. The treatment is animated and appears as a “movie” to respondents, so as to better attract and maintain their attention.³⁶ We also lend credibility to it by mentioning that the information comes from “new research,” and intentionally placed a Harvard University logo on the screen to signal that we are an academic, non-partisan group.

The informational experiment consists of two animations, one related to the chances of children from low income families, the other related to children from high income families. They are introduced by a page that tells respondents that they are about to see two short animations that summarize two key findings of recent academic studies on the link between one’s family background and one’s chances of making it in life (see the screenshot in Appendix Figure A5). On the first animation (see the screenshots in Appendix Figure A6), respondents are told that:

“The chances of a poor kid staying poor as an adult are extremely large. Only very few kids from poor families will ever make it and become rich.”

On the second animation, respondents are told that:

“Children born in rich families are extremely likely to remain rich themselves when they grow up, like their parents. It is extremely rare for a child from a rich family to become poor later in life.”

7.2 First Stage Effects And Their Persistence

The treatment has a very significant and large effect on perceptions of social mobility. This means that the “first-stage” of our treatment worked well. Table 12 shows that the perceived probability of remaining in the bottom quintile increases significantly by 10 percentage points, and the probability of moving up to the third and fourth quintiles decreases significantly by around 6 and 2 percentage points, respectively.³⁷ While there is no significant effect on the reported perceived probability of making it from the bottom to the very top quintile according to the quantitative question, the qualitative questions do show significant effects of making it both to the fourth and fifth quintile. The last column shows that there is a marked decrease of 3 percentage points in the fraction of people who say that they believe that “everybody has a fair chance of making it,” (our so called “American dream” question). Table 13 shows that the treatment has large and significant effects on the perceived mobility conditional on effort as well.

One may wonder whether these effects simply arise in the spur of the moment. To test for the persistence of the treatment effects, we ran the survey again for the U.S. a week later to

³⁵It would be interesting to explore the symmetric treatment of making people more optimistic in future work or to show people data on actual mobility in each country.

³⁶See the animated U.S. version of the treatment here: https://harvard.az1.qualtrics.com/SE/?SID=SV_5dxninfErZ246X3. All other survey links are available for the reader to see in Appendix .

³⁷The order of magnitude of these changes across different countries, although not shown here, is very similar.

check whether people who had been treated still maintained different views relative to the control group. Table A20 reports the results from this follow-up survey. Overall, the originally treated individuals still exhibit increased pessimism relative to the control group one week later. For instance, the treatment effect on the probability remaining in the first quintile in the subset of treated respondents who took both the main survey and the follow-up was 9 percentage points and persists significantly at 6 percentage points. The effects on the probability of moving to the third, fourth, and fifth quintiles are also very close in magnitude and significance between the original and the follow up rounds.

Both Tables 12 and 13 show that the treatment effects on mobility perceptions are consistently stronger for right-wing respondents, even though they are also significant and large for left-wing respondents. E.g., among right-wing respondents, 5 percentage points more say that not everybody gets a fair shot in the country (our so-called “American dream” question) in the treatment group. It may be that, since right-wing individuals are more optimistic to start with, they have a larger potential scope for updating their beliefs about mobility downwards.

7.3 Heterogeneous Effects on Policy Preferences

The treatment effects on taxes, spending, and views of the government are consistent with the correlations from Section 6.3, i.e., the idea that more pessimism about mobility (causally) leads to more support for equality of opportunity policies, and only little support for equality of outcome policies. The first panel in Table 14 shows the treatment effects on all respondents.

Treated respondents on average want to allocate significantly more of the budget to “Opportunities” (education plus health), support more spending on equality of opportunity policies even if it means reducing spending on other policies (qualitative question), and are more likely to perceive unequal opportunities as a serious problem. They are also less likely to respond that they trust the government. There are no treatment effects on spending on the safety net, or on chosen tax rates. Thus, overall, it is equality of opportunity policies rather than equality of outcome policies that exhibit the treatment effect.

Treatment effects are also shown separately for left-wing and right-wing respondents. The differences are striking. Among left-wing respondents, all the aforementioned effects are larger and more significant. Treated left-wing respondents are also more likely to say they want a high level of government intervention. This stands in vivid contrast to the complete lack of treatment effects on right-wing respondents. Despite having become significantly more pessimistic about mobility, treated right-wing respondents are not more likely to think that unequal opportunities are a problem, unlike left-wing respondents. Hence, the treatment effects on policy preferences are entirely concentrated on left-wing respondents.

We can estimate the causal effect of mobility perceptions on support for policies, using our treatment as an exogenous shifter of perceptions. This is only valid if we assume that the treatment had no direct effect on policy preferences except through mobility perceptions. Although we designed it with this criterion in mind, we cannot check this assumption, and, thus these IV estimates, reported in Table A21 are only suggestive. They do show that the (potentially) causal

effect of mobility perceptions on policy support is smaller than the correlations in Table 6.3. This is to be expected if, as we showed, individuals with more pessimistic mobility perceptions tend to be left-wing and generally hold more positive attitudes towards government, which in turn also increases their support for redistribution.

7.4 Explaining the Treatment Effects: Polarization on Role of Government

Yet the message of the right is increasingly: It's not your fault that you're a loser; it's the government's fault.

J.D. Vance, *Hillbilly Elogy: A Memoir of a Family and Culture in Crisis*

Why does right-wing respondents' support for redistributive policies react so differently than that of left-wing respondents to the exact same information about mobility?

First, it seems reasonable to rule out that the information contained in the treatment was not believed by right-wing respondents, given the especially strong and persistent first-stage effects on mobility perceptions of right-wing respondents (even stronger than for left-wing respondents).³⁸ Recall the striking fact shown in Section 6.3 that for right-wing respondents pessimism and optimism was not correlated with more support for redistributive policies, except if it was conditional on effort. Here, right-wing respondents' perceptions conditional on effort are also strongly affected by the treatment, and yet there is still no causal effect on support for redistribution.

The most convincing explanation seems to be the polarized attitudes towards government and redistribution, already documented in Section 6. The treatment is either "preaching to the choir" or "preaching to the deaf." Section 6.1 described how right-wing respondents have much worse views of government and are more averse to government intervention. Tables 11 and Appendix Table A18 documented that worse views of the government are negatively correlated with support for redistribution, specifically among right-wing respondents. Their support for redistributive policies seems most prone to being slashed from its already lower level when their views of government worsen. In fact, the treatment itself may have further deteriorated the bad views of right-wing respondents on government, as there is a significant treatment effect on the belief that government cannot do much to resolve unequal opportunities (column 11 of Table 14). It thus makes sense that right-wing respondents would exhibit no treatment effects on policies, despite significant and strong treatment effects on perceptions of mobility.

8 Conclusion

In this paper, we explore the anatomy of perceptions of intergenerational mobility and fairness of opportunity, and how they shape preferences for redistribution. We develop detailed, quantitative, animated or interactive survey questions and a randomized informational treatment to collect

³⁸It is worth noting that, although right-wing respondents are slightly more likely to say that they perceived the survey as being left-wing biased relative to left-wing respondents, there is no difference in the perceived bias of the survey between right-wing respondents in the control and treatment groups.

information on perceptions of mobility, fairness, and government, and support for redistributive policies for five countries on both sides of the Atlantic.

Respondents seem to have inaccurate perceptions of actual social mobility: Americans are too optimistic relative to the actual mobility in the U.S., while Europeans are too pessimistic. There is a lot of heterogeneity in perceptions based on individual characteristics, and wide geographical variation in perceptions in the U.S.. Pessimism and optimism about social mobility are significantly correlated with policy preferences: across all countries, more pessimistic respondents tend to favor more generous redistributive policies, especially equality of opportunity policies. These correlations are confirmed by the exogenous treatment, which increases support for redistribution.

There is, however, a stark political polarization that manifests itself not only in very different baseline views of mobility, government, and redistribution, but also in divergent responses to the same exogenously provided information. When treated with pessimistic information about mobility, only left-wing respondents want significantly more redistribution. On the other hand, although the treatment shifts right-wing respondents' perceptions of mobility, it has no effect at all on their support for redistribution. This is likely due to their extremely negative views of government.

There are three key directions which we believe are promising for future work using such large-scale cross-country survey tools and experimental treatments. First, it would be interesting (and highly useful given the current political climate in most of these countries) to understand whether there are specific types of arguments that could overcome the political polarization and unite people around more support for some redistributive policies. Low intergenerational mobility—an issue typically dear to both left and right wing respondents—does not seem sufficient on its own to kindle redistributive preferences. Second, the geographical disparities in perceptions in the U.S. raise the question of where people draw their information about mobility or inequality from: is it the media, interactions with their neighbors, or other sources? Finally, it would be very fruitful to understand how the existence of racial inequality in the U.S., and the related (but clearly distinct) issue of economic outcomes of immigrants in both Europe and the U.S. affect the link between lack of mobility and support for redistribution.

References

- Acciari, P., A. Polo, and G. Violante (2016). And yet, it moves: Intergenerational economic mobility in Italy. *Unpublished*.
- Alesina, A. and G.-M. Angeletos (2005). Fairness and redistribution. *The American Economic Review* 95(4), 960–980.
- Alesina, A. and P. Giuliano (2011). Preferences for redistribution. *Handbook of Social Economics*, 93–132.
- Alesina, A. and E. La Ferrara (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics* 89(5), 897–931.

- Ariely, D. and M. I. Norton (2011). Building a better america - one wealth quintile at a time. *Perspectives on Psychological Science* 6(1), 9–12.
- Ashok, V., I. Kuziemko, and E. Washington (2015). Preferences for redistribution in an era of rising inequality: Some new stylized facts and tentative explanations. *Brookings Papers on Economic Activity* (Spring), 367–405.
- Bénabou, R. and E. A. Ok (2001). Mobility as progressivity: Ranking income processes according to equality of opportunity. Nber working paper w8431.
- Björklund, A. and M. Jäntti (1997). Intergenerational income mobility in sweden compared to the united states. *The American Economic Review* 87(5), 1009–1018.
- Björklund, A., J. Roine, and D. Waldenström (2012). Intergenerational top income mobility in sweden: Capitalist dynasties in the land of equal opportunity. *Journal of Public Economics* 96, 474–484.
- Blanden, J. (2013). Cross-country rankings in intergenerational mobility: a comparison of approaches from economics and sociology. *Journal of Economic Surveys* 27(1), 38–73.
- Chambers, J. and L. Swan (2015). Perceptions of u.s. social mobility are divided (and distorted) along ideological lines. *Psychological Science* 26(4), 413–423.
- Charite, J., R. Fisman, and I. Kuziemko (2016). Reference points and redistributive preferences: Experiment evidence. *NBER Working Paper 21009*.
- Chetty, R. and N. Hendren (2016). The effects of neighborhoods on intergenerational mobility ii: County level estimates. *Stanford University Working Paper*.
- Chetty, R., N. Hendren, and L. Katz (2016). The effects of exposure to better neighborhoods on children: New evidence from the moving to opportunity experiment. *American Economic Review* 106(4), 855–902.
- Chetty, R., N. Hendren, P. Kline, and E. Saez (2014). Where is the land of opportunity? the geography of intergenerational mobility in the united states. *The Quarterly Journal of Economics* 129(4), 1553–1623.
- Cruces, G., R. Perez-Truglia, and M. Tetaz (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics* 98, 100–112.
- Davidai, S. and T. Gilovich (2015). Building a more mobile america - one income quintile at a time. *Perspectives on Psychological Science* 10(1), 60–71.
- Gelber, A. and M. Weinzierl (2016). Optimal taxation when children’s abilities depend on parents’ resources. *National Tax Journal* 69(1), 11–40.
- Gottschalk, P. and E. Spolaore (2002). On the evaluation of economic mobility. *Review of Economic Studies* 69(1), 191–208.
- Hilger, N. (2016a). The great escape: Intergenerational mobility in the united states since 1940. Working paper.
- Hilger, N. (2016b). Upward mobility and discrimination: the case of asian-americans. Working paper.
- Jäntti, M., B. Bratsberg, K. Roed, O. Raaum, R. Naylor, E. Osterbacka, A. Björklund, and T. Eriksson (2006). American exceptionalism in a new light: A comparison of intergenerational earnings mobility in the nordic countries, the united kingdom and the united states.

- Jost, J., M. Banaji, and B. Nosek (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology* 25(6), 881–919.
- Kleven, H. (2014). How can scandinavians tax so much? *Journal of Economic Perspectives* 28(4), 77–98.
- Kleven, H., C. Kreiner, and E. Saez (2009). The optimal income taxation of couples. *Econometrica* 77, 537–560.
- Kuziemko, I., R. Buell, T. Reich, and M. Norton (2014). Last-place aversion: Evidence and redistributive implications. *Quarterly Journal of Economics* 129(1).
- Kuziemko, I., M. I. Norton, E. Saez, and S. Stantcheva (2015). How elastic are preferences for redistribution? evidence from randomized survey experiments. *The American Economic Review* 105(4), 1478–1508.
- Landais, C., H. Kleven, and J. E. Sogaard (2016). Children and gender inequality: Evidence from denmark. Working Paper.
- Lockwood, B. and M. Weinzierl (2015). De gustibus non est taxandum: Theory and evidence on preference heterogeneity and redistribution. *Journal of Public Economics* 124, 74–80.
- Lockwood, B. and M. Weinzierl (2016). Positive and normative judgments implicit in us tax policy, and the costs of unequal growth and recessions. *Journal of Monetary Economics* 77, 30–47.
- Meade, A. W. and S. B. Craig (2012). Identifying careless responses in survey data. *Psychological methods* 17(3), 437.
- Newman, B., C. Johnston, and P. Lown (2015). False consciousness or class awareness? local income inequality, personal economic position, and belief in american meritocracy. *American Journal of Political Science* 59(2), 326–340.
- Niehues, J. and A. Peichl (2014). Lower and upper bounds of unfair inequality: Theory and evidence for germany and the u.s. *Social Choice and Welfare* 43, 73–99.
- Peichl, A., L. Durnzclaff, D. Neumann, and J. Niehues (2011). Equality of opportunity and redistribution in europe. *Bulletin of Economic Inequality* 19, 99–129.
- Peichl, A. and M. Ungerer (2016). Equality of opportunity: East vs. west germany. *Bulletin of Economic Research*.
- Piketty, T. (1995). Social Mobility and Redistributive Politics. *The Quarterly Journal of Economics* 110(3), 551–584.
- Piketty, T., E. Saez, and G. Zucman (2016). Distributional national accounts: Methods and estimates for the united states. Working paper.
- Piketty, T. and G. Zucman (2014). Capital is back: Wealth-income ratios in rich countries, 1700–2010. *The Quarterly Journal of Economics* 129(3), 1255–1310.
- Piketty, T. and G. Zucman (2015). Wealth and inheritance in the long run. In *Handbook of Income Distribution, vol.2*.
- Piraino, P. (2007). Comparable estimates of intergenerational income mobility in italy. *The B.E. Journal of Economic Analysis and Policy* 7(2).
- Roine, J. and D. Waldenström (2009). Wealth concentration over the path of development: Sweden, 1873?2006. *Scandinavian Journal of Economics* 111(1), 151–187.

- Roine, J. and D. Waldenström (2015). Long run trends in the distribution of income and wealth. In F. B. A Atkinson (Ed.), *Handbook in Income Distribution, vol 2A*. Amsterdam: North-Holland.
- Saez, E. and S. Stantcheva (2016). Generalized social welfare weights for optimal tax theory. *American Economic Review* 106(1), 24–45.
- Solon, G. (2002). Cross-country differences in intergenerational earnings mobility. *The Journal of Economic Perspectives* 16(3), 59–66.
- Waldenström, D. (2016). Wealth-income ratios in a small, developing economy: Sweden, 1810–2010. *Journal of Economic History*, forthcoming.
- Weinzierl, M. (2014). The promise of positive optimal taxation: Normative diversity and a role for equal sacrifice. *Journal of Public Economics* 118, 128–142.
- Weinzierl, M. (2016). Revisiting the classical view of benefit-based taxation. *Economic Journal*, forthcoming.

TABLES AND FIGURES

TABLE 1: ACTUAL TRANSITION PROBABILITIES ACROSS COUNTRIES

	US	UK	France	Italy	Sweden
	(1)	(2)	(3)	(4)	(5)
Q1 to Q5	7.80	11.44	11.20	10.42	11.10
Q1 to Q4	12.70	12.92	12.80	15.55	17.30
Q1 to Q3	18.70	19.93	23.00	21.00	21.00
Q1 to Q2	27.70	25.09	23.80	25.78	23.80
Q1 to Q1	33.10	30.63	29.20	27.27	26.70

Notes: Row i of column j reports the actual probability that a child born to parents in the bottom quintile of the income distribution in country j will be in quintile i when adult. Transition probabilities for the US are based on the universe of taxpayers in the 1980-1985 cohorts. Transition probabilities for the UK are based on a sample of 2,806 individuals. Transition probabilities for France are based on a sample of 1279 individuals. Transition probabilities for Italy are based on children of the universe of taxpayers aged 35-55 in 1998-99. Transition probabilities for Sweden are based on a 20% random sample of all male children born in 1962. See Section 3 and Appendix A.6 for details on the data sources.

TABLE 2: PERCEIVED TRANSITION PROBABILITIES

	US	UK	France	Italy	Sweden
	(1)	(2)	(3)	(4)	(5)
Q1 to Q5	11.72	9.97	9.10	10.14	9.21
Q1 to Q4	11.98	10.62	10.53	11.25	11.16
Q1 to Q3	22.32	19.39	21.51	21.87	24.52
Q1 to Q2	21.83	22.25	23.60	23.13	23.10
Q1 to Q1	32.16	37.77	35.26	33.61	32.00
Obs.	2,170	1,290	1,297	1,242	881

Notes: Row i of column j reports the perceived probability that a child born to parents in the bottom quintile of the income distribution in country j will be in quintile i when adult. See Figure A1 and Appendix A.4 for the complete wording of the question and the methodology to elicit respondents' perceptions in the survey.

TABLE 3: DETAILED PERCEIVED TRANSITION PROBABILITIES

	Q1 to Q1 (1)	Q1 to Q2 (2)	Q1 to Q3 (3)	Q1 to Q4 (4)	Q1 to Q5 (5)	Q1 to Q4 (Qual.) (6)	Q1 to Q5 (Qual.) (7)	Obs. (8)
<i>All Countries</i>								
All	34.04	22.64	21.82	11.21	10.29	0.43	0.31	6,880
Left	37.55	23.00	20.27	10.06	9.12	0.35	0.23	2,276
Right	32.25	22.67	22.91	11.70	10.47	0.46	0.32	2,206
<i>US</i>								
All	32.16	21.83	22.32	11.98	11.72	0.46	0.34	2,170
Left	37.37	21.67	19.33	11.10	10.53	0.35	0.25	577
Right	29.45	21.96	24.14	12.49	11.96	0.53	0.38	652
<i>UK</i>								
All	37.77	22.25	19.39	10.62	9.97	0.37	0.27	1,290
Left	42.88	23.20	16.85	8.63	8.44	0.23	0.14	406
Right	36.20	22.00	19.71	11.52	10.57	0.41	0.26	304
<i>France</i>								
All	35.26	23.60	21.51	10.53	9.10	0.42	0.29	1,297
Left	38.36	23.07	20.48	9.56	8.54	0.40	0.26	451
Right	32.70	23.76	22.59	11.47	9.47	0.46	0.31	501
<i>Italy</i>								
All	33.61	23.13	21.87	11.25	10.14	0.40	0.29	1,242
Left	34.77	23.54	21.80	10.51	9.38	0.34	0.25	554
Right	33.55	22.85	22.13	11.18	10.29	0.41	0.31	402
<i>Sweden</i>								
All	32.00	23.10	24.52	11.16	9.21	0.47	0.33	881
Left	34.51	24.22	23.66	9.95	7.66	0.43	0.27	288
Right	31.88	22.79	24.79	11.31	9.24	0.45	0.29	347

Notes: The table reports mobility perceptions. Respondents are split according to their self-reported political views. Political views are assessed on a five point scale, ranging from “Very liberal (1)” to “Very conservative (5).” “All” refers to the average across all respondents. “Left” refers to the average across respondents whose views on economic issues are “liberal” or “very liberal.” “Right” refers to the average across respondents whose views on economic issues are “conservative” or “very conservative.” Column j for $j = \{1, 2, 3, 4, 5\}$ shows the perceived probability of a child from from the bottom quintile to move to quintile j . Columns 6 (respectively, 7) shows the proportion of respondents who believe that the chance of moving from the first to the fourth (respectively, to the fifth) quintile is “fairly low,” “fairly high,” or “high.” Column 8 reports the number of observations for each row.

TABLE 4: HETEROGENEITY IN MOBILITY PERCEPTIONS

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)
Male (2,165)	35.20	20.45	0.37	0.24
Female (2,283)	33.28	21.39	0.40	0.30
Difference	1.92*** (0.72)	-0.94 (0.65)	-0.03** (0.02)	-0.06*** (0.01)
Young (2,358)	35.49	20.44	0.41	0.31
Old (2,090)	32.77	21.48	0.35	0.23
Difference	2.71*** (0.72)	-1.04 (0.65)	0.06*** (0.02)	0.08*** (0.01)
Children (2,574)	32.75	21.78	0.39	0.28
No Children (1,874)	36.21	19.75	0.38	0.26
Difference	-3.46*** (0.73)	2.04*** (0.66)	0.01 (0.02)	0.03** (0.01)
Rich (826)	35.81	19.97	0.38	0.24
Poor (3,622)	33.85	21.15	0.39	0.28
Difference	1.96** (0.93)	-1.18 (0.83)	-0.01 (0.02)	-0.04** (0.02)
College (1,849)	36.46	18.93	0.38	0.25
Less than College (2,599)	32.62	22.35	0.39	0.29
Difference	3.84*** (0.73)	-3.42*** (0.66)	-0.01 (0.02)	-0.04*** (0.01)
Left-wing (1,442)	37.34	18.76	0.30	0.20
Right-wing (1,422)	32.31	21.52	0.44	0.29
Difference	5.03*** (0.90)	-2.76*** (0.80)	-0.14*** (0.02)	-0.09*** (0.02)
Moved up (1,902)	33.47	21.07	0.39	0.27
Did not moved up (2,416)	34.75	20.94	0.38	0.28
Difference	-1.27* (0.74)	0.13 (0.66)	0.01 (0.02)	-0.01 (0.01)
Immigrant (690)	33.70	21.05	0.42	0.31
Not Immigrant (3,758)	34.31	20.91	0.38	0.27
Difference	-0.61 (1.00)	0.15 (0.89)	0.04** (0.02)	0.05** (0.02)
Reason poor is lack of effort (1,500)	32.27	21.76	0.46	0.32
Reason poor is not lack of effort (2,946)	35.21	20.50	0.35	0.25
Difference	-2.94*** (0.76)	1.26* (0.68)	0.12*** (0.02)	0.07*** (0.01)
Reason rich is effort (1,447)	30.26	23.29	0.50	0.37
Reason rich is not effort (2,999)	36.12	19.79	0.33	0.22
Difference	-5.86*** (0.77)	3.49*** (0.69)	0.17*** (0.02)	0.15*** (0.01)
Econ system fair (1,728)	30.68	22.50	0.47	0.34
Econ system unfair (2,719)	36.46	19.93	0.33	0.23
Difference	-5.78*** (0.74)	2.57*** (0.66)	0.14*** (0.02)	0.12*** (0.01)
Unequal opp problem (3,873)	35.02	20.16	0.37	0.25
Unequal opp not problem (575)	28.76	26.08	0.50	0.40
Difference	6.26*** (1.07)	-5.92*** (0.96)	-0.13*** (0.02)	-0.14*** (0.02)

Notes: The table reports average mobility perceptions for different groups of respondents and the difference between them. Standard errors in parentheses. *Q1 to Q4 or Q5* is the sum of probabilities of moving from the bottom to the fourth or fifth quintile. See variable definitions in Table 3 for the dependent variables and in Appendix A.2 for the group characteristics.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 5: VIEWS ON FAIRNESS

	Economic System Fair (1)	American Dream Alive (2)	Effort Reason Poor (3)	Effort Reason Rich (4)	Obs. (5)
<i>All Countries</i>					
All	0.39	0.35	0.34	0.33	4,448
Left	0.26	0.24	0.19	0.18	1,442
Right	0.49	0.46	0.46	0.46	1,422
<i>US</i>					
All	0.50	0.53	0.46	0.39	1,731
Left	0.33	0.39	0.27	0.24	464
Right	0.69	0.72	0.65	0.58	517
<i>UK</i>					
All	0.45	0.39	0.37	0.31	759
Left	0.24	0.21	0.20	0.14	257
Right	0.65	0.59	0.50	0.49	167
<i>France</i>					
All	0.19	0.16	0.23	0.31	769
Left	0.18	0.16	0.15	0.22	249
Right	0.23	0.19	0.34	0.39	307
<i>Italy</i>					
All	0.10	0.08	0.14	0.17	735
Left	0.10	0.07	0.13	0.13	335
Right	0.08	0.11	0.18	0.23	238
<i>Sweden</i>					
All	0.65	0.41	0.32	0.38	454
Left	0.61	0.31	0.14	0.14	137
Right	0.74	0.53	0.49	0.53	193

Notes: The table reports respondents' perceptions of fairness. Political affiliations "Left" and "Right" are defined as in Table 3. *Economic System Fair*, *American Dream Alive*, *Effort Reason Poor*, *Effort Reason Rich* are dummies equal to one if the respondent says that the economic system in her country is "basically fair," she agrees or strongly agrees with the statement that in her country "everybody has a chance to make it and be economically successful," "lack of effort on his or her own part" is the most important reason for a person being poor, and "she or he worked harder than others" is the most important reason for a person being rich, respectively. Column 5 reports the number of observations for each row.

TABLE 6: THE PERCEIVED ROLE OF EFFORT

	Panel A: Perceived Transition					Panel B: % Difference Between				
	Probabilities Conditional on Effort					Perceived Transition Probabilities				
	US	UK	France	Italy	Sweden	US	UK	France	Italy	Sweden
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Q1 to Q5	12.47	12.54	11.39	10.86	12.57	0.06	0.26	0.25	0.07	0.36
						(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Q1 to Q4	14.83	15.20	15.03	14.22	17.96	0.24	0.43	0.43	0.26	0.61
						(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Q1 to Q3	29.33	26.38	29.39	27.61	31.82	0.31	0.36	0.37	0.26	0.30
						(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Q1 to Q2	21.14	22.09	20.91	22.53	19.72	-0.03	-0.01	-0.11	-0.03	-0.15
						(0.01)	(0.58)	(0.00)	(0.27)	(0.00)
Q1 to Q1	22.23	23.79	23.28	24.78	17.93	-0.31	-0.37	-0.34	-0.26	-0.44
						(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Obs.	1,735	900	908	872	656	1,735	900	908	872	656

Notes: Row i of column j in Panel A reports the perceived probability that a child born to parents in the bottom quintile of the income distribution in country j will be in quintile i when adult if that child “works very hard,” i.e., based on our survey question that asks respondents to think conditional on individual hard work. Row i of column j in Panel B reports the percent change in the perceived probability of a child born in a family from the bottom quintile to be in quintile i when adult conditional on effort relative to the unconditional case. p-values in parentheses. See Figure A1 and Appendix A.4 for the complete wording of the question and the methodology to elicit respondents’ perceptions in the survey.

TABLE 7: HETEROGENEITY IN MOBILITY PERCEPTIONS CONDITIONAL ON EFFORT

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)	Diff. Q1 to Q1	Diff. Q1 to Q4 or Q5
Male (1,295)	24.16	24.60	0.65	0.48	-10.07	3.51
Female (1,344)	22.76	25.57	0.67	0.53	-10.55	4.05
Difference	1.40*	-0.97	-0.03	-0.05***	0.48	-0.54
	(0.83)	(0.83)	(0.02)	(0.02)	(0.78)	(0.66)
Young (1,411)	24.43	25.82	0.68	0.54	-9.88	4.62
Old (1,228)	22.32	24.25	0.63	0.47	-10.81	2.82
Difference	2.11**	1.58*	0.05**	0.08***	0.93	1.80***
	(0.83)	(0.83)	(0.02)	(0.02)	(0.78)	(0.66)
Children (1,480)	22.88	25.40	0.67	0.53	-9.74	3.37
No Children (1,16)	24.16	24.70	0.65	0.48	-11.04	4.31
Difference	-1.27	0.70	0.02	0.05***	1.30*	-0.94
	(0.83)	(0.83)	(0.02)	(0.02)	(0.79)	(0.67)
Rich (483)	23.77	25.44	0.66	0.48	-11.41	4.71
Poor (2,156)	23.37	25.01	0.66	0.51	-10.07	3.58
Difference	0.40	0.43	-0.000	-0.03	-1.34	1.14
	(1.07)	(1.07)	(0.02)	(0.03)	(1.01)	(0.86)
College (1,123)	22.77	24.11	0.66	0.47	-12.87	4.82
Less than College (1,516)	23.94	25.82	0.66	0.53	-8.42	3.02
Difference	-1.17	-1.71**	0.00	-0.06***	-4.45***	1.80***
	(0.84)	(0.84)	(0.02)	(0.02)	(0.79)	(0.67)
Left-wing (816)	26.78	22.70	0.59	0.41	-10.79	3.47
Right-wing (845)	20.99	26.79	0.69	0.55	-10.78	4.98
Difference	5.79***	-4.09***	-0.10***	-0.14***	-0.00	-1.50*
	(1.05)	(1.04)	(0.02)	(0.02)	(1.00)	(0.83)
Moved up (1,134)	22.38	25.59	0.67	0.51	-10.39	3.76
Did not moved up (1,422)	24.47	24.87	0.65	0.51	-10.05	3.86
Difference	-2.09**	0.72	0.02	0.00	-0.34	-0.10
	(0.85)	(0.85)	(0.02)	(0.02)	(0.80)	(0.68)
Immigrant (405)	22.79	25.75	0.69	0.56	-10.05	4.40
Not Immigrant (2,234)	23.56	24.97	0.65	0.50	-10.36	3.67
Difference	-0.78	0.78	0.04	0.07**	0.31	0.72
	(1.15)	(1.15)	(0.03)	(0.03)	(1.08)	(0.92)
Reason poor is lack of effort (932)	19.99	28.12	0.75	0.58	-11.41	5.55
Reason poor is not lack of effort (1,706)	25.34	23.44	0.61	0.47	-9.71	2.82
Difference	-5.35***	4.68***	0.15***	0.11***	-1.70**	2.73***
	(0.86)	(0.86)	(0.02)	(0.02)	(0.82)	(0.69)
Reason rich is effort (873)	19.15	30.45	0.79	0.64	-10.04	6.21
Reason rich is not effort (1,765)	25.56	22.44	0.60	0.44	-10.43	2.57
Difference	-6.42***	8.01***	0.19***	0.21***	0.40	3.64***
	(0.87)	(0.87)	(0.02)	(0.02)	(0.83)	(0.70)
Econ system fair (1,064)	19.12	27.85	0.77	0.60	-10.59	4.78
Econ system unfair (1,575)	26.36	23.22	0.59	0.45	-10.12	3.11
Difference	-7.24***	4.63***	0.18***	0.15***	-0.47	1.68**
	(0.83)	(0.84)	(0.02)	(0.02)	(0.80)	(0.68)
Unequal opp problem (2,278)	23.93	24.23	0.64	0.49	-10.67	3.75
Unequal opp not problem (361)	20.39	30.53	0.75	0.59	-8.04	4.03
Difference	3.54***	-6.30***	-0.11***	-0.10***	-2.63**	-0.28
	(1.20)	(1.20)	(0.03)	(0.03)	(1.14)	(0.97)

Notes: The table reports average mobility perceptions conditional on effort, based on the answers to all questions asking respondents to consider “very hard-working” children. See the notes to Table 4. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 8: PERCEPTIONS OF GOVERNMENT

	Trust Government (1)	Government Tools (2)	Government Intervention (3)	Lowering Taxes Better (4)	Unequal Opp. Problem (5)	Against Government 1 (6)	Against Government 2 (7)	Obs. (8)
<i>All Countries</i>								
All	0.19	0.72	5.32	0.36	0.87	0.63	0.77	4,448
Left	0.21	0.79	5.79	0.20	0.94	0.49	0.61	1,442
Right	0.19	0.64	4.81	0.57	0.81	0.80	0.90	1,422
<i>US</i>								
All	0.23	0.75	4.95	0.32	0.83	0.59	0.76	1,731
Left	0.30	0.85	5.61	0.14	0.92	0.39	0.54	464
Right	0.17	0.63	4.10	0.56	0.74	0.78	0.92	517
<i>UK</i>								
All	0.17	0.82	5.50	0.24	0.85	0.50	0.71	759
Left	0.09	0.89	5.91	0.11	0.93	0.40	0.56	257
Right	0.37	0.75	5.02	0.44	0.75	0.65	0.84	167
<i>France</i>								
All	0.06	0.48	5.42	0.51	0.89	0.85	0.89	769
Left	0.08	0.53	5.61	0.32	0.94	0.75	0.80	249
Right	0.06	0.48	5.22	0.66	0.84	0.91	0.93	307
<i>Italy</i>								
All	0.08	0.73	5.92	0.44	0.94	0.71	0.79	735
Left	0.10	0.76	6.00	0.33	0.96	0.60	0.70	335
Right	0.05	0.69	5.76	0.61	0.92	0.84	0.89	238
<i>Sweden</i>								
All	0.50	0.81	5.28	0.29	0.91	0.53	0.71	454
Left	0.59	0.90	5.96	0.07	0.99	0.23	0.39	137
Right	0.46	0.78	4.70	0.53	0.84	0.74	0.90	193

Notes: The table reports respondents' views on the government. Political affiliations "Left" and "Right" are defined as in Table 3. *Trust Government* is a binary variable equal to one if the respondent says the government can be trusted to do what is right "Most of the time" or "Always." *Government Tools* is a binary variable equal to one if he thinks the government has the ability and the tools to do "Some" or "A lot" to improve mobility, *Lowering Taxes Better* is a binary variable equal to one if respondent thinks "lowering taxes on wealthy people and corporations to encourage more investment in economic growth" is better than "raising taxes [...] to expand programs for the poor" to improve mobility. *Unequal Opp. Problem* is a binary variable equal to one if unequal opportunities are perceived to be "A problem," "A serious problem" or "A very serious problem." *Government Intervention* is support for government intervention to improve opportunities (scale from 1 to 7, with 7 being the max intervention). *Against Government 1* is a binary variable equal to one if the respondent answers that she can "never" trust the government, or that to reduce the inequality of opportunities between children born in poor and rich families the government has the ability and the tools to do "nothing at all" or "not much," or that she supports little government intervention (less than 4 on the scale of 1 to 7), or that "lowering taxes on wealthy people and corporations to encourage more investment in economic growth" would be the better way to equalize opportunities. *Against Government 2* is a binary variable equal to one if *Against Government 1* is equal to one or if the respondent thinks that effort is the main determinant of being poor or rich, or that if opportunities are unequal, this is not a problem or a small problem. Column 8 reports the number of observations for each row.

TABLE 9: VIEWS ON TAXES AND PUBLIC SPENDING

	Tax Rate Top 1 (1)	Tax Rate Next 9 (2)	Tax Rate Bottom 50 (3)	Share Taxes Top 1 (4)	Share Taxes Bottom 50 (5)	Support Estate Tax (6)	Budget Opportunities (7)	Budget Safety Net (8)	Support Equality Opp. Policies (9)	Obs. 1-5 (10)	Obs. 6-9 (11)
All Countries											
All	37.58	25.75	10.09	0.23	0.11	0.30	37.29	13.93	3.74	3,564	4,447
Left	40.49	27.13	8.83	0.24	0.10	0.41	39.17	15.17	4.10	1,193	1,442
Right	36.11	26.07	11.96	0.21	0.13	0.18	35.74	12.75	3.41	1,163	1,422
US											
All	25.22	14.78	7.86	0.35	0.07	0.35	32.73	13.51	3.61	851	1,731
Left	28.10	15.19	5.96	0.39	0.05	0.51	35.22	15.03	4.08	216	464
Right	22.49	14.52	10.05	0.31	0.08	0.20	29.08	11.86	3.09	261	517
UK											
All	37.15	23.06	6.50	0.28	0.10	0.32	41.30	13.36	3.90	758	758
Left	39.97	23.21	5.67	0.31	0.08	0.44	42.12	14.45	4.20	256	257
Right	34.65	22.89	6.89	0.26	0.10	0.26	41.52	12.19	3.67	167	167
France											
All	43.71	29.41	8.51	0.18	0.12	0.22	38.59	13.37	3.66	769	769
Left	47.07	30.98	6.92	0.19	0.09	0.31	39.95	14.81	3.97	249	249
Right	42.70	28.60	9.59	0.17	0.13	0.18	37.09	12.31	3.42	307	307
Italy											
All	37.75	26.35	10.37	0.19	0.14	0.23	38.99	15.70	3.96	732	735
Left	38.66	27.66	9.04	0.19	0.12	0.31	40.15	15.55	4.11	335	335
Right	34.74	25.26	11.44	0.17	0.15	0.14	38.33	15.37	3.84	235	238
Sweden											
All	50.81	43.61	22.50	0.11	0.17	0.28	43.03	14.52	3.76	454	454
Left	53.49	44.99	22.23	0.11	0.17	0.49	43.26	16.67	4.19	137	137
Right	46.99	41.39	23.32	0.10	0.17	0.16	43.25	13.07	3.53	193	193

Notes: The table reports respondents' views on taxes and public spending. Political affiliations "Left" and "Right" are defined as in Table 3. *Tax Rate Top 1*, *Tax Rate Next 9*, *Tax Rate Bottom 50* are the respondent's chosen income tax rates for the Top 1% of the income distribution, the next 9%, and the bottom 50%, respectively. *Share Taxes Top 1* and *Share Taxes Bottom 50* convert the tax rates chosen by respondents into shares of tax revenue paid by each group. *Support Estate Tax* is a dummy equal to one if the respondent is in favor of the estate tax. *Budget Opportunities* and *Budget Safety net* are the share of the budget the respondent believes should be allocated to education and health, and to safety net policies, respectively. *Support Equality Opp. Policies* is the respondent's support, on a scale from 1 to 5, for policies to improve equality of opportunity. Columns 10 and 11 report the number of observations for each row, for the outcomes in columns 1-5 and 6-9, respectively.

TABLE 10: CORRELATIONS OF MOBILITY PERCEPTIONS AND POLICY PREFERENCES

	Tax Rate Top 1 (1)	Tax Rate Bottom 50 (2)	Budget Opportunities (3)	Budget Safety Net (4)	Support Estate Tax (5)	Support Equality Opp. Policies (6)
<i>All Respondents</i>						
Q1 to Q1	0.057*** (0.012)	-0.035*** (0.007)	0.030*** (0.007)	0.013*** (0.005)	0.000 (0.000)	0.004*** (0.001)
Q1 to Q5	-0.041** (0.019)	0.060*** (0.011)	-0.044*** (0.011)	-0.011 (0.007)	0.000 (0.000)	-0.004*** (0.001)
Obs.	3442	3442	4290	4290	4289	4290
Q1 to Q1 Effort	0.049*** (0.016)	0.005 (0.010)	0.033*** (0.010)	0.030*** (0.007)	0.001** (0.000)	0.003*** (0.001)
Q1 to Q5 Effort	-0.066*** (0.024)	0.073*** (0.014)	-0.050*** (0.015)	-0.016 (0.010)	-0.001* (0.001)	-0.007*** (0.001)
Obs.	2112	2112	2543	2543	2542	2543
<i>Left-Wing Respondents</i>						
Q1 to Q1	0.061*** (0.020)	-0.041*** (0.010)	0.032*** (0.010)	0.016** (0.008)	0.001* (0.001)	0.005*** (0.001)
Q1 to Q5	-0.050 (0.033)	0.060*** (0.016)	-0.085*** (0.017)	-0.009 (0.013)	-0.001 (0.001)	-0.006*** (0.002)
Obs.	1164	1164	1401	1401	1401	1401
Q1 to Q1 Effort	0.048* (0.026)	-0.001 (0.014)	0.004 (0.014)	0.033*** (0.010)	0.001 (0.001)	0.003** (0.001)
Q1 to Q5 Effort	-0.084* (0.045)	0.065*** (0.024)	-0.072*** (0.024)	-0.012 (0.018)	-0.002* (0.001)	-0.010*** (0.003)
Obs.	683	683	790	790	790	790
<i>Right-Wing Respondents</i>						
Q1 to Q1	0.039* (0.021)	-0.031** (0.013)	0.011 (0.012)	0.003 (0.008)	-0.001 (0.000)	0.002* (0.001)
Q1 to Q5	-0.003 (0.034)	0.038* (0.021)	-0.002 (0.020)	-0.003 (0.013)	0.001* (0.001)	-0.002 (0.002)
Obs.	1143	1143	1395	1395	1395	1395
Q1 to Q1 Effort	0.041 (0.032)	0.012 (0.022)	0.035* (0.019)	0.025** (0.012)	0.001 (0.001)	0.004* (0.002)
Q1 to Q5 Effort	-0.030 (0.047)	0.071** (0.031)	-0.025 (0.028)	-0.035** (0.018)	-0.000 (0.001)	-0.007*** (0.003)
Obs.	690	690	828	828	828	828

Notes: Outcome variables are defined as in Table 9. Controls included in all regressions are: indicator variables for gender, age less than 45, having children, being in the top quartile of the income distribution, having a college degree, political affiliation, having a job with a status higher than father, having at least one of the parents not born in the country, country fixed effects, and survey wave fixed effects. Political views are assessed on a five point scale, ranging from “Very liberal (1)” to “Very conservative (5).” “Left-Wing Respondents” refers to respondents whose views on economic issues are “liberal” or “very liberal.” “Right-Wing Respondents” refers to respondents whose views on economic issues are “conservative” or “very conservative. Standard errors in parentheses.” * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 11: TRUST IN GOVERNMENT AND POLICY PREFERENCES, LEFT VERSUS RIGHT

	Tax rate Top 1 (1)	Tax rate Bottom 50 (2)	Budget Opportunities (3)	Budget Safety Net (4)	Support Estate Tax (5)	Support Equality Opp. Policies (6)
<i>All Respondents</i>						
Trust government	-0.119 (0.799)	0.709 (0.453)	1.456*** (0.436)	0.589** (0.298)	0.095*** (0.019)	0.159*** (0.040)
Obs.	3439	3439	4287	4287	4286	4287
<i>Left-Wing Respondents</i>						
Trust government	-0.316 (1.397)	-0.464 (0.695)	1.419** (0.714)	-0.069 (0.526)	0.047 (0.036)	0.132* (0.069)
Obs.	1162	1162	1399	1399	1399	1399
<i>Right-Wing Respondents</i>						
Trust government	-0.090 (1.410)	2.641*** (0.886)	1.773** (0.800)	1.017** (0.516)	0.115*** (0.029)	0.271*** (0.076)
Obs.	1143	1143	1395	1395	1395	1395

Notes: The outcome variables are defined as in Table 9. *Trust Government* is defined as in Table 8. All regressions include the same controls of Table 10, and also an indicator equal to one if the respondent says that “the economic system in her country is basically fair,” an indicator equal to one if the respondent says that “Lack of effort on his or her own part” is the most important determinant of why a person is poor,” an indicator equal to one if the respondent says that “Because she or he worked harder than others” is the most important determinant of why a person is rich, an indicator equal to one if the respondent says that if children from poor and rich backgrounds have unequal opportunities in life this is “A problem” or “A serious problem” or “A very serious problem.” “Left-Wing Respondents” and “Right-Wing Respondents” are defined as in Table 10. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 12: FIRST STAGE EFFECTS ON MOBILITY PERCEPTIONS

	Q1 to Q1 (1)	Q1 to Q2 (2)	Q1 to Q3 (3)	Q1 to Q4 (4)	Q1 to Q5 (5)	Q1 to Q4 (Qual.) (6)	Q1 to Q5 (Qual.) (7)	American Dream Alive (8)
<i>All Respondents</i>								
Treated	9.691*** (0.560)	-2.123*** (0.278)	-5.885*** (0.304)	-1.806*** (0.201)	0.123 (0.344)	-0.105*** (0.010)	-0.085*** (0.009)	-0.031*** (0.009)
Control mean	34.17	22.63	22.23	10.76	10.21	0.38	0.27	0.36
Obs.	8585	8585	8585	8585	8585	8585	8585	8585
<i>Left-Wing Respondents</i>								
Treated	10.170*** (0.999)	-2.117*** (0.506)	-6.076*** (0.507)	-2.052*** (0.339)	0.076 (0.604)	-0.092*** (0.016)	-0.069*** (0.014)	-0.011 (0.015)
Control mean	37.48	23.01	20.71	9.70	9.11	0.30	0.20	0.24
Obs.	2797	2797	2797	2797	2797	2797	2797	2797
<i>Right-Wing Respondents</i>								
Treated	11.267*** (0.964)	-2.211*** (0.479)	-6.247*** (0.555)	-2.259*** (0.350)	-0.551 (0.582)	-0.135*** (0.018)	-0.097*** (0.016)	-0.046*** (0.016)
Control mean	32.39	22.84	23.37	11.16	10.24	0.43	0.29	0.46
Obs.	2808	2808	2808	2808	2808	2808	2808	2808

Notes: The outcome variables are all as defined in Table 3 (columns 1-7), and in Table 5 (column 8). All regressions include the same controls of Table 10. “Left-Wing Respondents” and “Right-Wing Respondents” are defined as in Table 10. “Control mean” is the mean of the outcome variable in the control group. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 13: FIRST STAGE ON MOBILITY PERCEPTIONS CONDITIONAL ON EFFORT

	Q1 to Q1 (1)	Q1 to Q2 (2)	Q1 to Q3 (3)	Q1 to Q4 (4)	Q1 to Q5 (5)	Q1 to Q4 (Qual.) (6)	Q1 to Q5 (Qual.) (7)
<i>All Respondents</i>							
Treated	8.016*** (0.663)	0.501 (0.373)	-5.434*** (0.525)	-2.642*** (0.307)	-0.441 (0.417)	-0.067*** (0.013)	-0.073*** (0.014)
Control mean	23.48	21.43	29.90	14.19	11.00	0.66	0.51
Obs.	5118	5118	5118	5118	5118	5117	5117
<i>Left-Wing Respondents</i>							
Treated	8.305*** (1.272)	0.784 (0.692)	-4.994*** (0.918)	-3.064*** (0.529)	-1.031 (0.713)	-0.077*** (0.025)	-0.083*** (0.024)
Control mean	27.04	22.37	27.88	12.93	9.78	0.59	0.42
Obs.	1582	1582	1582	1582	1582	1582	1582
<i>Right-Wing Respondents</i>							
Treated	8.919*** (1.112)	0.760 (0.662)	-5.390*** (0.935)	-3.336*** (0.556)	-0.952 (0.694)	-0.050** (0.023)	-0.067*** (0.024)
Control mean	21.01	20.90	31.28	15.39	11.42	0.69	0.55
Obs.	1675	1675	1675	1675	1675	1675	1675

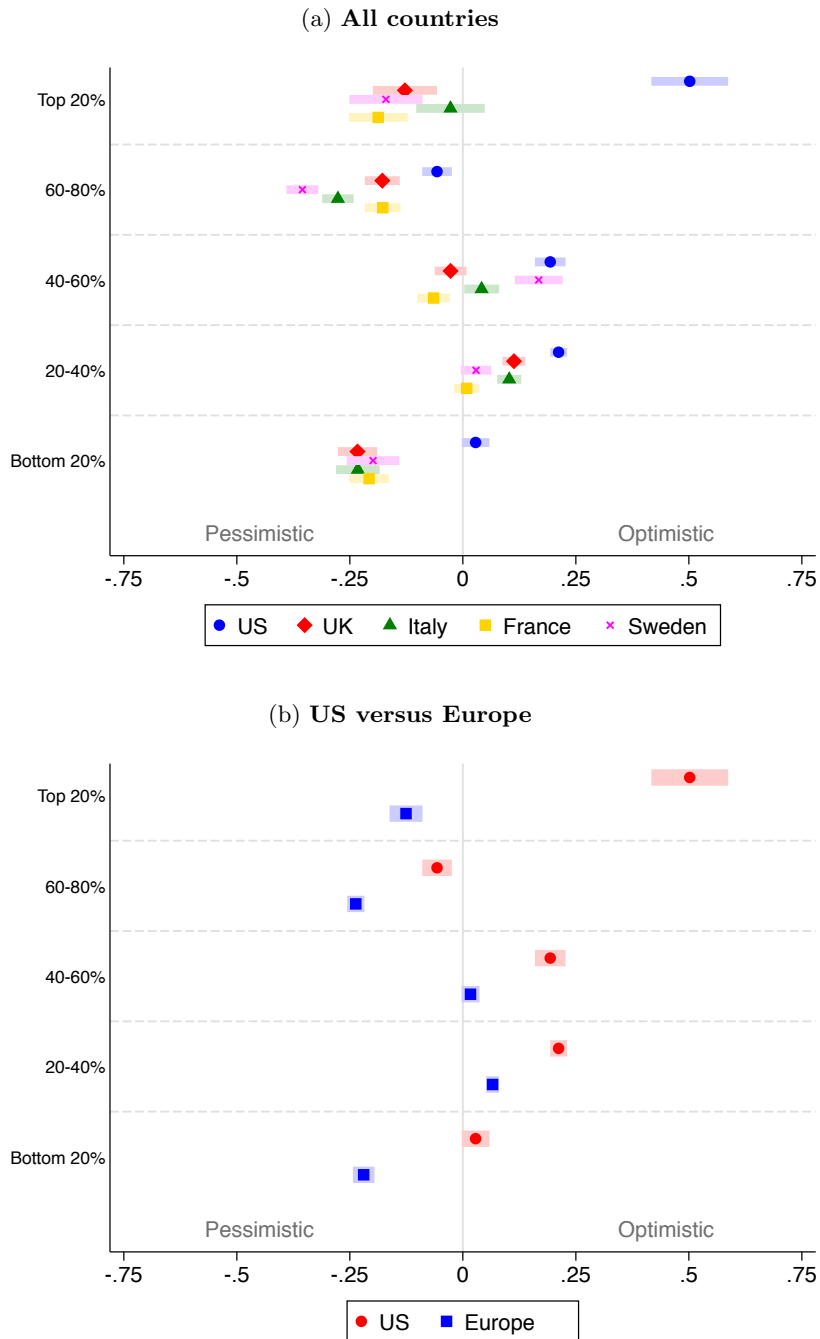
Notes: The outcome variables are all as defined in Table 3 (columns 1-7), but based on the questions that asks respondents about their mobility perceptions for “very hard working” individuals. “Left-Wing Respondents” and “Right-Wing Respondents” are defined as in Table 10. All regressions include the same controls of Table 10. “Control mean” is the mean of the outcome variable in the control group. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 14: TREATMENT EFFECTS ON POLICY PREFERENCES

	Budget Education > $p(80)$ (1)	Budget Health > $p(80)$ (2)	Budget Opp. > $p(80)$ (3)	Budget Safety Net > $p(80)$ (4)	High Government Interv. (5)	High Support Equal Pol. (6)	Tax Rate Top 1 > $p(80)$ (7)	Tax Rate Bottom 50 > $p(80)$ (8)	Support Estate Tax (9)	Unequal Opp. Very Serious Problem (10)	Government Tools (11)	Trust Government (12)
<i>All Respondents</i>												
Treated	0.009 (0.007)	0.016** (0.007)	0.014* (0.008)	0.008 (0.006)	0.004 (0.010)	0.028*** (0.009)	0.007 (0.009)	0.013 (0.009)	0.015 (0.010)	0.046*** (0.013)	-0.017 (0.013)	-0.018* (0.011)
Control mean	0.13	0.12	0.16	0.07	0.48	0.23	0.18	0.17	0.58	0.23	0.72	0.19
Obs.	8585	8585	8585	8585	8585	8585	6851	6851	8584	4281	4281	4281
<i>Left-Wing Respondents</i>												
Treated	0.031** (0.014)	0.042*** (0.013)	0.036** (0.015)	-0.005 (0.011)	0.048*** (0.018)	0.047** (0.019)	0.007 (0.017)	0.007 (0.014)	0.014 (0.017)	0.104*** (0.026)	-0.009 (0.021)	-0.029 (0.020)
Control mean	0.14	0.13	0.20	0.09	0.63	0.38	0.22	0.13	0.71	0.33	0.79	0.21
Obs.	2797	2797	2797	2797	2797	2797	2309	2309	2797	1391	1391	1391
<i>Right-Wing Respondents</i>												
Treated	-0.003 (0.012)	0.010 (0.012)	-0.000 (0.013)	0.010 (0.009)	0.006 (0.017)	0.017 (0.013)	0.008 (0.015)	-0.005 (0.017)	0.012 (0.018)	0.017 (0.019)	-0.050** (0.025)	-0.014 (0.019)
Control mean	0.12	0.12	0.14	0.05	0.36	0.13	0.15	0.22	0.42	0.15	0.65	0.19
Obs.	2808	2808	2808	2808	2808	2808	2282	2282	2808	1442	1442	1442

Notes: The budget outcomes are indicators equal to one if the share of budget allocated to the specific category is above the 80th percentile in the variable distribution. *High Government Intervention* is an indicator equal to one if the respondent has a high support for government intervention to improve opportunities. *High Support Equal Pol.* is an indicator equal to one if the respondent strongly supports increasing policies to equalize opportunities. The tax rates outcomes are indicators equal to one if the respondent's preferred income tax rate for the specific income group is above the 80th percentile in the variable distribution within her country. *Support Estate Tax* is defined as in Table 9. *Unequal Opp. Very Serious Problem* is a dummy equal to one if the respondent believes that if children from poor and rich families have unequal opportunities this is a very serious problem. *Government Tools* and *Trust Government* are defined as in Table 8. All regressions include the same controls of Table 10. "Left-Wing Respondents" and "Right-Wing Respondents" are defined as in Table 10. "Control mean" is the mean of the outcome variable in the control group. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

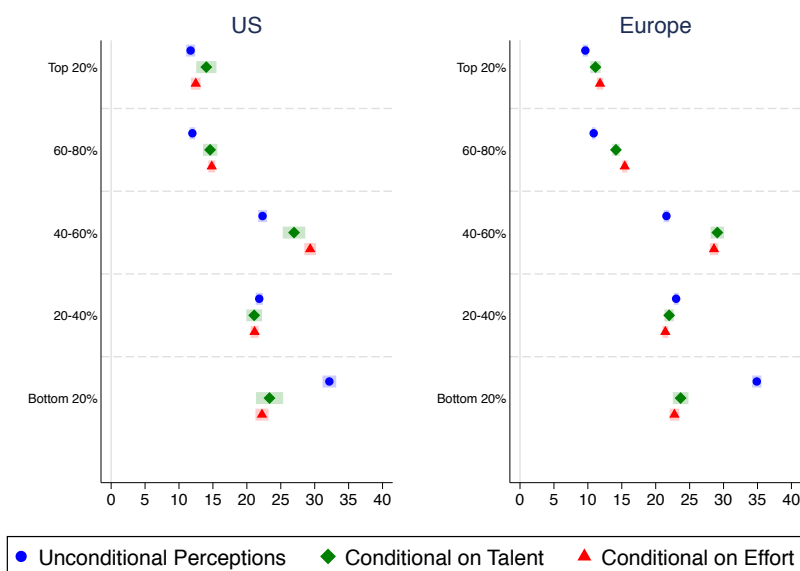
FIGURE 2: MOBILITY MISPERCEPTIONS



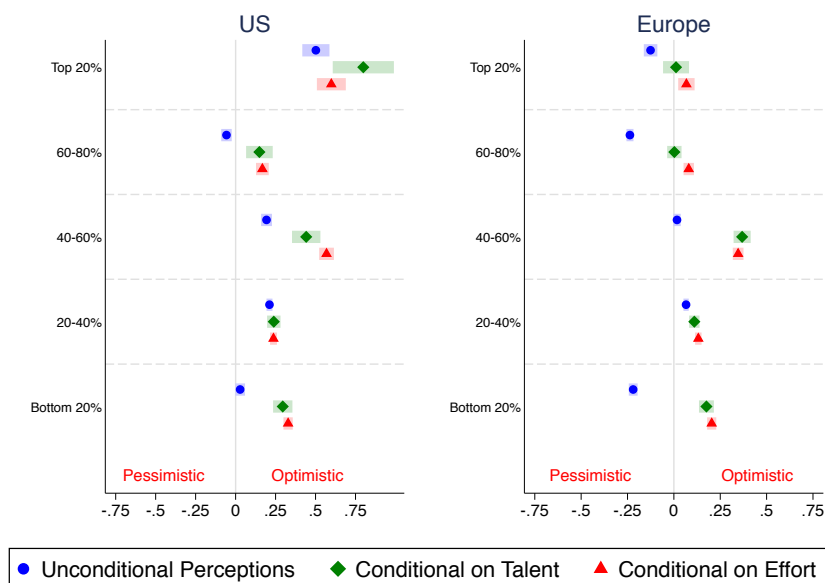
Notes: the figure shows, for each country (top panel) and for the US versus Europe (bottom panel), average respondents' mobility misperceptions about chances of moving from the bottom quintile of the parents' income distribution to each quintile of the income distribution, together with 95% confidence intervals. We measure optimism as an overprediction of the probability of moving up in the ladder to the third, fourth or fifth quintile, and an underprediction of remaining in the bottom quintile or moving only to the second quintile, as described in Section 5.

FIGURE 3: PERCEPTIONS AND MISPERCEPTIONS CONDITIONAL ON EFFORT OR TALENT, U.S. VERSUS EUROPE

(a) Perceptions



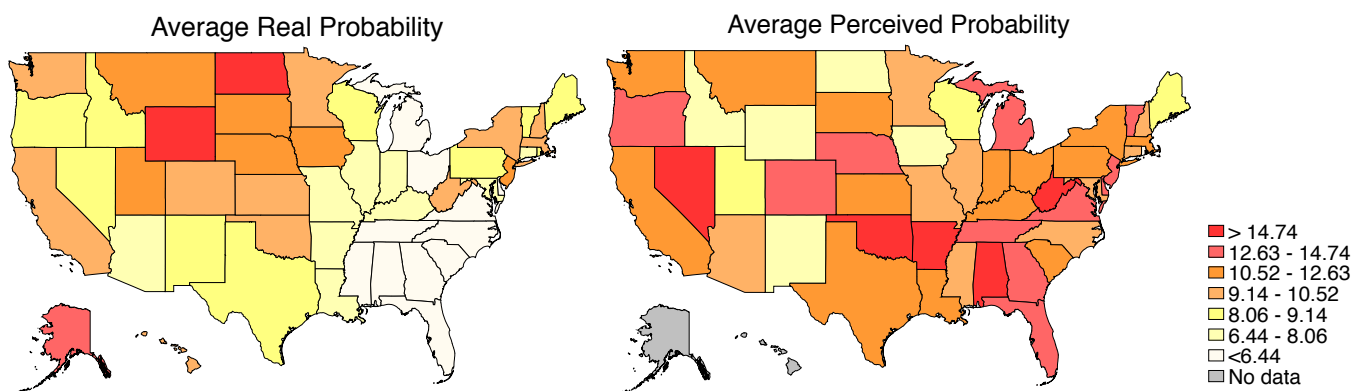
(b) Misperceptions



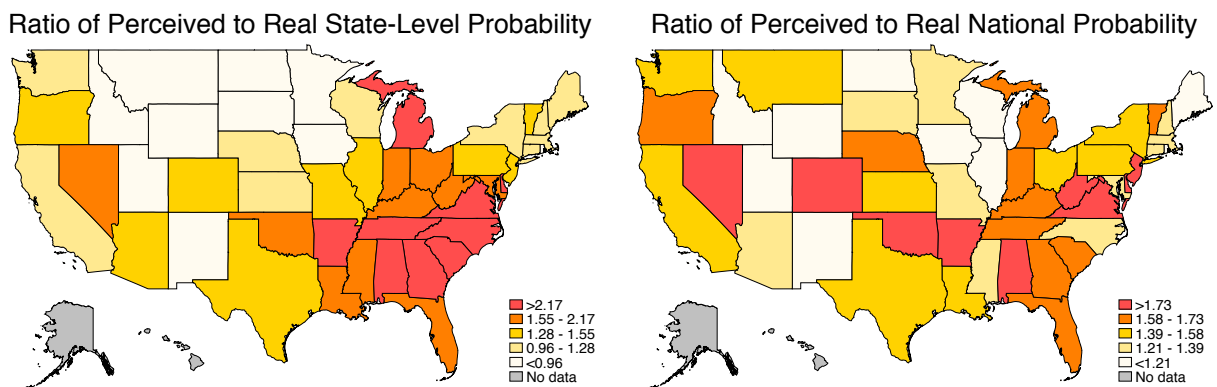
Notes: the figure shows, for the US and European countries grouped together, average respondents' mobility perceptions (top panel) and misperceptions (bottom panel) about chances of moving from the bottom quintile of the parents' income distribution to each quintile of the income distribution, together with 95% confidence intervals. The figure includes respondents' unconditional beliefs, beliefs conditional on effort, and beliefs conditional on talent. We measure optimism as an overprediction of the probability of moving up in the ladder to the third, fourth or fifth quintile, and an underprediction of remaining in the bottom quintile or moving only to the second quintile, as described in Section 5.

FIGURE 4: ACTUAL AND PERCEIVED PROBABILITY OF MOVING FROM THE BOTTOM TO THE TOP QUINTILE ACROSS U.S. STATES

Panel A:



Panel B:



Notes: The top left panel shows the actual probability of a person born in a family in the bottom quintile moving to the top quintile in each state. The top right panel shows the corresponding average perceived probability among respondents in our survey who live in that state. The bottom left panel shows the ratio of the average state-level perceived probability to the actual state-level probability. The bottom right panel shows the ratio of average state-level perceived probability to the average real national probability. The average real national probability of moving from the bottom to the top quintile in the United States is 7.8%. Real state-level probabilities are aggregated to the state level using community zone-level data from Chetty et al. (2014).

ONLINE APPENDIX – NOT FOR PUBLICATION

for “Intergenerational Mobility and Preferences for Redistribution”

by Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso

A.1 Survey Information

We collected data in three waves. The first smaller pilot wave (Wave A) consisted of only the survey part (without a treatment) of about 500 respondents in February 2016.³⁹ The second and main wave (Wave B) with the informational treatment was conducted in September 2016. We conducted a third wave (Wave C) in the United States in October 2016 to ensure robustness and increase sample size in the U.S. The only difference between Wave B and Wave C was that in the latter all respondents were asked the questions on mobility for very hard-working people. Follow-up surveys were conducted in the US about one week after wave B and wave C, respectively.

Table A1 reports the number of respondents for each survey wave and country. Table A2 summarizes the 8 randomization groups of Wave B. Wave C had only 4 randomization groups (Group 1-Group 4). Table A3 reports the share of respondents with strange answer patterns in the “ladder” mobility question. Tables A4 and A5 show demographic characteristics for the survey respondents. Table A6 shows that respondents assigned to different randomization groups are not different in terms of baseline demographic characteristics.

³⁹We conducted a small additional survey in the US in April 2016, in order to collect additional responses from the less populous states. We use responses from this additional wave in section 5.5.

TABLE A1: SURVEY WAVES, DATE AND SAMPLE SIZE

	Sample size	Date
Wave A - US	501	February 2016
Wave A - US Extra	209	April 2016
Wave A - UK	552	February 2016
Wave A - France	550	February 2016
Wave A - Italy	550	February 2016
Wave A - Sweden	495	February 2016
Wave B - US	2002	September 2016
Wave B - Follow Up	423	September 2016
Wave B - UK	1600	September 2016
Wave B - France	1600	September 2016
Wave B - Italy	1601	September 2016
Wave B - Sweden	1003	September 2016
Wave C - US	2000	October 2016
Wave C - Follow Up	586	October 2016

TABLE A2: SUMMARY OF THE 8 RANDOMIZATION GROUPS

	Treatment/Control	Saw govt. block before/after	
		mobility questions	Effort/talent
Group 1	Control	Before	Effort
Group 2	Treatment	Before	Effort
Group 3	Control	After	Effort
Group 4	Treatment	After	Effort
Group 5	Control	Before	Talent
Group 6	Treatment	Before	Talent
Group 7	Control	After	Talent
Group 8	Treatment	After	Talent

Notes: “Before” and “After” refer to whether the block was seen before or after the questions to elicit the respondent’s mobility perceptions (and, for the treated respondents, before or after the treatment).

TABLE A3: SHARE OF RESPONDENTS WITH STRANGE PATTERNS IN “LADDER” QUESTION

	Wave A	Waves B and C
100 in any quintile	0.05	0.04
100 in quintile Q2 or Q3 or Q4 or Q5	0.03	0.02
0 in quintile Q1 or Q2 or Q3	0.12	0.12
20 in each quintile	0.06	0.06

Notes: The table shows the share of respondents whose responses to the “baseline” ladder question exhibit strange patterns.

TABLE A4: SUMMARY STATISTICS

	Wave A	Waves B and C
	(1)	(2)
Male	0.47	0.49
Age	43.50	43.08
Married	0.51	0.48
Has children	0.55	0.58
Native	0.93	0.93
Employed	0.64	0.63
Unemployed	0.09	0.09
Not in labor force	0.21	0.22
College	0.38	0.42
Left-wing	0.35	0.33

Notes: This table displays summary statistics for respondents in our sample, separately for Wave A and Waves B/C. The complete wording of these questions is reported in section A.4.

TABLE A5: SUMMARY STATISTICS - BY COUNTRY

Country:	US	US	UK	UK	France	France	Italy	Italy	Sweden	Sweden
Wave:	A	B and C	A	B and C	A	B and C	A	B and C	A	B and C
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Male	0.47	0.48	0.47	0.48	0.50	0.49	0.50	0.50	0.41	0.49
Age	43.24	42.49	42.44	42.89	43.51	42.84	43.42	43.88	45.17	44.74
Married	0.51	0.51	0.49	0.47	0.51	0.42	0.60	0.54	0.41	0.41
Has children	0.52	0.57	0.55	0.55	0.56	0.59	0.52	0.58	0.61	0.65
Native	0.92	0.94	0.89	0.89	0.95	0.94	0.97	0.97	0.91	0.91
Employed	0.64	0.62	0.63	0.66	0.65	0.62	0.66	0.63	0.64	0.66
Unemployed	0.08	0.08	0.06	0.05	0.11	0.12	0.13	0.11	0.06	0.07
Not in labor force	0.23	0.24	0.26	0.24	0.20	0.20	0.15	0.19	0.19	0.20
College	0.56	0.53	0.36	0.37	0.30	0.30	0.40	0.38	0.31	0.33
Left-wing	0.26	0.27	0.28	0.33	0.39	0.34	0.44	0.44	0.35	0.32

Notes: This table displays summary statistics for respondents in our sample, by country and separately for Wave A and Waves B/C. The complete wording of these questions is reported in section A.4.

TABLE A6: COVARIATES BALANCE AMONG RANDOMIZATION GROUPS

	Treated	Saw Channels Block Before Mobility Questions	Effort Questions
	(1)	(2)	(3)
Male	0.99	0.51	0.70
Age	0.45	0.42	0.58
Married	0.35	0.70	0.45
Has children	0.60	0.13	0.33
Native	0.17	0.73	0.84
Employed	0.92	0.73	0.58
Unemployed	0.23	0.59	0.41
Not in labor force	0.79	0.86	0.79
Has university degree	0.61	0.42	0.00
Left-wing	0.91	0.98	0.12

Notes: The table shows the p-value from a series of regressions of the form $y_{ic} = \alpha + \beta Covariate_i + \gamma_c + \epsilon_{ic}$, where $Covariate_i$ is the variable listed in the row and γ_c are country fixed effects. In the column “Treated”, y_{ic} is a dummy equal to one if the respondent was in the treatment group and zero if she was in the control group. In the column “Saw Channels Block Before Mobility Questions” y_{ic} is a dummy equal to one if the respondent saw the three survey questions whose order was randomized before being asked the questions on mobility perceptions, and equal to zero if she saw them after. In the column “Effort Questions” y_{ic} is a dummy equal to one if the respondent was asked about the mobility prospects of very hard-working children, and equal to zero if she was asked about the mobility prospects of very talented children.

FIGURE A1: LADDER QUESTION TO ELICIT BELIEFS ABOUT MOBILITY

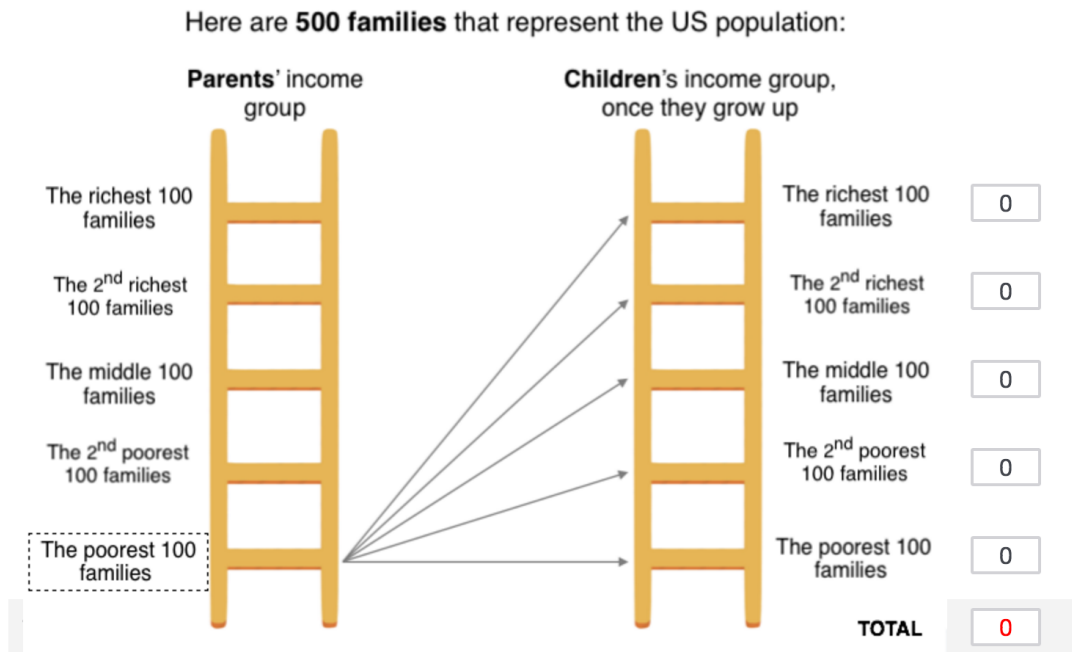


FIGURE A2: QUESTION ON PREFERRED INCOME TAX RATES FOR VARIOUS INCOME GROUPS

The government currently raises a certain amount of revenue through the income tax in order to sustain the current level of public spending. In your view, what would be the fair split of the tax burden to sustain public spending?

The income tax* rate is the percentage of your income that you pay in federal income tax. For example, if you earn \$30,000 and you pay \$3,000 in income taxes, your income tax rate is 10%.

Please use the sliders below to tell us how much you think each of the following groups should pay as a percentage of their total income.

While you adjust the four sliders for each group, the fifth bar at the bottom moves in order to show you how much of the current revenue you have been able to raise so far. The bar appears red as long as you have not raised enough revenue, or if you have raised more money than what is needed.

You will only be able to move to the next question when you meet the revenue target and the bar becomes green.

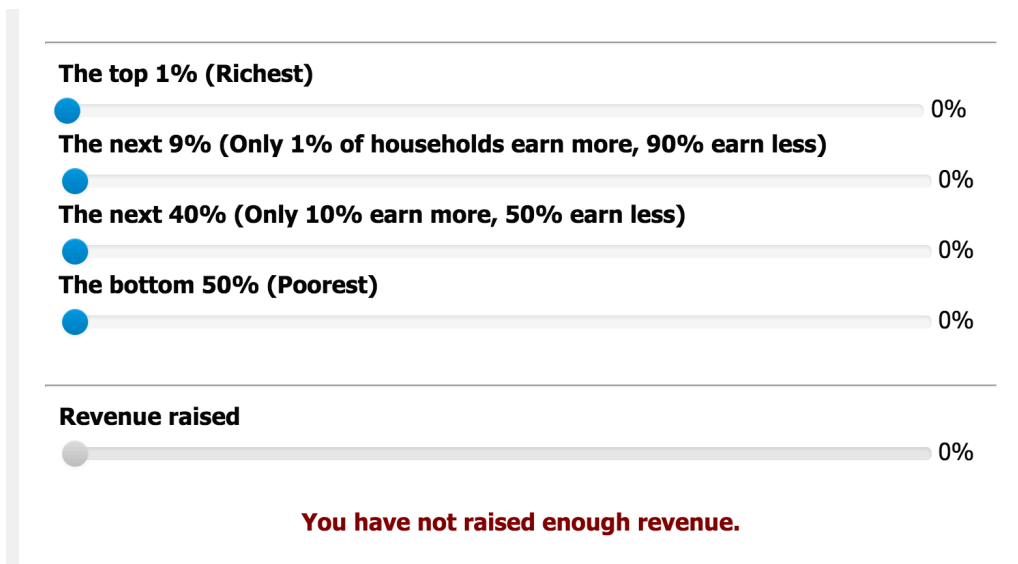


FIGURE A3: QUESTION ON PREFERRED ALLOCATION OF GOVERNMENT BUDGET

- 1) **Defense and National Security**, which refers to the costs of the Defense department and the costs of supporting security operations in foreign countries.
- 2) **Public Infrastructure**, which includes, among others, transport infrastructure like roads, bridges and airports, and water infrastructure.
- 3) **Spending on Schooling and Higher Education**, including help for children from low income families to attend school and university.
- 4) **Social Security, Medicare, Disability Insurance and Supplementary Security Income (SSI)**, which provide income support and help with health care expenses to the elderly and the disabled.
- 5) **Social Insurance and Income Support Programs**. This covers help to the unemployed (through unemployment insurance) and help for low income families (such as through Food stamps or the earned income tax credit (EITC), a tax credit for low-income working families)
- 6) **Public Spending on Health**, such as Medicaid for the poor (a healthcare program for low income families) or tax subsidies to help families buy health insurance.

Please enter the percent of the budget you would assign to each spending category (the total must sum to 100):

Defense and National Security	<input type="text" value="0"/>
Public Infrastructure	<input type="text" value="0"/>
Spending on Schooling and Higher Education	<input type="text" value="0"/>
Social Security, Medicare, Disability Insurance and Supplementary Security Income (SSI)	<input type="text" value="0"/>
Social Insurance and Income Support Programs	<input type="text" value="0"/>
Public Spending on Health	<input type="text" value="0"/>
Total	<input type="text" value="0"/>

FIGURE A4: FIRST PAGE OF THE SURVEY (ENGLISH VERSION)

We are a non-partisan group of academic researchers from Harvard. Our goal is to understand how information we see and hear in the media influences views on policies. No matter what your political views are, this is an important question and by completing this survey, you are contributing to our knowledge as a society. You might not agree with all the information presented, and that is perfectly fine. Our survey will give you an opportunity to express your own views.

It is very important for the success of our research that you **answer honestly** and **read the questions very carefully** before answering. Anytime you don't know an answer, just give your best guess. However, please be sure to spend enough time reading and understanding the question. To ensure the quality of survey data, your responses will be subject to sophisticated statistical control methods. **Responding without adequate effort may result in your responses being flagged for low quality.**

It is also very important for the success of our research project that you **complete the entire survey**, once you have started. This survey should take (on average) about 10 minutes to complete.

Notes: Your participation in this study is purely voluntary. Your name will never be recorded. Results may include summary data, but you will never be identified. If you have any question about this study, you may contact us at socialsciencestudies@gmail.com

FIGURE A5: TREATMENT ANIMATION - INTRODUCTION



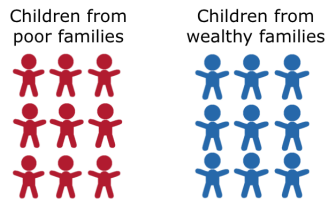
Recent academic research has been exploring the link between one's family background and one's chances of making it in life. These **recent academic studies** have leveraged new large-scale datasets to explore the opportunities available to children from different family backgrounds and their chances of making it in life.

We will now show you **two short animations** that summarize the two key findings of these studies. Please proceed to the next page when you are ready.

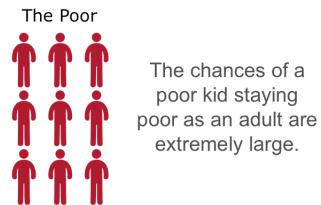
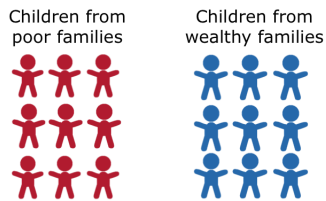


FIGURE A6: TREATMENT ANIMATION

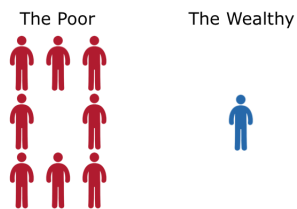
(a) First screen



What does recent research tell us about how children from poor families will do when they grow up?

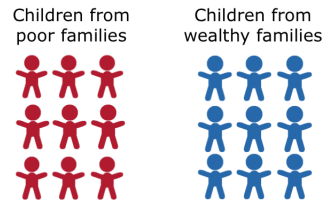


Only very few kids from poor families will ever make it and become rich.

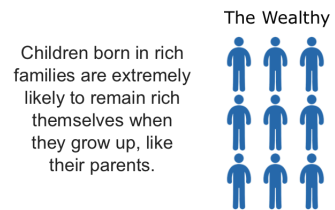
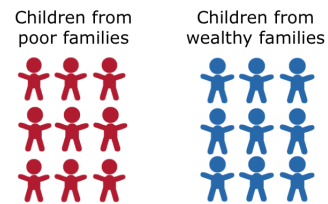


REPLAY

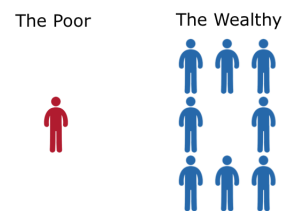
(b) Second screen



What does recent research tell us about how children from rich families will do when they grow up?



It is extremely rare for a child from a rich family to become poor later in life.



A.2 Variable Definitions

Demographic variables:

Male: respondent is male.

Young: respondent is younger than 45 years old.

Has Children: respondent has at least one child.

Rich: respondent's household income is above the 75th percentile of the respondents' household income distribution in the country.

College: respondent has college degree.

Left-wing: respondent's views on economic issues are liberal or very liberal.

Right-wing: respondent's views on economic issues are conservatives or very conservatives.

Moved up: dummy equal to one if the level of status of the respondent's job is higher than his father's one.

Immigrant: dummy equal to one if at least one of the respondent's parents is not born in the country.

Mobility Perceptions:

Q1 to Q[X]: perceived probability of being in the X th quintile as an adult for a child with parents in the first quintile.

Q1 to Q[X] Effort: perceived probability of being in the X th quintile as an adult for a hard-working child with parents in the first quintile.

Q1 to Q4 or Q5: perceived probability of being in the fourth or fifth quintile as an adult for a child with parents in the first quintile.

Q1 to Q4 (Qual.): dummy equal to one if respondent answers that the chances of moving from the first to the fourth quintile are "fairly low" or "fairly high" or "High" (equal to zero if chances are "Close to zero" or "Low").

Q1 to Q5 (Qual.): dummy equal to one if respondent answers that the chances of moving from the first to the fifth quintile are "fairly low" or "fairly high" or "High" (equal to zero if chances are "Close to zero" or "Low").

Diff Q1 to Q1: perceived probability of being in the first quintile as an adult for a child with parents in the first quintile *minus* perceived probability of being in the first quintile as an adult for a hard-working child with parents in the first quintile.

Diff Q1 to Q4 or Q5: perceived probability of being in the fourth or fifth quintile as an adult for a child with parents in the first quintile *minus* perceived probability of being in the fourth or fifth quintile as an adult for a hard-working child with parents in the first quintile.

Perceptions of Fairness:

Economic System Fair: dummy equal to one if respondent believes that the economic system in her country is basically fair, since all have an equal opportunity to succeed.

American Dream Alive: dummy equal to one if respondent agrees or strongly agrees with the state-

ment “In [country] everybody has a chance to make it and be economically successful” (equal to zero if neither agrees nor disagrees, disagrees, or strongly disagrees).

Effort Reason Poor: dummy equal to one if respondent believes that “Lack of effort on his or her own part” is a more important determinant of why a person is poor than “Circumstances beyond his or her control”.

Effort Reason Rich: dummy equal to one if respondent believes that “Because she or he worked harder than others” is a more important determinant of why a person is poor than “Because she or he had more advantages than others”.

Policy Preferences:

Tax Rate Top 1: Average income tax rate for households in the top 1% of the income distribution.

Tax Rate Next 9: Average income tax rate for households in the 99-90th percentiles of the income distribution.

Tax Rate Next 40: Average income tax rate for households in the 90-50th percentiles of the income distribution.

Tax Rate Bottom 50: Average income tax rate for households in the bottom 50% of the income distribution.

Tax Rate [X] > p(80): dummy equal to one if the respondent’s preferred income tax rate for income group X is above the 80th percentile in the variable distribution within her country.

Share Taxes Top 1: Average share of income taxes paid by households in the top 1% of the income distribution.

Share Taxes Next 9: Average share of income taxes paid by households in the 99-90th percentile of the income distribution.

Share Taxes Bottom 50: Average share of income taxes paid by households in the bottom 50% of the income distribution.

Support Estate Tax: Dummy equal to one if respondent is in favor of the estate tax (defined as answering 4 or 5 on a scale from 1 to 5, where 1 means “do not support at all” and 5 means “strongly support”).

Budget Defense: share of current government budget that should be allocated to defense.

Budget Infrastructure: share of current government budget that should be allocated to public infrastructure.

Budget Education: share of current government budget that should be allocated to education.

Budget Pensions: share of current government budget that should be allocated to pensions.

Budget Safety Net: share of current government budget that should be allocated to safety net policies.

Budget Health: share of current government budget that should be allocated to health care.

Budget Opportunities: share of current government budget that should be allocated to education and health.

Budget [X] > p(80): dummy equal to one if the share of budget allocated to category X is above

the 80th percentile in the variable distribution.

Support Equality Opp. Policies: respondent's support, on a scale from 1 to 5, for policies to increase the opportunities for children born in poor families and to foster more equality of opportunity. The respondent was told that "to finance an expansion of policies promoting equal opportunity, it would have to be the case that either other policies are scaled down or taxes are raised".

High Support Equal. Policies: a dummy equal to one if the respondent strongly supports policies to equalize opportunities. The respondent was told that "to finance an expansion of policies promoting equal opportunity, it would have to be the case that either other policies are scaled down or taxes are raised".

Government Interv.: respondent's support, on a scale from 1 to 7, for government intervention to make the opportunities for children from poor and rich families less unequal.

High Government Intervention: dummy equal to one if the respondent has a high degree of support for government intervention to make the opportunities for children from poor and rich families less unequal (support of 6 or more on a 1-7 scale).

Lowering Taxes Better: dummy equal to one if the respondent believes that "lowering taxes on wealthy people and corporations to encourage more investment in economic growth" would do more to make the opportunities for children from poor and rich families less unequal than "raising taxes on wealthy people and corporations to expand programs for the poor".

Unequal Opp. Problem: dummy equal to one if the respondent believes that if children from poor and rich backgrounds have unequal opportunities in life this is "A problem" or "A serious problem" or "A very serious problem" (equal to zero if it is "Not a problem" or "A small problem").

Unequal Opp. Very Serious Problem: dummy equal to one if the respondent believes that if children from poor and rich backgrounds have unequal opportunities in life this is "A very serious problem".

Role of government:

Trust Government: dummy equal to one if the respondent answers that she can trust the government to do what is right "Most of the time" or "Always" (it takes value zero if the answer is "Never" or "Only some of the time").

Government Tools: dummy equal to one if the respondent answers that to reduce the inequality of opportunities between children born in poor and rich families the government has the ability and the tools to do "Some" or "A lot" (it takes value zero if the answer is "Nothing at all" or "Not much").

Against government 1: dummy equal to one if any of the following is true: the respondent answers that she can never trust the government; the respondent believes that to reduce the inequality of opportunities between children born in poor and rich families the government has the ability and the tools to do nothing at all or not much; the respondent is at point 4 or below in the scale from 1 to 7 of the variable *Government Intervention* is less than 4 on the 1 to 7 scale; the respondent believes that "lowering taxes on wealthy people and corporations to encourage more investment in economic growth" would be the best way to equalize opportunities.

Against government 2: dummy equal to one if *Against government 1* is equal to one, or the respondent believes that lack of effort is the main reason why a person is poor, or the respondent believes that effort is the main reason why a person is rich, or the respondent believes that if opportunities are unequal this is not a problem or a small problem.

A.3 Links to surveys

- Survey U.S.: https://harvard.az1.qualtrics.com/SE/?SID=SV_5dxninfErZ246X3
- Survey U.K.: https://harvard.az1.qualtrics.com/SE/?SID=SV_7TCttX32sJZGUnP
- Survey France: https://harvard.az1.qualtrics.com/SE/?SID=SV_55Nxjd0VSEVnHBb
- Survey Italy: https://harvard.az1.qualtrics.com/SE/?SID=SV_ezmyMMB21TJgoeh
- Survey Sweden: https://harvard.az1.qualtrics.com/SE/?SID=SV_cZxXzaGNNjn6w5L

A.4 Detailed Survey Questionnaires

Answer options are in *italic*, separated by a semicolon.

1. See Figure A4

Yes, I would like to take part in this study, and confirm that I AM A U.S. RESIDENT and am 18 or older; No, I would not like to participate.

2. What is your gender?

Male; Female

3. What is your age?

4. What was your TOTAL household income, before taxes, last year (2015)?

\$0 - \$9,999; \$10,000 - \$14,999; \$15,000 - \$19,999; \$20,000 - \$29,999; \$30,000 - \$39,999; \$40,000 - \$49,999; \$50,000 - \$69,999; \$70,000 - \$89,999; \$90,000 - \$109,999; \$110,000 - \$149,999; \$150,000 - \$199,999; \$200,000 +

5. Please indicate your marital status

Single; Married; Other

6. How many children do you have?

I do not have children; 1; 2; 3; 4; 5 or more

7. How would you describe your ethnicity/race?
European American/White; African American/Black; Hispanic/Latino; Asian/Asian American; Other
8. Were you born in the United States?
Yes; No
9. Were both of your parents born in the United States?
Yes; No
10. Where was your father born?
Unites States; South or Central America, or Mexico; Canada; Europe; Asia; Africa; Oceania
11. In which state do you live?
12. In which ZIP code do you live?
13. Which category best describes your highest level of education?
Eighth Grade or less; Some High School; High School degree / GED; Some College; 2-year College Degree; 4-year College Degree; Master's Degree; Doctoral Degree; Professional Degree (JD, MD, MBA)
14. Which category best describes your father's highest level of education?
Eighth Grade or less; Some High School; High School degree / GED; Some College; 2-year College Degree; 4-year College Degree; Master's Degree; Doctoral Degree; Professional Degree (JD, MD, MBA); I come from a single-parent family and my father was not present
15. Which category best describes your mother's highest level of education?
Eighth Grade or less; Some High School; High School degree / GED; Some College; 2-year College Degree; 4-year College Degree; Master's Degree; Doctoral Degree; Professional Degree (JD, MD, MBA); I come from a single-parent family and my mother was not present
16. What is your current employment status?
Full-time employee; Part-time employee; Self-employed or small business owner; Unemployed and looking for work; Student; Not in labor force (for example: retired, or full-time parent)
17. If you compare your job (or your last job if you currently don't have a job) with the job your father had while you were growing up, would you say that the level of status of your job is:
Much higher than my father's; Higher than my father's; About equal to my father's; Lower than my father's; Much lower than my father's; My father did not have a job while I was growing up OR I come from a single-parent family

18. If you compare your job (or your last job if you currently don't have a job) with the job your mother had while you were growing up, would you say that the level of status of your job is:
Much higher than my mother's; Higher than my mother's; About equal to my mother's; Lower than my mother's; Much lower than my mother's; My mother did not have a job while I was growing up OR I come from a single-parent family
19. When you were growing up, compared with American families back then, would you say your family income was:
Far below average; Below average; Average; Above average; Far above average
20. Right now, compared with American families, would you say your own household income is:
Far below average; Below average; Average; Above average; Far above average
21. On economic policy matters, where do you see yourself on the liberal/conservative spectrum?
Very liberal; Liberal; Moderate; Conservative; Very conservative
22. Before proceeding to the next set of questions, we want to ask for your feedback about the responses you provided so far. It is vital to our study that we only include responses from people who devoted their full attention to this study. This will not affect in any way the payment you will receive for taking this survey. In your honest opinion, should we use your responses, or should we discard your responses since you did not devote your full attention to the questions so far?
Yes, I have devoted full attention to the questions so far and I think you should use my responses for your study; No, I have not devoted full attention to the questions so far and I think you should not use my responses for your study.
23. Do you think the economic system in the United States is:
Basically fair, since all Americans have an equal opportunity to succeed; Basically unfair, since all Americans do not have an equal opportunity to succeed
24. Which has more to do with why a person is poor?
Lack of effort on his or her own part; Circumstances beyond his or her control
25. Which has more to do with why a person is rich?
Because she or he worked harder than others; Because she or he had more advantages than others
26. How much of the time do you think you can trust the government to do what is right?
Never; Only some of the time; Most of the time; Always

27. If children from poor and rich backgrounds have unequal opportunities in life, do you think this is:

Not a problem at all; A small problem; A problem; A serious problem; A very serious problem

28. To reduce the inequality of opportunities between children born in poor and rich families, the government has the ability and the tools to do:

Nothing at all; Not much; Some; A lot

29. We would now like to ask you what you think about the life opportunities of children from very poor families.

For the following questions, we focus on 500 families that represent the U.S. population. We divide them into five groups on the basis of their income, with each group containing 100 families. These groups are: the poorest 100 families, the second poorest 100 families, the middle 100 families, the second richest 100 families, and the richest 100 families.

In the following questions, we will ask you to evaluate the chances that children born in one of the poorest 100 families, once they grow up, will belong to any of these income groups.

Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of 100 children coming from the poorest 100 families will grow up to be in each income group.

From our experience, this question will take you at the very least 1 minute to answer.

Please note that your entries need to add up to 100 or you will not be able to move on to the next page.

Figure A1 here.

30. Do you think the chances that a child from the poorest 100 families will grow up to be among the richest 100 families are:

Close to zero; Low; Fairly low; Fairly high; High

31. Do you think the chances that a child from the poorest 100 families will grow up to be among the second richest 100 families are:

Close to zero; Low; Fairly low; Fairly high; High

32. We are still interested in the life opportunities of children from very poor families, but we now focus on a different group of poor children.

From our experience, this question will take you at the very least 45 seconds to answer.

Consider 100 children coming from the poorest 100 families.

These children are very determined and put in hard work both at school and, later in life, when finding a job and doing that job.

Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of these 100 children will grow up to be in each income group.

Please note that your entries need to add up to 100 or you will not be able to move on to the next page.

Figure A1 here.

33. Do you think the chances that one of these hard working children will grow up to be among the richest 100 families are:

Close to zero; Low; Fairly low; Fairly high; High

34. Do you think the chances that one of these hard working children will grow up to be among the second richest 100 families are:

Close to zero; Low; Fairly low; Fairly high; High

35. We are still interested in the life opportunities of children from very poor families, but we now focus on a different group of poor children.

From our experience, this question will take you at the very least 45 seconds to answer.

Consider 100 children coming from the poorest 100 families.

These children are very talented.

Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of these 100 children will grow up to be in each income group.

Please note that your entries need to add up to 100 or you will not be able to move on to the next page.

Figure A1 here.

36. Do you think the chances that one of these talented children will grow up to be among the richest 100 families are:

Close to zero; Low; Fairly low; Fairly high; High

37. Do you think the chances that one of these talented children will grow up to be among the second richest 100 families are:

Close to zero; Low; Fairly low; Fairly high; High

38. How do you feel about the following statement?

”In the United States everybody has a chance to make it and be economically successful.”

Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

39. Some people think that the government should not concern itself with making the opportunities for children from poor and rich families less unequal. Others think that the government should do everything in its power to make the opportunities for children from poor and rich families less unequal. Think of a score of 1 as meaning that the government should not concern itself with making the opportunities for children from poor and rich families less unequal, and a score of 7 meaning that the government should do everything in its power to reduce this inequality of opportunities.

What score between 1 and 7 comes closest to the way you feel?

1; 2; 3; 4; 5; 6; 7

40. What do you think would do more to make the opportunities for children from poor and rich families less unequal?

Lowering taxes on wealthy people and corporations to encourage more investment in economic growth; Raising taxes on wealthy people and corporations to expand programs for the poor.

41. Do you support more policies to increase the opportunities for children born in poor families and to foster more equality of opportunity, such as education policies? Naturally, to finance an expansion of policies promoting equal opportunity, it would have to be the case that either other policies are scaled down or taxes are raised.

I very strongly oppose more policies promoting equality of opportunity; I oppose more policies promoting equality of opportunity; I am indifferent; I support more policies promoting equality of opportunity; I very strongly support more policies promoting equality of opportunity.

42. In the next two questions, we ask you to think about the total level of funds that the government raises and spends today on various policies. For the purpose of these questions, suppose that the level of government spending is fixed at its current level and cannot be changed. We will ask about your views on two aspects:

- First, on the fair split of the tax burden to raise this level of funds.
- Second, on how you think the government should spend this level of funds.

43. See Figure A2

44. We now ask you how you would like to spend the total government budget. Suppose that you are the person deciding on the U.S. budget for the next year. You can choose how you want to divide the budget (in percent) between the following 6 categories:

See Figure A3

45. The estate tax is a tax on the transfer of wealth from a deceased person to her heirs. This tax applies only to individuals with wealth above a certain threshold. On a scale from 1 to

5, how would you rate your support for the estate tax, where 1 means do not support at all and 5 means strongly support?

1; 2; 3; 4; 5

46. Do you feel that this survey was biased?

Yes, left-wing bias; Yes, right-wing bias; No, it did not feel bias

47. Please feel free to give us any feedback or impression regarding this survey.

A.5 Additional Tables and Figures

TABLE A7: HETEROGENEITY IN PERCEPTIONS: PARTIAL EFFECTS

	Q1 to Q1 (1)	Q1 to Q4 or Q5 (2)	Q1 to Q4 (Qual.) (3)	Q1 to Q5 (Qual.) (4)
Male	2.090*** (0.741)	-1.034 (0.669)	-0.026* (0.015)	-0.048*** (0.014)
Young	1.858** (0.769)	-0.387 (0.693)	0.073*** (0.016)	0.095*** (0.014)
Has Children	-2.328*** (0.776)	1.749** (0.700)	0.027* (0.016)	0.049*** (0.014)
Rich	1.694* (0.966)	-0.661 (0.871)	-0.013 (0.020)	-0.032* (0.018)
College	4.843*** (0.780)	-4.444*** (0.704)	-0.034** (0.016)	-0.058*** (0.014)
Right	-2.468*** (0.789)	0.960 (0.711)	0.080*** (0.016)	0.041*** (0.015)
Moved up	-1.890** (0.767)	0.861 (0.692)	0.021 (0.016)	0.011 (0.014)
Immigrant	-1.819* (1.028)	1.249 (0.927)	0.044** (0.021)	0.049** (0.019)
Obs.	4,290	4,290	4,290	4,290
Country-wave FE	Yes	Yes	Yes	Yes
Mean Dep. Var.	34.17	20.97	0.38	0.27

Notes: The outcome variables are defined as in Table 4. Regressors are indicator variables for gender, age less than 45, having children, being in the top quartile of the income distribution, having a college degree, right-wing political affiliation, having a job with a status higher than father, having at least one of the parents not born in the country. “Mean Dep. Var” reports the mean of the outcome variable. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A8: HETEROGENEITY IN PERCEPTIONS – UNITED STATES

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)
Male (833)	32.96	23.35	0.44	0.32
Female (898)	31.80	23.19	0.44	0.32
Difference	1.16	0.16	-0.00	-0.01
	(1.18)	(1.09)	(0.02)	(0.02)
Young (930)	33.71	23.14	0.48	0.36
Old (801)	30.87	23.42	0.39	0.27
Difference	2.84**	-0.28	0.10***	0.10***
	(1.18)	(1.09)	(0.02)	(0.02)
Children (997)	30.94	24.21	0.45	0.34
No Children (734)	34.37	21.96	0.42	0.29
Difference	-3.42***	2.25**	0.03	0.05**
	(1.20)	(1.11)	(0.03)	(0.02)
Rich (355)	32.63	23.72	0.46	0.30
Poor (1,376)	32.30	23.15	0.43	0.32
Difference	0.34	0.57	0.03	-0.03
	(1.44)	(1.34)	(0.03)	(0.03)
College (911)	33.85	21.87	0.43	0.30
Less than College (820)	30.64	24.91	0.44	0.35
Difference	3.20***	-3.04***	-0.01	-0.05**
	(1.18)	(1.09)	(0.02)	(0.02)
Left-wing (464)	38.30	20.81	0.33	0.24
Right-wing (517)	29.42	23.72	0.52	0.36
Difference	8.88***	-2.91**	-0.19***	-0.12***
	(1.58)	(1.44)	(0.03)	(0.03)
Moved up (720)	31.44	23.66	0.46	0.33
Did not moved up (937)	33.08	22.97	0.42	0.31
Difference	-1.64	0.69	0.05*	0.02
	(1.19)	(1.10)	(0.03)	(0.02)
Immigrant (272)	31.59	23.52	0.50	0.37
Not Immigrant (1,459)	32.51	23.23	0.43	0.31
Difference	-0.92	0.29	0.07**	0.06**
	(1.62)	(1.50)	(0.03)	(0.03)
Reason poor is lack of effort (794)	29.67	23.97	0.52	0.36
Reason poor is not lack of effort (937)	34.75	22.66	0.36	0.28
Difference	-5.08***	1.31	0.16***	0.08***
	(1.18)	(1.09)	(0.02)	(0.02)
Reason rich is effort (678)	27.00	26.10	0.57	0.44
Reason rich is not effort (1,05)	35.92	21.40	0.35	0.24
Difference	-8.92***	4.71***	0.21***	0.19***
	(1.19)	(1.11)	(0.02)	(0.02)
Econ system fair (873)	27.64	25.18	0.54	0.41
Econ system unfair (858)	37.34	21.27	0.33	0.23
Difference	-9.71***	3.91***	0.21***	0.18***
	(1.16)	(1.09)	(0.02)	(0.02)
Unequal opp problem (1,440)	33.58	22.43	0.41	0.29
Unequal opp not problem (291)	26.41	27.39	0.57	0.44
Difference	7.17***	-4.96***	-0.16***	-0.15***
	(1.57)	(1.45)	(0.03)	(0.03)

Notes: The table reports average mobility perceptions for different groups of respondents and the difference between them. Standard errors in parentheses. See the notes to Table 4. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A9: HETEROGENEITY IN PERCEPTIONS – UNITED KINGDOM

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)
Male (386)	40.54	18.82	0.28	0.17
Female (373)	37.45	20.08	0.36	0.27
Difference	3.09*	-1.26	-0.08**	-0.10***
	(1.86)	(1.58)	(0.03)	(0.03)
Young (393)	38.74	19.29	0.37	0.29
Old (366)	39.35	19.57	0.27	0.14
Difference	-0.61	-0.29	0.10***	0.15***
	(1.87)	(1.58)	(0.03)	(0.03)
Children (414)	37.31	20.21	0.30	0.20
No Children (345)	41.13	18.49	0.34	0.24
Difference	-3.82**	1.72	-0.04	-0.05
	(1.87)	(1.58)	(0.04)	(0.03)
Rich (153)	44.13	15.44	0.34	0.21
Poor (606)	37.71	20.47	0.31	0.22
Difference	6.43***	-5.03***	0.03	-0.01
	(2.29)	(1.94)	(0.04)	(0.04)
College (279)	44.62	14.71	0.31	0.20
Less than College (480)	35.76	22.21	0.32	0.23
Difference	8.86***	-7.50***	-0.02	-0.03
	(1.90)	(1.61)	(0.04)	(0.03)
Left-wing (257)	42.43	17.46	0.19	0.09
Right-wing (167)	37.90	20.62	0.39	0.23
Difference	4.53*	-3.16	-0.20***	-0.14***
	(2.55)	(2.22)	(0.04)	(0.04)
Moved up (318)	40.25	18.42	0.28	0.18
Did not moved up (411)	38.10	20.21	0.35	0.24
Difference	2.15	-1.79	-0.07**	-0.06**
	(1.88)	(1.59)	(0.04)	(0.03)
Immigrant (148)	38.39	21.09	0.30	0.23
Not Immigrant (611)	39.19	19.03	0.32	0.21
Difference	-0.80	2.06	-0.02	0.02
	(2.37)	(2.00)	(0.04)	(0.04)
Reason poor is lack of effort (278)	37.24	20.37	0.37	0.27
Reason poor is not lack of effort (481)	40.10	18.87	0.28	0.19
Difference	-2.87	1.50	0.09**	0.08***
	(1.93)	(1.63)	(0.04)	(0.03)
Reason rich is effort (237)	35.19	21.57	0.39	0.31
Reason rich is not effort (522)	40.85	18.42	0.28	0.18
Difference	-5.66***	3.14*	0.11***	0.13***
	(1.99)	(1.69)	(0.04)	(0.03)
Econ system fair (345)	36.96	20.17	0.38	0.27
Econ system unfair (414)	40.83	18.79	0.27	0.17
Difference	-3.87**	1.39	0.11***	0.09***
	(1.86)	(1.58)	(0.03)	(0.03)
Unequal opp problem (648)	39.87	18.73	0.31	0.20
Unequal opp not problem (111)	34.19	23.49	0.36	0.33
Difference	5.68**	-4.76**	-0.06	-0.13***
	(2.63)	(2.22)	(0.05)	(0.04)

Notes: The table reports average mobility perceptions for different groups of respondents and the difference between them. Standard errors in parentheses. See the notes to Table 4. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A10: HETEROGENEITY IN PERCEPTIONS – FRANCE

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)
Male (373)	35.64	17.96	0.36	0.20
Female (396)	35.52	18.30	0.37	0.29
Difference	0.12	-0.35	-0.01	-0.09***
	(1.73)	(1.47)	(0.04)	(0.03)
Young (416)	37.99	17.47	0.37	0.26
Old (353)	32.71	18.92	0.35	0.23
Difference	5.28***	-1.45	0.01	0.03
	(1.73)	(1.47)	(0.04)	(0.03)
Children (443)	34.88	18.50	0.38	0.26
No Children (326)	36.53	17.64	0.34	0.23
Difference	-1.65	0.86	0.04	0.02
	(1.75)	(1.48)	(0.04)	(0.03)
Rich (138)	38.63	16.74	0.37	0.23
Poor (631)	34.91	18.44	0.36	0.25
Difference	3.72*	-1.70	0.01	-0.03
	(2.24)	(1.90)	(0.05)	(0.04)
College (227)	39.50	15.11	0.34	0.20
Less than College (542)	33.87	19.46	0.37	0.27
Difference	5.63***	-4.35***	-0.03	-0.07*
	(1.87)	(1.59)	(0.04)	(0.04)
Left-wing (249)	37.71	16.66	0.36	0.24
Right-wing (307)	33.55	18.99	0.39	0.27
Difference	4.16**	-2.33	-0.03	-0.04
	(2.01)	(1.67)	(0.04)	(0.04)
Moved up (337)	33.42	18.83	0.38	0.24
Did not moved up (419)	37.35	17.57	0.35	0.25
Difference	-3.93**	1.26	0.03	-0.01
	(1.73)	(1.47)	(0.04)	(0.03)
Immigrant (131)	33.99	15.44	0.39	0.22
Not Immigrant (638)	35.90	18.68	0.36	0.25
Difference	-1.91	-3.24*	0.04	-0.03
	(2.32)	(1.96)	(0.05)	(0.04)
Reason poor is lack of effort (180)	35.13	17.39	0.44	0.27
Reason poor is not lack of effort (587)	35.73	18.38	0.34	0.24
Difference	-0.59	-0.99	0.10**	0.04
	(2.02)	(1.71)	(0.04)	(0.04)
Reason rich is effort (234)	32.44	20.21	0.44	0.30
Reason rich is not effort (533)	36.99	17.21	0.33	0.22
Difference	-4.55**	3.00*	0.12***	0.08**
	(1.86)	(1.58)	(0.04)	(0.03)
Econ system fair (146)	31.87	20.06	0.45	0.31
Econ system unfair (622)	36.49	17.66	0.34	0.23
Difference	-4.62**	2.39	0.11**	0.08**
	(2.17)	(1.84)	(0.04)	(0.04)
Unequal opp problem (684)	36.09	17.05	0.35	0.22
Unequal opp not problem (85)	31.62	26.58	0.46	0.44
Difference	4.47*	-9.54***	-0.12**	-0.22***
	(2.72)	(2.28)	(0.06)	(0.05)

Notes: The table reports average mobility perceptions for different groups of respondents and the difference between them. Standard errors in parentheses. See the notes to Table 4. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A11: HETEROGENEITY IN PERCEPTIONS – ITALY

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)
Male (360)	33.97	19.50	0.32	0.20
Female (375)	31.39	22.37	0.38	0.28
Difference	2.58	-2.86*	-0.05	-0.08**
	(1.73)	(1.65)	(0.04)	(0.03)
Young (398)	34.81	18.77	0.35	0.26
Old (337)	30.12	23.54	0.35	0.22
Difference	4.69***	-4.77***	-0.01	0.04
	(1.73)	(1.65)	(0.04)	(0.03)
Children (422)	31.05	22.06	0.36	0.27
No Children (313)	34.85	19.46	0.34	0.21
Difference	-3.81**	2.60	0.02	0.06*
	(1.75)	(1.67)	(0.04)	(0.03)
Rich (127)	33.56	19.14	0.27	0.17
Poor (608)	32.46	21.35	0.37	0.26
Difference	1.10	-2.21	-0.10**	-0.08**
	(2.28)	(2.17)	(0.05)	(0.04)
College (271)	34.81	18.23	0.36	0.23
Less than College (464)	31.37	22.58	0.34	0.25
Difference	3.44*	-4.35**	0.02	-0.02
	(1.79)	(1.71)	(0.04)	(0.03)
Left-wing (335)	33.51	19.55	0.28	0.21
Right-wing (238)	32.91	21.99	0.39	0.27
Difference	0.60	-2.44	-0.11***	-0.06*
	(2.01)	(1.88)	(0.04)	(0.04)
Moved up (307)	31.41	20.92	0.35	0.23
Did not moved up (424)	33.56	21.00	0.35	0.26
Difference	-2.15	-0.08	0.00	-0.03
	(1.75)	(1.68)	(0.04)	(0.03)
Immigrant (33)	33.33	19.09	0.33	0.33
Not Immigrant (702)	32.62	21.05	0.35	0.24
Difference	0.72	-1.96	-0.02	0.10
	(4.15)	(3.96)	(0.09)	(0.08)
Reason poor is lack of effort (101)	32.78	22.46	0.40	0.28
Reason poor is not lack of effort (634)	32.63	20.72	0.34	0.24
Difference	0.15	1.74	0.05	0.04
	(2.50)	(2.39)	(0.05)	(0.05)
Reason rich is effort (124)	32.39	22.17	0.53	0.39
Reason rich is not effort (611)	32.71	20.72	0.31	0.21
Difference	-0.32	1.46	0.22***	0.17***
	(2.31)	(2.21)	(0.05)	(0.04)
Econ system fair (71)	28.55	23.92	0.58	0.41
Econ system unfair (664)	33.10	20.64	0.33	0.23
Difference	-4.55	3.28	0.25***	0.18***
	(2.91)	(2.78)	(0.06)	(0.05)
Unequal opp problem (690)	33.25	20.34	0.34	0.24
Unequal opp not problem (45)	23.60	30.27	0.51	0.36
Difference	9.65***	-9.92***	-0.18**	-0.12*
	(3.57)	(3.40)	(0.07)	(0.07)

Notes: The table reports average mobility perceptions for different groups of respondents and the difference between them. Standard errors in parentheses. See the notes to Table 4. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A12: HETEROGENEITY IN PERCEPTIONS – SWEDEN

	Q1 to Q1	Q1 to Q4 or Q5	Q1 to Q4 (Qual.)	Q1 to Q5 (Qual.)
Male (213)	34.43	18.26	0.37	0.21
Female (241)	31.78	20.94	0.42	0.32
Difference	2.65	-2.68	-0.04	-0.12***
	(2.26)	(1.99)	(0.05)	(0.04)
Young (221)	32.85	20.74	0.42	0.33
Old (233)	33.18	18.67	0.37	0.21
Difference	-0.33	2.07	0.06	0.12***
	(2.26)	(1.99)	(0.05)	(0.04)
Children (298)	32.94	20.07	0.39	0.27
No Children (156)	33.18	18.93	0.41	0.27
Difference	-0.25	1.13	-0.03	-0.000
	(2.38)	(2.10)	(0.05)	(0.04)
Rich (53)	31.83	19.50	0.23	0.12
Poor (401)	33.18	19.70	0.42	0.29
Difference	-1.35	-0.20	-0.19***	-0.17***
	(3.52)	(3.10)	(0.07)	(0.07)
College (161)	36.02	17.16	0.30	0.17
Less than College (293)	31.32	21.11	0.45	0.32
Difference	4.70**	-3.95*	-0.14***	-0.15***
	(2.34)	(2.07)	(0.05)	(0.04)
Left-wing (137)	35.12	16.69	0.32	0.20
Right-wing (193)	32.88	19.09	0.37	0.21
Difference	2.24	-2.40	-0.05	-0.01
	(2.69)	(2.31)	(0.05)	(0.05)
Moved up (220)	33.33	19.89	0.39	0.25
Did not moved up (225)	32.72	19.48	0.40	0.28
Difference	0.61	0.41	-0.02	-0.03
	(2.26)	(1.99)	(0.05)	(0.04)
Immigrant (106)	32.55	23.98	0.49	0.39
Not Immigrant (348)	33.17	18.37	0.37	0.23
Difference	-0.62	5.61**	0.12**	0.17***
	(2.67)	(2.34)	(0.06)	(0.05)
Reason poor is lack of effort (147)	34.06	17.10	0.37	0.22
Reason poor is not lack of effort (307)	32.51	20.95	0.41	0.29
Difference	1.55	-3.85*	-0.03	-0.06
	(2.40)	(2.11)	(0.05)	(0.05)
Reason rich is effort (174)	31.87	19.88	0.45	0.33
Reason rich is not effort (280)	33.74	19.56	0.36	0.23
Difference	-1.86	0.32	0.08*	0.10**
	(2.33)	(2.05)	(0.05)	(0.04)
Econ system fair (293)	32.19	18.41	0.37	0.25
Econ system unfair (161)	34.54	21.98	0.45	0.30
Difference	-2.35	-3.57*	-0.08*	-0.06
	(2.36)	(2.08)	(0.05)	(0.04)
Unequal opp problem (411)	33.31	19.74	0.39	0.27
Unequal opp not problem (43)	30.24	19.07	0.43	0.26
Difference	3.08	0.67	-0.04	0.01
	(3.86)	(3.41)	(0.08)	(0.07)

Notes: The table reports average mobility perceptions for different groups of respondents and the difference between them. Standard errors in parentheses. See the notes to Table 4. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A13: THE PERCEIVED ROLE OF TALENT

	Panel A: Perceived Transition Probabilities Conditional on Talent					Panel B: % Difference Between Perceived Transition Probabilities Conditional and Unconditional on Talent				
	US	UK	France	Italy	Sweden	US	UK	France	Italy	Sweden
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Q1 to Q5	14.03	9.59	11.83	12.25	10.70	0.20 (0.00)	-0.04 (0.09)	0.30 (0.00)	0.21 (0.05)	0.16 (0.31)
Q1 to Q4	14.59	13.37	15.06	13.77	14.49	0.22 (0.00)	0.26 (0.00)	0.43 (0.00)	0.22 (0.00)	0.30 (0.00)
Q1 to Q3	26.96	26.84	30.83	27.82	32.02	0.21 (0.00)	0.38 (0.00)	0.43 (0.00)	0.27 (0.00)	0.31 (0.00)
Q1 to Q2	21.08	22.74	20.58	22.91	21.58	-0.03 (0.96)	0.02 (0.35)	-0.13 (0.00)	-0.01 (0.61)	-0.07 (0.14)
Q1 to Q1	23.34	27.45	21.70	23.25	21.22	-0.27 (0.00)	-0.27 (0.00)	-0.38 (0.00)	-0.31 (0.00)	-0.34 (0.00)
Obs.	435	390	389	370	225	435	390	389	370	225

Notes: Row i of column j in Panel A reports the perceived probability that a child born to parents in the bottom quintile of the income distribution in country j will be in quintile i when adult if that child is very talented, i.e., based on our survey question that asks respondents to think conditional on individual talent. Row i of column j in Panel B reports the percent change in the perceived probability of a child born in a family from the bottom quintile to be in quintile i when adult conditional on talent relative to the unconditional case. p-values in parentheses. See Figure A1 and Appendix A.4 for the complete wording of the question and the methodology to elicit respondents' perceptions in the survey.

TABLE A14: HETEROGENEITY IN PERCEPTIONS CONDITIONAL ON EFFORT: PARTIAL EFFECTS

	Q1 to Q1 (1)	Q1 to Q4 or Q5 (2)	Q1 to Q4 (Qual.) (3)	Q1 to Q5 (Qual.) (4)	Diff Q1 to Q1 (5)	Diff Q1 to Q4 or Q5 (6)
Male	1.800** (0.863)	-1.215 (0.861)	-0.023 (0.019)	-0.037* (0.020)	0.894 (0.805)	-0.661 (0.692)
Young	1.999** (0.890)	2.358*** (0.888)	0.060*** (0.020)	0.098*** (0.021)	1.608* (0.830)	1.716** (0.714)
Has Children	-0.307 (0.899)	0.610 (0.896)	0.031 (0.020)	0.074*** (0.021)	1.790** (0.838)	-0.972 (0.721)
Rich	1.344 (1.127)	0.532 (1.124)	-0.005 (0.025)	-0.023 (0.026)	-0.358 (1.051)	0.660 (0.904)
College	-0.816 (0.905)	-2.584*** (0.903)	-0.015 (0.020)	-0.076*** (0.021)	-5.422*** (0.844)	2.146*** (0.726)
Right	-3.496*** (0.913)	2.785*** (0.911)	0.057*** (0.020)	0.069*** (0.021)	-0.625 (0.852)	1.981*** (0.733)
Moved up	-1.601* (0.890)	1.188 (0.888)	0.023 (0.020)	0.014 (0.021)	0.779 (0.830)	-0.382 (0.714)
Immigrant	-0.918 (1.197)	0.684 (1.193)	0.028 (0.027)	0.066** (0.028)	1.146 (1.116)	-0.138 (0.960)
Obs.	2,543	2,543	2,543	2,543	2,543	2,543
Country-wave FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dep. Var.	23.48	25.19	0.66	0.51	-10.24	3.83

Notes: The outcome variables are defined as in Table 7. Regressors are defined as in Table A7. “Mean Dep. Var” reports the mean of the outcome variable. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A15: HETEROGENEITY IN PERCEPTIONS CONDITIONAL ON TALENT: PARTIAL EFFECTS

	Q1 to Q1 (1)	Q1 to Q4 or Q5 (2)	Q1 to Q4 (Qual.) (3)	Q1 to Q5 (Qual.) (4)	Diff Q1 to Q1 (5)	Diff Q1 to Q4 or Q5 (6)
Male	2.793*** (1.039)	-2.440** (1.015)	-0.030 (0.023)	-0.068*** (0.024)	-1.081 (0.946)	-0.622 (0.862)
Young	3.253*** (1.085)	-0.576 (1.060)	0.044* (0.024)	0.056** (0.025)	-0.758 (0.988)	1.372 (0.900)
Has Children	-1.741 (1.103)	1.106 (1.078)	0.031 (0.024)	0.019 (0.025)	0.932 (1.005)	-0.708 (0.916)
Rich	0.441 (1.349)	-1.797 (1.318)	0.027 (0.030)	0.032 (0.031)	-1.120 (1.228)	-0.531 (1.119)
College	2.560** (1.103)	-3.169*** (1.078)	-0.027 (0.024)	-0.087*** (0.025)	-2.501** (1.004)	0.903 (0.915)
Right	-2.957*** (1.112)	3.483*** (1.086)	0.072*** (0.025)	0.085*** (0.026)	-1.144 (1.012)	2.262** (0.922)
Moved up	-1.174 (1.080)	-0.363 (1.055)	-0.011 (0.024)	0.001 (0.025)	-0.163 (0.983)	-0.126 (0.896)
Immigrant	-2.703* (1.443)	3.571** (1.410)	0.069** (0.032)	0.075** (0.033)	-1.282 (1.313)	1.859 (1.197)
Obs.	1,747	1,747	1,747	1,747	1,747	1,747
Country-wave FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dep. Var.	23.53	26.18	0.66	0.52	-11.31	5.78

Notes: The outcome variables are defined as in Table 7, but based on our survey question that asks respondents to think conditional on individual talent. Regressors are defined as in Table A7. “Mean Dep. Var” reports the mean of the outcome variable. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A16: COMMUTING ZONE CHARACTERISTICS AND MOBILITY PERCEPTIONS: PARTIAL EFFECTS

	Q1 to Q1 (1)	Q1 to Q4 or Q5 (2)	Q1 to Q4 (Qual.) (3)	Q1 to Q5 (Qual.) (4)
Racial Segregation	-0.075** (0.037)	0.035 (0.035)	0.089** (0.044)	0.080** (0.038)
Income Segregation	0.076** (0.036)	-0.046 (0.035)	-0.068* (0.039)	-0.077* (0.041)
Social Capital Index	0.050 (0.037)	-0.060* (0.033)	-0.092*** (0.032)	-0.075** (0.037)
Gini	-0.025 (0.035)	0.052 (0.036)	-0.041 (0.038)	0.038 (0.037)
Manufacturing Share	-0.010 (0.027)	0.039 (0.028)	-0.034 (0.028)	-0.001 (0.031)
College Grad Rate	-0.006 (0.026)	-0.011 (0.025)	-0.007 (0.029)	0.014 (0.031)
Obs.	1,635	1,635	1,635	1,635

Notes: The outcome variables are defined as in Table 4. “Racial Segregation” is a Multi-group Theil Index calculated at the census-tract level over four groups (White alone, Black alone, Hispanic, and Other) and aggregated at the commuting zone level, “Income Segregation” is measured by a weighted average of two-group Theil indices, as in Reardon (2011), at the commuting zone level, “Social Capital Index” is the social capital index from Rupasingha and Goetz (2008) at the commuting zone-level, “Gini” is the commuting zone-level Gini coefficient, “Manufacturing Share” is the share of employed persons 16 and older working in manufacturing from the 2000 census at the commuting zone-level, “College Grad Rate” is the residual from a regression of graduation rate (the share of undergraduate students that complete their degree in 150% of normal time) on household income per capita in 2000, aggregated at the commuting zone level. The regressors are from Chetty et al. (2014). Please refer to Chetty et al. (2014) for a detailed explanation of the construction of the commuting zone-level regressors. All regressions control for round fixed effects and include all covariates in Table A7. All variables normalized to have mean 0 and standard deviation 1 in the estimation sample. Standard errors in parentheses, clustered at the commuting zone level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A17: PESSIMISM AND OPTIMISM CORRELATED WITH POLICIES BY COUNTRY

	Tax Rate Top 1 (1)	Tax Rate Bottom 50 (2)	Budget Opportunities (3)	Budget Safety Net (4)	Support Estate Tax (5)	Support Equality Opp. Policies (6)
<i>US</i>						
Q1 to Q1	0.032* (0.018)	-0.027* (0.016)	0.033*** (0.011)	0.016** (0.007)	0.000 (0.000)	0.002* (0.001)
Obs.	812	812	1656	1656	1656	1656
Q1 to Q5	0.039 (0.026)	0.034 (0.023)	-0.010 (0.017)	-0.021** (0.011)	-0.000 (0.001)	-0.000 (0.002)
Obs.	812	812	1656	1656	1656	1656
Q1 to Q1 Effort	0.011 (0.021)	0.027 (0.018)	0.074*** (0.015)	0.041*** (0.009)	0.001* (0.001)	0.004*** (0.002)
Obs.	812	812	1242	1242	1242	1242
Q1 to Q5 Effort	0.024 (0.027)	0.064*** (0.024)	-0.018 (0.021)	-0.029** (0.013)	-0.002*** (0.001)	-0.008*** (0.002)
Obs.	812	812	1242	1242	1242	1242
<i>UK</i>						
Q1 to Q1	0.057** (0.022)	-0.032*** (0.009)	0.030** (0.014)	0.007 (0.011)	0.001* (0.001)	0.003** (0.001)
Obs.	728	728	729	729	728	729
Q1 to Q5	-0.011 (0.038)	0.034** (0.015)	-0.053** (0.024)	0.021 (0.018)	0.000 (0.001)	-0.004 (0.002)
Obs.	728	728	729	729	728	729
Q1 to Q1 Effort	-0.022 (0.038)	0.006 (0.015)	-0.009 (0.023)	0.018 (0.019)	0.002* (0.001)	0.000 (0.002)
Obs.	352	352	352	352	351	352
Q1 to Q5 Effort	-0.024 (0.055)	0.049** (0.021)	-0.062* (0.032)	0.088*** (0.027)	0.003 (0.002)	-0.002 (0.003)
Obs.	352	352	352	352	351	352
<i>Italy</i>						
Q1 to Q1	0.090*** (0.031)	-0.052*** (0.017)	0.038** (0.017)	0.009 (0.014)	0.001* (0.001)	0.006*** (0.002)
Obs.	718	718	721	721	721	721
Q1 to Q5	-0.137*** (0.049)	0.110*** (0.027)	-0.087*** (0.027)	-0.001 (0.023)	0.001 (0.001)	-0.010*** (0.002)
Obs.	718	718	721	721	721	721
Q1 to Q1 Effort	0.125*** (0.046)	-0.029 (0.025)	0.018 (0.027)	0.025 (0.022)	0.000 (0.001)	0.003 (0.003)
Obs.	357	357	358	358	358	358
Q1 to Q5 Effort	-0.295*** (0.079)	0.156*** (0.042)	-0.123*** (0.045)	-0.067* (0.038)	0.001 (0.002)	-0.012*** (0.004)
Obs.	357	357	358	358	358	358

TABLE A17 (CONTINUED): PESSIMISM AND OPTIMISM CORRELATED WITH POLICIES BY COUNTRY

	Tax Rate Top 1 (1)	Tax Rate Bottom 50 (2)	Budget Opportunities (3)	Budget Safety Net (4)	Support Estate Tax (5)	Support Equality Opp. Policies (6)
<i>France</i>						
Q1 to Q1	0.065** (0.029)	-0.029** (0.012)	0.003 (0.015)	0.013 (0.010)	0.000 (0.001)	0.006*** (0.002)
Obs.	739	739	739	739	739	739
Q1 to Q5	-0.072 (0.051)	0.081*** (0.021)	-0.054** (0.027)	-0.030* (0.017)	-0.002 (0.001)	-0.008*** (0.003)
Obs.	739	739	739	739	739	739
Q1 to Q1 Effort	0.170*** (0.044)	-0.023 (0.018)	-0.011 (0.023)	0.018 (0.015)	0.001 (0.001)	0.001 (0.002)
Obs.	366	366	366	366	366	366
Q1 to Q5 Effort	-0.196*** (0.074)	0.100*** (0.030)	-0.116*** (0.037)	-0.049* (0.025)	-0.001 (0.002)	-0.007* (0.004)
Obs.	366	366	366	366	366	366
<i>Sweden</i>						
Q1 to Q1	0.036 (0.036)	-0.033 (0.023)	0.039** (0.020)	0.009 (0.013)	-0.000 (0.001)	0.003** (0.002)
Obs.	445	445	445	445	445	445
Q1 to Q5	-0.086 (0.058)	0.047 (0.037)	-0.093*** (0.032)	-0.008 (0.021)	0.004*** (0.001)	-0.002 (0.003)
Obs.	445	445	445	445	445	445
Q1 to Q1 Effort	-0.042 (0.060)	0.034 (0.035)	-0.023 (0.033)	0.011 (0.020)	0.001 (0.001)	0.000 (0.003)
Obs.	225	225	225	225	225	225
Q1 to Q5 Effort	-0.000 (0.108)	0.015 (0.062)	-0.029 (0.060)	0.013 (0.035)	-0.002 (0.002)	0.004 (0.005)
Obs.	225	225	225	225	225	225

Notes: Outcome variables are defined as in Table 9. All regressions include the same controls of Table 10. Each of the panels focuses on the sample of respondents from a specific country. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A18: VIEWS OF GOVERNMENT AND POLICY PREFERENCES, LEFT VERSUS RIGHT

	Tax rate Top 1 (1)	Tax rate Bottom 50 (2)	Budget Opportunities (3)	Budget Safety Net (4)	Support Estate Tax (5)	Support Equality Opp. Policies (6)
<i>All Respondents</i>						
Trust government	-0.751 (0.795)	0.965** (0.456)	1.013** (0.437)	0.434 (0.299)	0.072*** (0.018)	0.039 (0.038)
Government intervention	0.310 (0.217)	-0.184 (0.125)	0.683*** (0.124)	0.302*** (0.085)	0.049*** (0.005)	0.209*** (0.011)
Government tools	1.023 (0.668)	-0.562 (0.383)	1.351*** (0.388)	0.031 (0.265)	-0.003 (0.016)	0.258*** (0.034)
Lowering taxes better	-6.104*** (0.648)	1.802*** (0.371)	-0.512 (0.372)	-1.096*** (0.255)	-0.111*** (0.016)	-0.258*** (0.032)
Obs.	3434	3434	4282	4282	4281	4282
<i>Left-Wing Respondents</i>						
Trust government	-0.770 (1.390)	-0.168 (0.686)	1.335* (0.714)	-0.095 (0.527)	0.045 (0.036)	0.102 (0.066)
Government intervention	0.682* (0.394)	-0.727*** (0.194)	0.579*** (0.214)	0.197 (0.158)	0.066*** (0.011)	0.205*** (0.020)
Government tools	1.105 (1.230)	-0.966 (0.607)	-0.014 (0.677)	0.211 (0.500)	-0.068** (0.034)	0.181*** (0.062)
Lowering taxes better	-5.695*** (1.257)	3.174*** (0.620)	-1.664** (0.693)	-0.255 (0.512)	-0.146*** (0.035)	-0.388*** (0.064)
Obs.	1159	1159	1396	1396	1396	1396
<i>Right-Wing Respondents</i>						
Trust government	-0.747 (1.409)	2.641*** (0.902)	1.004 (0.810)	0.532 (0.519)	0.082*** (0.029)	0.074 (0.071)
Government intervention	0.242 (0.362)	-0.010 (0.232)	0.831*** (0.214)	0.422*** (0.137)	0.045*** (0.008)	0.225*** (0.019)
Government tools	0.377 (1.122)	0.294 (0.718)	1.363** (0.660)	0.605 (0.423)	0.007 (0.024)	0.239*** (0.058)
Lowering taxes better	-6.938*** (1.064)	0.952 (0.682)	0.028 (0.623)	-1.725*** (0.399)	-0.101*** (0.022)	-0.286*** (0.055)
Obs.	1143	1143	1395	1395	1395	1395

Notes: The outcome variables are defined as in Table 9. The variables *Trust government*, *Government intervention*, *Government tools* and *Lowering taxes better* are defined as in Table 8. All regressions include the same controls of Table 11. “Left-Wing Respondents” and “Right-Wing Respondents” are defined as in Table 10. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A19: CORRELATION BETWEEN VIEWS OF GOVERNMENT, POLICY PREFERENCES, AND PESSIMISM

	Government Cannot Do Much	Unequal Opp. Not Serious Problem	Lowering Taxes Better	Low Spending Opp.	Optimistic
Government Cannot Do Much	-	-	-	-	-
Unequal Opp. Not Serious Problem	0.207 (0.013)***	-	-	-	-
Lowering Taxes Better	0.156 (0.014)***	0.25 (0.015)***	-	-	-
Low Spending Opp.	0.146 (0.015)***	0.139 (0.017)***	0.093 (0.016)***	-	-
Optimistic	0.029 (0.015)**	0.123 (0.017)***	0.093 (0.016)***	0.071 (0.015)***	-

Notes: Each coefficient in the table refers to a regression of the variable in the column on the variable in the row and a constant, controlling for country and survey fixed effects. The number of observations is 4,440 for all regressions. *Government Cannot Do Much* is a binary variable equal to one if the respondent says that the government cannot do much or can do nothing to equalize opportunities. *Unequal Opp. Not Serious Problem* is a binary variable equal to one if unequal opportunities are not perceived to be a serious problem. *Lowering Taxes Better* is defined as in Table 8. *Low Spending Opp.* is a binary variable equal to one if the share of budget allocated by the respondent to education and health policies is below the 20th percentile in the variable distribution. *Optimistic* is a binary variable equal to one if the respondent believes that the chances of moving from the bottom to the top quintile are neither “close to zero” nor “low”. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A20: PERSISTENCE OF FIRST STAGE

	First Survey All Respondents (1)	First Survey Who Took Follow Up (2)	Follow up Respondents (3)
<i>Q1 to Q1</i>			
Treated	8.308*** (0.899)	9.149*** (1.739)	5.897*** (1.672)
Control mean	32.37	30.25	30.60
<i>Q1 to Q2</i>			
Treated	-1.731*** (0.444)	-1.190 (0.917)	-1.451 (0.996)
Control mean	21.75	22.12	25.36
<i>Q1 to Q3</i>			
Treated	-5.479*** (0.491)	-6.679*** (1.017)	-3.646*** (1.051)
Control mean	22.61	24.28	23.36
<i>Q1 to Q4</i>			
Treated	-1.733*** (0.335)	-1.816*** (0.645)	-1.258* (0.748)
Control mean	11.74	11.34	10.98
<i>Q1 to Q5</i>			
Treated	0.636 (0.582)	0.536 (1.248)	0.457 (1.123)
Control mean	11.53	12.01	9.69
<i>Q1 to Q4 (Qual.)</i>			
Treated	-0.128*** (0.016)	-0.097*** (0.033)	-0.068** (0.033)
Control mean	0.44	0.41	0.38
<i>Q1 to Q5 (Qual.)</i>			
Treated	-0.107*** (0.015)	-0.070** (0.029)	-0.014 (0.029)
Control mean	0.32	0.29	0.24
<i>American Dream Alive</i>			
Treated	-0.048*** (0.017)	-0.054 (0.034)	0.001 (0.033)
Control mean	0.53	0.57	0.42
Obs.	3354	825	825

Notes: Each coefficient and standard error refers to a regression of the variable listed in the name of the panel on the “Treated” indicator. Column 1 presents the results from the first survey. Column 2 presents the results from the first survey but limiting the sample to only the respondents who also took the follow up survey. Column 3 presents the results from the follow up survey. All regressions include the same controls of Table 10. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE A21: IV ESTIMATES OF PERCEPTIONS OF MOBILITY ON POLICY PREFERENCES

	Budget Education > $p(80)$ (1)	Budget Health > $p(80)$ (2)	Budget Opp. > $p(80)$ (3)	Budget Safety Net > $p(80)$ (4)	High Government Interv. (5)	High Support Equal Pol. (6)	Tax Rate Top 1 > $p(80)$ (7)	Tax Rate Bottom 50 > $p(80)$ (8)	Support Estate Tax (9)	Unequal Opp. Very Serious Problem (10)	Government Tools (11)	Trust Government (12)
<i>All Respondents</i>												
Q1 to Q1	0.001 (0.001)	0.002** (0.001)	0.001* (0.001)	0.001 (0.001)	0.000 (0.001)	0.003*** (0.001)	0.001 (0.001)	0.001 (0.001)	0.002 (0.001)	0.005*** (0.001)	-0.002 (0.001)	-0.002* (0.001)
Control mean	0.13	0.12	0.16	0.07	0.48	0.23	0.18	0.17	0.58	0.23	0.72	0.19
Obs.	8585	8585	8585	8585	8585	8585	6851	6851	8584	4281	4281	4281
<i>Left-Wing Respondents</i>												
Q1 to Q1	0.003** (0.001)	0.004*** (0.001)	0.004** (0.002)	-0.001 (0.001)	0.005*** (0.002)	0.005** (0.002)	0.001 (0.002)	0.001 (0.001)	0.001 (0.002)	0.011*** (0.003)	-0.001 (0.002)	-0.003 (0.002)
Control mean	0.14	0.13	0.20	0.09	0.63	0.38	0.22	0.13	0.71	0.33	0.79	0.21
Obs.	2797	2797	2797	2797	2797	2797	2309	2309	2797	1391	1391	1391
<i>Right-Wing Respondents</i>												
Q1 to Q1	-0.000 (0.001)	0.001 (0.001)	-0.000 (0.001)	0.001 (0.001)	0.001 (0.002)	0.002 (0.001)	0.001 (0.001)	-0.000 (0.002)	0.001 (0.002)	0.001 (0.002)	-0.004** (0.002)	-0.001 (0.002)
Control mean	0.12	0.12	0.14	0.05	0.36	0.13	0.15	0.22	0.42	0.15	0.65	0.19
Obs.	2808	2808	2808	2808	2808	2808	2282	2282	2808	1442	1442	1442

Notes: The table reports IV estimates of the effect of individual perceived probability of remaining in the first quintile on policy preferences. *Q1 to Q1* is instrumented with the indicator for treatment status. Outcome variables are defined as in Table 14. All regressions include the same controls of Table 10. “Left-Wing Respondents” and “Right-Wing Respondents” are defined as in Table 10. “Control mean” is the mean of the outcome variable in the control group.

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

FIGURE A7: PESSIMISM, OPTIMISM, AND POLICY PREFERENCES

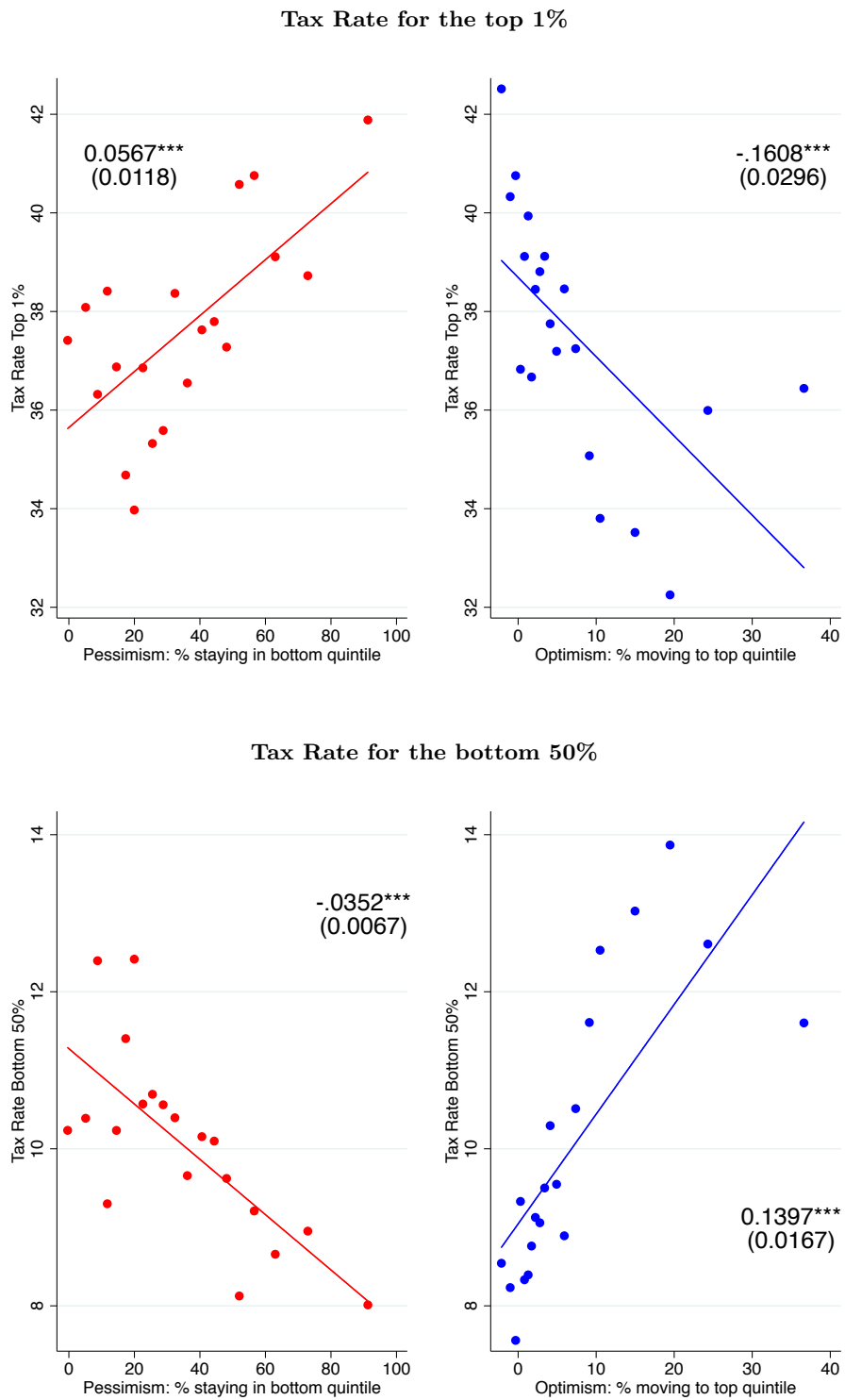
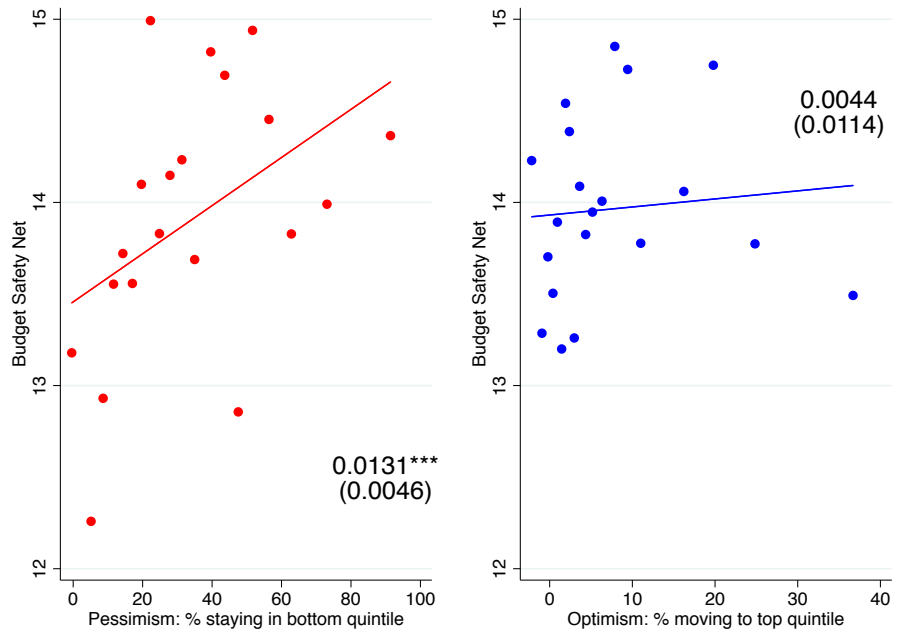


FIGURE A7 (CONTINUED): PESSIMISM, OPTIMISM, AND POLICY PREFERENCES

% Budget to safety net policies



% Budget to education and health policies

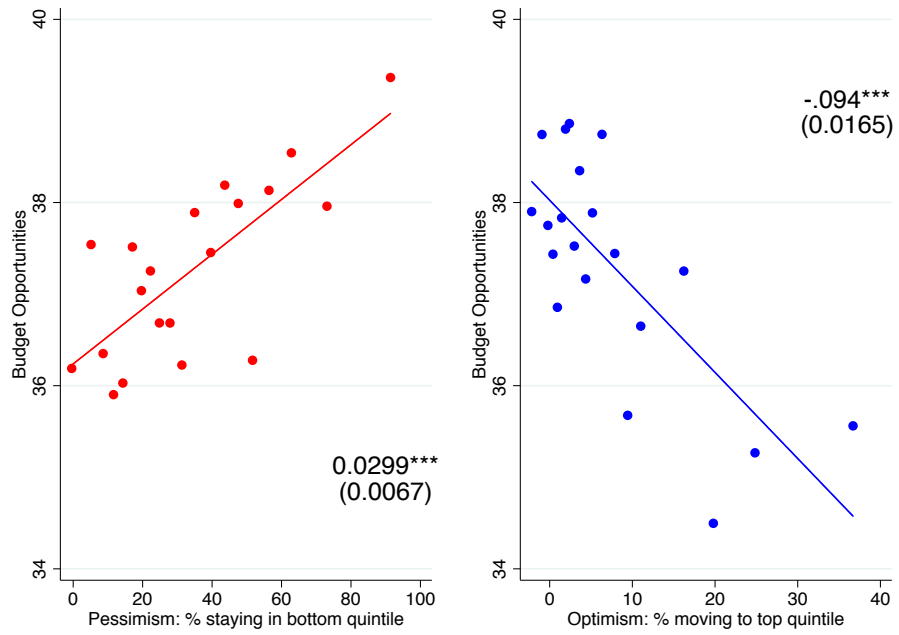
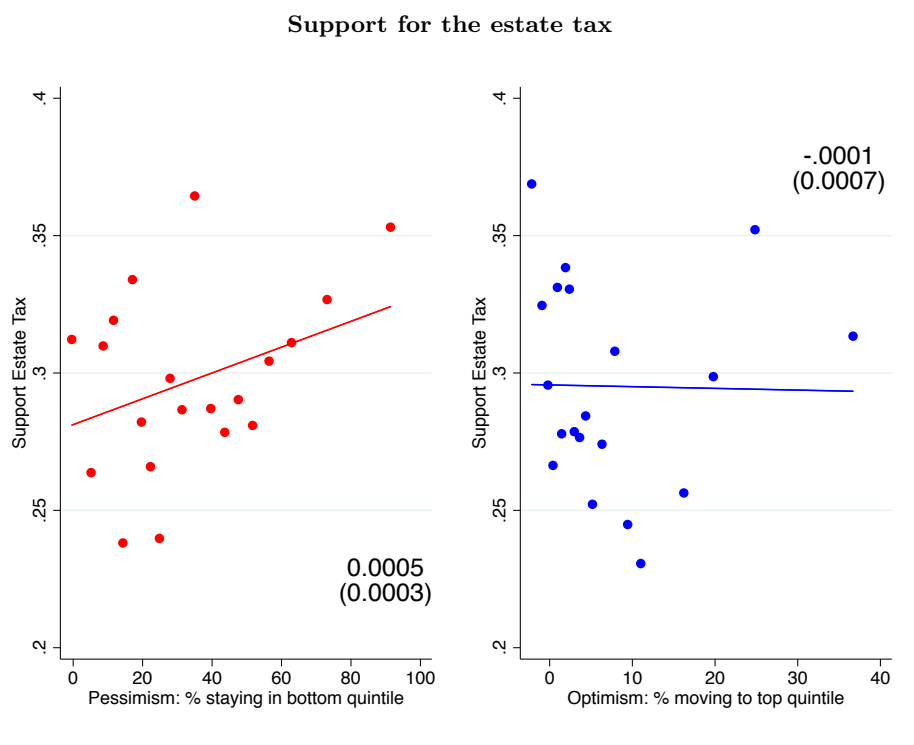


FIGURE A7 (CONTINUED): PESSIMISM, OPTIMISM, AND POLICY PREFERENCES



Notes: The figure presents non-parametric binned scatter plots of the relationship between respondents' policy preferences (as defined in Table 9) and perceived probability of staying in the bottom quintile (left panel) or of moving to the top quintile (right panel) of the income distribution. It is constructed after first partialing out the controls included in Table 10. The best-fit line and the coefficient and standard error of the slope are estimated on the underlying data.

A.6 Information on construction of the French transition matrix

Our methodology is inspired by Piraino (2007). We perform a two-stage regression based on two samples: a sample of sons who reported their fathers' socioeconomic characteristics and a sample of adult men ("pseudo fathers") whose age was consistent with that of the actual fathers. Once the samples are selected, the steps required for this empirical strategy are:

1. estimate an income equation from the older sample;
2. use the estimated coefficients to predict fathers' incomes on the basis of sons' reports;
3. construct a transition matrix based on these results.

Sample selection:

- Sample of fathers: from the 1985 wave of the “Formation et Qualification professionnelle, INSEE” survey. They are men born between 1927 and 1947, who have at least one child and who have less than four older sister and brothers. We restrict the sample to individuals with positive income that are above half of the annual minimum wage and discard self-employed individuals because we do not have information on income from self-employment. The final sample has about 4500 fathers.
- Sample of sons: from the 2003 wave of the “Formation et Qualification professionnelle, INSEE” survey. They are born between 1963 and 1973, with fathers born between 1927 and 1947. We therefore measure income of the pseudo fathers when sons are 12-22. We further restrict the sample to those individuals who report a basic set of their father’s demographic characteristics, have less than four older siblings, and, similarly to the fathers’ sample, have positive income, are above half of the annual minimum wage and are not self-employed. The final sample has 1279 sons.

Variables to construct income of pseudo fathers: educational level, occupation category, year of birth, indicator for whether father lived in Paris.

References

Reardon, Sean F., “Measures of Income Segregation,” CEPA Working Papers, 2011.

Rupasingha, Anil, and Stephan J. Goetz, “US County-Level Social Capital Data, 1990-2005,” The Northeast Regional Center for Rural Development, Penn State University, University Park, PA, 2008