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Preferences over Taxation of High-Income Individuals: Evidence from a Survey Experiment*

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Abstract

Mobility of high-income individuals across borders puts pressure on governments to lower taxes. A central tenet of the corresponding textbook argument is that mobile individuals react to tax differentials through migration, and in turn immobile individuals vote for lower taxes. We investigate to which extent this argument is complete. In particular, political ideology may influence voting on taxes. We vary mobility and foreign taxes in a survey experiment within the German Internet Panel (GIP), with more than 3,000 individuals participating. We find that while the treatment effects qualitatively confirm model predictions how voters take mobility of high-income earners into account when choosing domestic taxes, ideology matters: left-leaning high-income individuals choose higher taxes and emigrate less frequently than right-leaning ones. These findings are in line with the comparative-static predictions of a simple model of inequality aversion when the aversion parameters vary with ideology.

JEL Classification: D72, F22, H21
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1 Introduction

In the year 2012, president Hollande announced a 75% tax on high incomes in France. Despite being a national figure, famous French actor Gérard Dépardieu reacted by exchanging his French for the Russian citizenship. While often seen as confirming the textbook argument that globalization entails tax competition for high-income earners, this well-covered move hardly constitutes more than anecdotal evidence. Indeed, more systematic evidence is surprisingly rare and hard to generate. To be more specific, two immediate questions arise: First, are the rich really as ready to act upon their advantage and migrate for tax reasons as predicted by the textbook argument, or are Dépardieu-like migration decisions rare exceptions? The well-established concept of home bias suggests that not all would migrate when it pays in monetary terms (see, e.g., Feldstein and Horioka, 1980; Ogura, 2006). Second, do net beneficiaries of the tax-transfer system anticipate the degree of mobility of the rich and choose tax rates accordingly? The answer to the second question is not obvious since evidence in experimental public economics suggests that voters are less than rational when choosing taxes (see, e.g., Sausgruber and Tyran, 2011). Moreover, it is neither evident that the rich will migrate nor that the voters will vote as predicted, because a consensus has emerged in the literature on behavioral public economics that redistribution is driven by subjective beliefs about givers and receivers, as well as by social preferences.[1]

Importantly, both such beliefs and preferences are heterogeneous. It is hence plausible that political ideology - as a composite of redistribution-related beliefs and preferences - may play a major role when it comes to taxing the rich and the migration choices of the rich. Almås et al. (2020) provide support that ideology matters for redistribution preferences. They compare in an experiment Norwegian and US citizens (two populations who arguably differ in their political ideology) when they, in the role of an unaffected third party, make distributional choices. They find that Norwegians are much more in favor of redistribution than US citizens when inequality is based on luck, but both samples do not differ in the degree to which merit makes them more inequality accepting. In a survey experiment in Sweden, Karadja et al. (2017) find that informing participants that they rank higher in the income distribution than they thought makes them prefer less redistribution and a more conservative party. Interestingly, this effect is entirely driven by participants who are right-of-center to begin with. Furthermore, in a class-room experiment with students as well as in surveys of politicians, Janeba (2014) finds that party preferences correlate with tax choices of students while party affiliation correlates with beliefs of politicians about tax-induced mobility of firms.

We therefore underpin our above two reasearch questions by a related triple: Do those on the left and those on the right of the political spectrum differ in their expectations regarding the mobility of the rich and therefore in their views on how progressive taxes should be? Do they even hold on to purely ideological views about appropriate

[1] For the role of beliefs, see, e.g., Alesina and Angeletos (2005); Benabou and Tirole (2006). For the role of preferences, see Engelmann and Strobel (2004, 2007); Höchtl et al. (2012).

taxation that are independent of their beliefs about migration of the rich? Finally, do the left-leaning and the right-leaning rich differ in their tendency to make Dépardieu-like migration decisions? Answering these questions is important for evaluating the race-to-the-bottom argument that the increasing mobility of labor (and capital) leads to suboptimally low taxes and public spending (Keen and Konrad, 2013). If in practice, however, on average households migrate less and stick to more progressive taxes than what would be expected in a situation without the influence of political biases, the race to the bottom and the link between globalization and inequality are attenuated.

We address the above questions in a large incentivized survey experiment with a representative sample of subjects. It implements a stylized setting in which rich and poor voters collectively choose the tax rate to impose on the rich, conditional on which tax rate prevails in a (ficticious) neighboring country into which the rich may migrate. Embedding the experiment in the 18th wave of the German Internet Panel (GIP), a large online panel representative on observable variables of the German population aged 16 to 75, we elicit experimental tax choices, migration beliefs, and migration choices of more than 3,000 individuals.

We randomly assign participants to the roles of rich and poor by providing them with high and low endowments, respectively.[2] While the poor are always immobile, mobility of the rich varies across treatments. For them, incentives to migrate when mobile can be positive or negative. These migration incentives depend on the domestic tax rate that the rich and the poor collectively choose by vote for their fictitious home country and the exogenous tax rate in a fictitious neighboring country (the potential destination of rich migrants). The latter tax rate varies across treatments. After the domestic tax is chosen, the rich may migrate into the foreign country, then bearing some migration costs. Apart from voting and migration decisions, we also elicit beliefs about the choices of subjects in the other role, i.e., what the poor believe about the choices of the rich, and vice versa.

We match our experimental data with response data obtained in earlier waves of the German Internet Panel, in particular self-declared attitudes on redistribution, party adherence, and demographic variables like age, gender, and education. Using regressions, we analyze the determinants of tax and migration choices to isolate treatment effects and effects of political ideology. Eliciting beliefs of the poor about migration choices of the rich allows us to investigate whether beliefs and, once we control for these, tax choices vary with political ideology. Hence, we can separate whether possible differences in tax choices between more left-leaning and more right-leaning subjects are driven by differences in beliefs about migration choices or by differences in preferences.

Reassuringly, the roles of being poor or rich determine experimental choices while the actual positions in the income distribution do not. Hence, our experiment seems internally valid. With regard to our research questions regarding the role of political ideology, we find that it matters, although more clearly for the rich than for the poor:

[2]Hereafter, we will refer to subjects in the role of the poor as "the poor" and to subjects in the role of the rich as "the rich".

the left-leaning rich are less willing to migrate than the right-leaning rich when it pays in material terms. The left-leaning rich also vote for higher taxes than the right-leaning rich. These effects do not depend on how we measure ideology, as attitudes toward redistribution or as self-declared support for left-of-center or right-of-center political parties. The poor, in their turn, choose higher taxes when generally in favor of redistribution, although their party preference has no significant effect on tax choices. The effect of a pro-redistribution attitude, however, holds even when conditioning on the poor's migration beliefs. We also find that migration beliefs are not systematically related to political attitudes. Hence, we conclude that political ideology relates to preferences rather than beliefs. These findings are in line with the comparative-static predictions of a simple model of inequality aversion when the aversion parameters vary with ideology.

The comparative-statics predictions of our model are supported by the observed treatment effects. They reveal that the poor understand the migration incentives of the rich and react to these incentives when choosing domestic taxes. The rich, in their turn, also react to migration incentives but much less so than expected by the poor. By contrast, and as predicted by our model, they are willing to forego material gains to benefit their poor fellow-citizens, both when choosing domestic taxes and when deciding whether to migrate or stay. Tax choices are also more benevolent than expected for selfish agents since both poor and rich tend to vote for medium taxes. In fact, the poor tend to choose medium taxes even in the absence of migration incentives for the rich, and although they seem to understand these incentives well. Hence, the poor refrain from exploiting the rich even when exploitation is possible, and although being poor or rich in our experiment is entirely due to luck. This generosity of the poor toward the rich exceeds what can be rationalized by our model.

Our work is closely related and complementary to Kerschbamer and Müller (2020). They analyze the distribution of social preferences in Germany, implementing the equality equivalence test of Kerschbamer (2015) in the GIP. They focus on the correlation of these preferences with socio-economic characteristics on the one hand and attitudes towards redistribution as well as the support for immigration of refugees on the other hand. Kerschbamer and Müller (2020) find that the majority of participants are inequality-averse, which supports our theoretical modelling assumption. Moreover, in line with our hypothesis how social preferences correlate with political orientation, they find selfish participants tend to be right-leaning, whereas preference types that are benevolent towards players with lower payoffs are more likely left-leaning. Participants classified as selfish according to the equality equivalence test are also less in favor of redistribution and immigration of refugees according to their survey responses. Our analysis differs from theirs by using a survey experiment i) to elicit preferences for redistribution policy rather than choices in a dictator game, ii) to explicitly investigate migration choices, and iii) to disentangle the taxation choices into differences in beliefs about mobility responses and differences in preferences.

We also relate to a large theoretical and empirical literature on taxation and migration. As Mirrlees (1971, p. 176) famously noted, "the threat of migration is a major

influence on the degree of progression in actual tax systems". Spelling out this idea in more detail, the theoretical literature robustly finds that if labor is mobile, particularly at the top of the income distribution, then tax competition between governments reduces redistribution from high-income earners to lower segments of the income distribution.[3] However, this literature largely ignores behavioral factors such as social preferences or biased beliefs. If, for instance, low-income voters are inequality-averse with respect to the inhabitants of their own country but do not take other countries into account, they may tend to vote for highly progressive taxes even if such taxes drive the top earners out of the country. Alternatively, if high-income earners are sufficiently averse towards advantageous inequality, they may refrain from migrating despite high taxes in their domestic country. Moreover, beliefs about the willingness to migrate might be biased among voters. Hence, it is important to turn to empirically testing the standard predictions about tax competition in an open political economy.

In fact, the question how taxation affects migration choices of high-income individuals has already been the subject of empirical research. For example, Kleven et al. (2013) analyze the role of taxes on the incentives of professional football players to play abroad. They find that the elasticity of the number of foreign players with respect to their net-of-tax rate is around one, and substantially higher for younger and top players. Qualitatively, the result is in line with Kleven et al. (2014) who estimate high elasticities of migration of foreign high-income individuals with respect to the net-of-tax rate of around 1.5 to 2 in a study of preferential income taxation in Denmark. Similarly, Muñoz (2019) finds an elasticity of above 1 in Europe for the responsiveness of the number of foreign top earners with respect to the net of tax rate. A (stock) elasticity around 1 is reported by Akcigit et al. (2016) for foreign superstar inventors, while much lower elasticities prevail for domestic inventors. Agrawal and Foremny (2019) conclude that the tax-induced mobility is large within Spain, in particular in certain industries like the health sector, but with only moderate tax revenue consequences. Overall, empirical studies suggest that mobility of top earners is substantial (see Kleven et al., 2020, for an overview).

It is difficult, however, to construct counterfactuals regarding mobility conditions with field data only; and it is difficult to correctly estimate the tendency to migrate without the construction of counterfactuals. Here, experimental work can complement standard empirical research. In an experiment, it is possible to construct counterfactuals and pin down causality for individual decisions, such as migration and voting decisions, by treatment comparisons. Hence, we experimentally test a simple model of optimal taxation and migration in the presence of inequality aversion to investigate to

[3]The standard approach to optimal income taxation by Mirrlees (1971) applied to a closed economy situation. While also early contributions like Wilson (1980) considered the problem of optimal linear income taxation when workers are mobile, later work has advanced Mirrlees' approach. Simula and Trannoy (2010) analyze the optimal nonlinear income tax schedule when workers are mobile at a cost, while holding tax policy in the outside country fixed. Other authors have analyzed income taxation when governments of several countries compete, which is modeled as a Nash game (Bierbrauer et al., 2013; Blumkin et al., 2015; Lehmann et al., 2014; Morelli et al., 2012; Piaser, 2007).

which extent behavioral factors such as social preferences or biased beliefs shall become part of the story.

In doing so, we contribute to a growing experimental literature on tax choices through voting (see Lorenz et al., 2015, p. 2, for a review of this literature). Sausgruber and Tyran (2011) ascertain that biased beliefs on price effects of taxes distort collective tax choice. Höchtl et al. (2012) find that inequality aversion affects democratic redistribution if and only if high-income earners are in the majority, while a poor majority does not expropriate the rich. This latter finding is in line with the (standard) model of Meltzer and Richard (1981) and resonates with recent experiments and surveys, including our own. For instance, Weinzierl (2017), in a survey among 2,500 U.S. citizen, reports that between 50 and 95 percent of respondents believe that full equalization of endowments that are due to luck would be unjust. Instead, they advocate the idea that post-tax incomes should depend on pre-tax endowments and that there is an entitlement to one's own endowments even in the absence of effort. Relatedly, Charité et al. (2015) report results from two experiments suggesting that subjects redistribute less when knowing pre-tax endowments of the better-off or when reference points are more deeply engrained.[4]

We contribute to this literature in two ways. First, we experimentally investigate an open economy in which the top earners can avoid excessive taxation if they migrate. Second, we relate individual tax and migration choices in our survey experiment to survey data about political attitudes and beliefs.

Our work is complementary to the literature on preferences for redistribution in the presence of immigration (see, for example, Alesina et al., 2018; Alesina and Stantcheva, 2020; Dahlberg et al., 2012; Hainmueller and Hiscox, 2010; Martinangeli and Windsteiger, 2019). In this literature, immigration is typically taken as given and thus not endogenous to government policy in the host country. Furthermore, preferences for redistribution are elicited through unincentivized survey questions, in contrast to our approach, where participants make choices that have material consequences, albeit with a small probability. For example, using evidence from a large-scale survey in six countries, Alesina et al. (2018) document that native respondents overestimate the number of immigrants in their country. Simply reminding respondents of immigration decreases support for redistribution. Behavioral biases thus appear to play a role in the context of immigration.

The rest of the paper is organized as follows. In the next section we present the simple model of redistributive taxation that mirrors the experimental implementation. In Section 3 we first explain in detail the setup of the survey experiment within the German Internet Panel and then discuss the hypotheses based on the comparative-static predictions of our model. We present the main results and discuss deviations from the point predictions of our model in Section 4. Section 5 concludes.

[4]Casal et al. (2019) experimentally analyze the role of preferential tax treatment of high-income earners, motivated by mobility, for the tax compliance decisions and equity perceptions of low income earners. They find that exogenously given motivations for tax preferences for the rich have negative effects on tax compliance and equity perceptions of the poor.

2 Redistributive Taxation with Inequality-averse Agents

A country (home) is populated by two types of individuals $\{p, r\}$, called poor and rich, with exogenously given gross incomes $y_p = 20$ and $y_r = 90$. In the base case (closed economy: no mobility) the country has two poor and one rich inhabitant. We model a purely redistributive tax-transfer system. The set of feasible tax rates is limited to three - low, medium, high - with the following values: $t_L = 10$, $t_M = 20$, $t_H = 40$. A rich individual pays the tax $t \in \{t_L, t_M, t_H\}$, which is then divided among the two poor. Under a balanced government budget without other spending, the transfer to each poor individual becomes $\frac{t}{2}$. Net income as a function of the tax rate is therefore $z_p = 20 + \frac{t}{2}$ for a poor and $z_r = 90 - t$ for a rich individual. Notice that even under the highest tax the ranking of pre-tax incomes is preserved post tax and transfer, that is, $z_p < z_r$ holds under any tax.

Next, consider an open economy. Here, we allow for migration of the rich to a second country, called foreign, in which the rich earns the same gross income $y_r = 90$. The tax rate in the foreign country is exogenously given and from the same set of feasible tax rates: $t^* \in \{10, 20, 40\}$. Migration is costly for the rich, however, involving a loss of $m = 15$. If the rich emigrates to the other country, there is no tax revenue generated at home. Then, the net income of a poor in his domestic country equals his gross income: $z_p = y_p$.

As an abundant literature on social preferences has shown, experimental participants in the laboratory and the field often exhibit social preferences, i.e., they tend to care about what others earn, too. Given that our experiment involves simple redistribution choices, it makes sense to model participants' social preferences as inequality aversion, following Fehr and Schmidt (1999). The standard Fehr-Schmidt utility function for person i is given by

$$U_i(x) = x_i - \frac{\alpha_i}{n-1} \sum_{j \neq i} \max(x_j - x_i, 0) - \frac{\beta_i}{n-1} \sum_{j \neq i} \max(x_i - x_j, 0) \tag{1}$$

where x is the payoff vector and n the number of players in the game. Note that, by design, in our game the rich always earns more than the poor do. Hence, the poor's inequality aversion can only pertain to disadvantageous inequality (α), while the reverse holds true for the rich. The resulting utility function takes the following form (with U_p denoting the utility of the poor and U_r the utility of the rich):

$$U_p = z_p - \frac{\alpha}{2}(z_r - z_p) \tag{2}$$

and

$$U_r = z_r - \beta(z_r - z_p). \tag{3}$$

We assume that inequality aversion relates to the net income of the rich and poor and consider the migration cost m as monetary so that it enters net income $z_r = y_r - t^* - m$ if the rich migrates.

In the experiment, the tax rate is chosen by a random dictator mechanism. Hence, beliefs about the other players' tax choices are irrelevant for one's optimal choice because whenever one's own choice matters, those of the others do not. We now derive the preferred tax rate for each type in both the no-mobility and the mobility regime.

2.1 No-Mobility Setting

The utility level of a poor player in absence of mobility (nm) is

$$U_p^{nm} = 20 + \frac{t}{2} - \frac{\alpha}{2}\left(90 - t - \left(20 + \frac{t}{2}\right)\right) = 20 - 35\alpha + \frac{t}{2}\left(\frac{3}{2}\alpha + 1\right). \tag{4}$$

Utility of the poor is strictly increasing in the tax rate as long as the net income of the rich still exceeds the net income of the poor, which holds for our admissible tax rates. Hence, the preferred tax rate of a poor is $t_p = 40$. By contrast, the utility of a rich is given by

$$U_r^{nm} = 90 - t - \beta\left(90 - t - \left(20 + \frac{t}{2}\right)\right) = 90 - 70\beta + t\left(\frac{3}{2}\beta - 1\right). \tag{5}$$

Utility of the rich is a linear function of t, and the sign of the derivative of equation 5 with respect to the tax rate depends on the level of inequality aversion. For $\beta < 2/3$, the preferred tax rate is the lowest, as inequality concerns are relatively unimportant. When β is larger than 2/3, the rich favors the highest possible tax rate. For $\beta = 2/3$, the rich is indifferent between all admissible tax rates.

We summarize preferred tax rates for each type:

$$t_p^{nm} = 40 \tag{6}$$

and

$$t_r^{nm} = \begin{cases} 10 & \beta < 2/3 \\ \{10, 20, 40\} \text{ if} & \beta = 2/3 \\ 40 & \beta > 2/3. \end{cases} \tag{7}$$

2.2 Mobility Setting

In the mobility setting, we first analyze under which condition the rich migrates. Assuming that the domestic tax rate is t and the foreign tax rate is t^*, the rich migrates if

the utility at home, U_r^h, is smaller than the utility in the foreign country, U_r^f:[5]

$$U_r^h = 90 - t - \beta\left(90 - t - \left(20 + \frac{t}{2}\right)\right) < 90 - t^* - m - \beta(90 - t^* - m - 20) = U_r^f$$
$$\iff m < \frac{t - t^* + \beta(t^* - 3t/2)}{1 - \beta} \tag{8}$$

The interpretation is straightforward: migration takes place when the migration costs (weighted by $1 - \beta$) are smaller than the differential between the domestic and foreign tax, adjusted by a term reflecting the difference in realized inequality between the two situations. We assume that inequality aversion is experienced with respect to the citizens of the home country, not the foreign country, even if a rich player migrates.[6] Following the standard assumption of Fehr and Schmidt (1999) that $\beta < 1$ (i.e., aversion towards advantageous inequality does not dominate concerns for own payoffs), the sign of the right-hand side of equation 8 depends only on the numerator. Hence, implausible migration outcomes are avoided where the rich would migrate because paying the migration costs reduces inequality. Under this assumption, it is now easy to show how migration depends on the degree of inequality aversion.

Lemma 1: Migration is weakly decreasing in the parameter for inequality aversion β of the rich:

- For $\beta \in [0, 1/5)$, the rich will migrate if and only if $t = 40$ and $t^* \in \{10, 20\}$.
- For $\beta \in [1/5, 3/7)$, the rich will migrate if and only if $t = 40$ and $t^* = 10$.
- For $\beta \in [3/7, 1)$, the rich will not migrate.

We now analyze the preferred tax rate of a rich and a poor, when all anticipate migration behavior. The rich knows their own type β, which then directly yields the migration decision in (8). A poor, by contrast, needs to form a belief about the rich type's inequality aversion. We denote this belief by $E_p[\beta]$, where E is the expectation. We note that by the same argument as for the no-mobility case, the utility of the poor is increasing in the tax rate as long as the rich does not migrate. Migration leads to lower payoffs for the poor. A poor player could hence only prefer the rich to migrate if he is so inequality-averse that the reduction of inequality that is caused by the migration costs exceeds the loss in material payoff.[7]

[5] We assume that a rich person who is indifferent between migrating or not will stay in the domestic country. Under the reasonable assumption on the continuous distribution of the inequality aversion parameters, indifference is a zero probability event, so that the assumption on how the rich break indifference is immaterial.

[6] In our experimental setting, where one can influence the payoffs of the participants in the home country, but there are not actual participants in the foreign country, this is arguably plausible.

[7] This can only be the case if $t^* = 20$. If $t^* = 10$, the payoff of a rich who migrates will only be lower by 5 compared to staying at home and paying $t = 20$, but the poor would each lose 10 and hence inequality

2.2.1 Preferred tax of the poor

The preferred tax rate of an extremely inequality-averse poor player ($\alpha > 4$) is 40 if the foreign tax rate is medium or high. For poor players with $\alpha \leq 4$ the preferred tax rate is 40 if either $t^* = 40$ or $t^* = 20$ and additionally $E_p[\beta] \geq 1/5$, because in both situations no migration is expected for any domestic tax rate. If $t^* = 20$ and $E_p[\beta] < 1/5$, the migration threat is credible and the highest possible tax rate subject to no migration is chosen by the poor, which is $t = 20$. Finally, when the foreign tax rate is low, the highest tax rate is preferred if the poor believes the rich to be sufficiently inequality averse, that is $E_p[\beta] \geq 3/7$. To summarize:

$$t_p^m(t^* = 40) = 40$$

$$t_p^m(t^* = 20) = \begin{cases} 40 \\ 20 \end{cases} \text{ if } \begin{array}{l} E_p[\beta] \geq 1/5 \text{ or } \alpha > 4 \\ E_p[\beta] < 1/5 \text{ and } \alpha \leq 4 \end{array} \tag{9}$$

$$t_p^m(t^* = 10) = \begin{cases} 40 \\ 20 \end{cases} \text{ if } \begin{array}{l} E_p[\beta] \geq 3/7 \\ E_p[\beta] < 3/7 \end{array}$$

Fehr and Schmidt (1999) estimate that extreme aversion towards disadvantageous inequality ($\alpha \geq 4$) pertains only to about 10% of typical experimental subject pools, which is also confirmed in a direct test by Blanco et al. (2011). We therefore expect the inequality aversion of the poor to be of minor importance, such that the poor will typically prefer tax rates that will prevent the rich from migrating.

2.2.2 Preferred tax of the rich

For the rich, the preferred tax rate can in principle also depend on their own migration choices and hence on the foreign tax rate. Note, however, that choosing a tax rate that would drive oneself out of the country is never optimal. Paying tax t^* abroad leads to additional costs m compared to paying $t = t^*$ at home and the additional reduction in inequality is less than m. Hence, since $\beta < 1$, paying $t = t^*$ at home is preferred over paying t^* abroad for any $\beta \in [0, 1)$. Therefore, the preferred tax rate for the rich is the same as without mobility and depends only on the rich's inequality aversion but not the foreign tax rate. To summarize, we obtain the following preferred tax:

$$t_r^m = \begin{cases} 10 & \beta < 2/3 \\ \{10, 20, 40\} \text{ if} & \beta = 2/3 \\ 40 & \beta > 2/3. \end{cases} \tag{10}$$

increases. Therefore, a poor player would never want a rich to migrate if the foreign tax is low. In case of the medium foreign tax, a poor player would prefer the high over the medium domestic tax, such that the rich migrates and pays migration costs if and only if $U_p(\text{rich leaves}) > U_p(\text{rich stays}) \iff 20 - \frac{\alpha}{2}(70 - 15 - 20) > 30 - \frac{\alpha}{2}(70 - 30) \iff \alpha > 4$.

2.3 Comparative Statics

Based on the above insights, we can establish the following comparative statics with respect to our treatments and the inequality aversion parameters α and β.

1. **The preferred tax rate of a rich** is weakly increasing in their inequality aversion β (follows from equations 7 and 10).

2. a) **The preferred tax rate of a poor** is weakly lower when the rich is mobile and the foreign tax is low or medium compared to when the rich is not mobile or the foreign tax is high (follows from equations 6 and 9).

   b) The preferred tax rate of a poor under mobility is weakly increasing in the expected inequality aversion β of the rich when the foreign tax is medium or low (follows from equation 9).

   c) The poor's preferred tax rate is independent of their inequality aversion α if she is not extremely inequality-averse (follows from equations 6 and 9).

3. a) When the domestic tax is high and the foreign tax is low or medium, **a rich's propensity to migrate** is weakly decreasing in their inequality aversion β (follows from Lemma 1).

   b) In all other cases, inequality aversion β of the rich should not matter for migration decisions (follows from Lemma 1).

It is also useful to make explicit predictions for the benchmark specification of our model when subjects are selfish ($\alpha = \beta = 0$). It is easy to see that a selfish rich will always prefer the low tax and will migrate if and only if the domestic tax is high and the foreign tax is not. A selfish poor, expecting the rich to be selfish, too, will prefer the medium tax if the rich is mobile and the foreign tax is not high. Otherwise, the selfish poor will prefer the high tax rate.

3 Survey Experiment

3.1 German Internet Panel (GIP)

We implement the above-described model of optimal redistributive taxation in an experimental setting using the German Internet Panel (GIP), a probability-based longitudinal panel survey conducted by the Collaborative Research Center "Political Economy of Reforms" (SFB 884) at the University of Mannheim. Although the GIP is online-based, it is representative for the general population in Germany aged from 16 to 75 living in private households. This is achieved by providing households without internet connection with the necessary devices to participate in the panel, as well as clear technical instructions on their usage (Blom et al., 2015). The selection of the panel is

based on a stratified random sample of both the online and offline population. In comparison to other population statistics, the GIP shows high congruence with regard to personal characteristics like age, unemployment, urbanity, and regionality (Blom et al., 2016, 2015).

All participants of the GIP are first recruited in face-to-face interviews and then take part in bimonthly surveys of around 20 minutes resulting in a panel data set. The GIP started in September 2012 and has a special focus on opinions and preferences with regard to political reforms. The surveys are accompanied by quality-assurance measures such as extensive plausibility tests conducted by an expert team of the GIP, as well as a pre-test concerning the technical implementation. These provisions are in place to ensure the comprehensibility of questions about complex issues for the general population. In order to maintain the GIP's high retention rates (73% - 80%) there is an incentive scheme in place (Blom et al., 2015). Participants are getting 4€ for every survey that they take part in and on top of that there is a bonus for those who participated in every survey of the year (10€) and those who only missed one survey (5€), respectively.

3.2 Design

In the experiment, every participant of the panel is randomly assigned to a treatment. One quarter of the panel is acting as the control group by playing under the *no-mobility* treatment condition, which is referring to the model without migration option, while the rest plays under the *mobility* treatment condition. Within both the mobile and immobile partition of the panel, two-thirds are assigned to be poor and one third to be rich.[8] The *mobility* types are also exogenously assigned to a foreign tax rate. 40% are facing a low foreign tax rate, 40% are facing a medium foreign tax rate and 20% are facing a high foreign tax rate (see Table 1 for an overview).[9] Respondents are told that they are part of a hypothetical country, which they share with two other participants such that each country consists of one rich and two poor respondents. Because of the nature of an online survey, the respondents cannot interact directly and are matched only ex post to their respective country by a random mechanism. Therefore, questions that condition on others' choices are asked using the strategy method. The questions are described in more detail later in this section.

All participants of the panel are required to go through a detailed explanation of the experiment specifically tailored to their type and treatment. This includes detailed step-by-step descriptions and multiple examples of possible outcomes written in easy language as well as simple graphics illustrating the timing of events and the voting system. Furthermore, tables visualizing all potential outcomes of the model are not only presented during the explanation, but also depicted when individuals have to make

[8]Note that we do not use the value-laden term "poor" in the instructions. Instead, we use the more neutral term of a low-income earner.

[9]We assigned fewer participants to the high foreign tax rate, because in this case mobility does not affect the optimal domestic tax rate and is therefore less interesting to study.

Table 1: Treatment and role assignment

mobility foreign tax	no –		yes low		yes medium		yes high		total	
	N	in %	N	in %	N	in %	N	in %	N	in %
poor	513	16.99	614	20.33	609	20.17	302	10.00	2,038	67.48
rich	257	8.50	293	9.70	285	9.44	147	4.87	982	32.52
total	770	25.50	907	30.33	894	29.60	449	14.87	3,020	100.00

Notes: Slight deviations from the expected share of treated individuals occur because of individuals not completing the whole survey. 40 out of 3,060 participants did not complete the whole survey.

their decisions. Participants took an average time of about eleven minutes to complete the survey.

After reading the description of the available choices and consequences and before making their tax-rate and migration choices, the participants are made aware that there is an extra incentive scheme on top of the general GIP scheme described above. After the experiment, 20 (out of 1,020) experimental countries are randomly drawn and the participants who were part of these countries are getting their hypothetical income from the game as a bonus payment. This translates into 60 out of 3,060 participants receiving an average bonus payment of 41.33€. Depending on their type, treatment, and their own decisions, this payment can range between 20€ (poor type when the rich migrates) and 80€ (rich type if she does not migrate and the low tax is chosen).[10]

Finally, all participants are asked the following questions: (1) What tax do you vote for? (2) Which tax do you think will the respective other type vote for? Participants in the *mobility* treatment who are of the rich type are additionally asked whether they would migrate conditional on every single possible tax rate in their domestic country (low, medium and high). Analogously, participants of the *mobility* treatment who are of the poor type are asked whether they believe that the rich in their country will migrate, again conditional on every possible domestic tax rate. The full questionnaire can be found in Appendix C.

To sum up, we collect data not only on tax and migration decisions, but also on the beliefs about the behavior of other participants. The random assignment of treatments and roles allows us to identify the treatment effects of mobility, type, and foreign tax rate on the tax and migration choices, as well as tax and migration beliefs by (ordered) logistic regressions.[11] Using our rich data set, we can link these variables to various questions about political opinions and party preferences as well as personal character-

[10] Our design aimed at achieving salient incentives for a given budget. We opted for a relatively high reward and low probability, because increasing the probability would likely not have made much of a difference to participants as long as this probability would still be perceived as relatively low, whereas reducing the payoff would substantially reduce the salience of the incentives. Not providing any incentives at all would likely lead to a strong bias towards socially desirable answers.

[11] Results are very similar when using (ordered) probit regressions. See Appendix B for details.

istics such as gender, age, and education level (see Table 7 in Appendix A for summary statistics).[12] With regard to political ideology, we can observe participants' stated party preference and distributive preference. In order to study the effect of party preferences in a more systematic way, we follow the sorting of parties by the Comparative Manifesto Project[13] on an economic left-right scheme. The center-left Social Democrats SPD, the environmentalist Greens, the Pirate party and the most far-left party The Left ("Die Linke") are coded as left-wing, while all other parties[14] are coded as right-wing. In order to infer an individual's preference for redistribution, respondents are asked directly: "Should the government employ policies to lower income inequality?" We group those who stated to be "in favor" or "strongly in favor" as in favor of redistribution, those who answered "against" or "strongly against" as against redistribution and those who chose "neither in favor nor against" as indifferent towards redistribution. We find that redistribution and political preferences are correlated in the expected direction. Left-wing participants are 25.6 percentage points ($p < 0.01$) more likely to be in favor of redistribution than right-wing participants. It is important to differentiate these variables from our treatment variables since they are not randomly assigned. Their effect should therefore be interpreted as (conditional) correlations, not causal effects.

3.3 Hypotheses

The comparative statics of our model, combined with the assumption that participants in favor of redistribution as well as left-leaning participants are more inequality-averse, yield testable hypotheses with respect to both tax and migration choices. This assumption is supported by Kerschbamer and Müller (2020) who find that participants classified as selfish are more likely right-leaning, whereas preference types that are benevolent towards players with lower payoffs are more likely left-leaning. For the ease of exposition, we will call both left-wing participants and those in favor of redistribution left-leaning and other participants right-leaning. The tax choices of the poor players depend on their beliefs about the migration choices of the rich, whereas the tax and migration choices of the rich are independent of their beliefs about the choices of the poor. Therefore, we begin with the tax and migration choices of the rich, then move to the beliefs of the poor about the migration choices of the rich and conclude with the tax choices of the poor. Our first hypothesis follows directly from comparative statics 1.

Hypothesis 1 (tax choices and political preferences of the rich)**.** *Left-leaning rich players vote for a higher tax rate than right-leaning rich players.*

[12] Given the context of our experiment, one might want to control for actual migration experiences of participants. The closest proxy for this variable is information on citizenship. However, only 5% of participants have a non-German passport, and of those almost half have dual citizenship, making a systematic analysis difficult.

[13] Data and information at `https://manifesto-project.wzb.eu/`

[14] These include the center-right CDU/CSU, the liberal (free market-oriented) democrats FDP, the right-wing populist AfD, and the far-right NPD.

Consider now migration choices of the rich. Again, we derive predictions from our model in a straightforward way, as summarized in our next hypothesis below. First, Lemma 1 implies that for any level of inequality aversion, the rich should only migrate if the domestic tax is high and the foreign tax is not because under this condition migration pays materially whereas otherwise migration does not pay materially and also increases inequality. Assuming that not all our participants are strongly inequality averse, this implies Hypothesis 2a. Second, Lemma 1 further implies that when migration pays materially, sufficiently inequality-averse rich players may still decide not to migrate (see also comparative statics 3a). Assuming that the left-leaning participants are more inequality averse than the right-leaning participants, we thus derive Hypothesis 2b. By contrast, if migration does not pay materially, migration choice is not affected by a rich player's inequality aversion (see comparative statics 3b). Under the assumption that political preferences do not affect migration choices in this situation other than through differences in inequality aversion, this yields Hypothesis 2c.

Hypothesis 2 (migration choices and political preferences of the rich)**.**

a) Rich players more frequently migrate when the domestic tax is high and the foreign tax is not high than in the remaining constellations.

b) When the domestic tax is high and the foreign tax is not high, the left-leaning rich are less likely to migrate than the right-leaning rich.

c) If the domestic tax is not high or the foreign tax is high, migration choices of the rich do not vary with their political preferences.

Given that the domestic and foreign tax rates affect the incentives for the rich to migrate, they should also affect the beliefs of the poor about the migration choices of the rich. This in turn affects the optimal tax level from the perspective of the poor. We first address the beliefs of the poor. If the poor understand the material incentives of the game and expect at least some of the rich to be affected by these material incentives, the poor should expect the rich to be more likely to migrate when domestic taxes are high and foreign taxes are not than otherwise (Hypothesis 3a). In our model, the beliefs of the poor about the migration choices of the rich are independent of the poor players' own political ideology. However, a more leftist political perspective might also make participants more optimistic that the rich will not migrate even when it pays materially, for example because the left-leaning expect others to be more inequality averse.[15] This implies Hypothesis 3b.

Hypothesis 3 (migration beliefs and political preferences of the poor)**.**

[15] If the left-leaning are more averse towards advantageous inequality than the right-leaning participants, it is also plausible that they expect others to be more averse towards advantageous inequality due to the (false) consensus effect, (Engelmann and Strobel, 2000), i.e., a correlation of a participant's expectation about other participants with their own type.

a) The expectation of the poor that the rich will migrate is higher when the domestic tax is high and the foreign tax is not high than in the remaining constellations.

b) When migration pays (high domestic tax and low or medium foreign tax), left-leaning poor players tend to be less convinced than right-leaning ones that the rich will migrate.

The material migration incentives of the rich and the beliefs of the poor whether the rich will act on these incentives are expected to affect the tax choices of the poor. Specifically, if the poor expect the rich to be more likely to migrate when it pays materially as predicted in Hypothesis 3a, the poor should vote for lower taxes (or more precisely, be less likely to vote for high taxes and more likely to vote for medium taxes) if the rich are mobile and foreign taxes are low or medium than if the rich are immobile or foreign taxes are high, implying Hypothesis 4a (see also comparative statics 2a). The poor may, however, also expect the rich not to migrate even when it pays, or they may also expect the rich to migrate when both domestic and foreign taxes are high. Assuming that the poor maximize their expected earnings, then for any level of foreign taxes, if they believe the rich will migrate when domestic taxes are high, the poor should be less likely to choose high taxes, implying 4b (see also comparative statics 2b).

Now consider the impact of political ideology on tax choices. If the left-leaning poor are indeed more optimistic than the right-leaning poor that the rich will not migrate even if this pays materially (Hypothesis 3b) and if in their tax choices the poor take their beliefs about the migration choices of the rich into account (Hypothesis 4b), then the left-leaning poor should choose higher taxes than the right-leaning poor, leading to Hypothesis 4c.[16] High tax choices by the left-leaning poor compared to the right-leaning poor that are not explained by differences in beliefs (i.e. support for Hypothesis 4c, even though 3b is violated) could be interpreted that the left-leaning are more likely than the right-leaning to be extremely inequality averse ($\alpha > 4$ in our model, see comparative statics 2c).

[16] As pointed out above, it is also plausible that the belief data will be subject to the (false) consensus effect. There is substantial evidence for the presence of the consensus effect in the experimental literature and the consensus effect can be responsible for patterns in the choice data that may be misinterpreted as evidence of certain preferences patterns. For example, Blanco et al. (2014) show that a correlation between cooperation in the role of first mover and second mover in a sequential prisoner's dilemma is explained to a large degree by cooperative second movers expecting others to cooperate as well rather than by a general preference for cooperation. Similarly, in our setting, the consensus effect would allow for a different underlying channel for support of Hypothesis 4c. It is possible that some strongly inequality-averse poor might vote for high taxes due to their inequality aversion and expect the rich to be strongly inequality averse (and hence not to migrate) due to the consensus effect. Then a correlation between tax choice and migration beliefs would result, even though the beliefs are not causal for the tax choices. Note, however, that this channel requires that the poor are strongly averse towards disadvantageous inequality but expect the rich to be strongly averse towards advantageous inequality. Blanco et al. (2011) observe essentially no correlation between estimated parameters for aversion towards advantageous and disadvantageous inequality, making it implausible that due to the consensus effect the poor who are averse towards disadvantageous inequality expect the rich to be averse towards advantageous inequality. Hence this alternative channel is unlikely to play a major role in our data.

Hypothesis 4 (tax choices and political preferences of the poor)**.**

a) The poor vote for lower tax rates in the mobility treatment with the foreign tax being low or medium compared to no mobility or the foreign tax being high.

b) The poor are less likely to vote for high taxes if they believe that the rich will migrate when domestic taxes are high.

c) Left-leaning poor participants vote for higher taxes than right-leaning participants.

4 Results

As a first step, in order to make sure that the randomization worked properly, we regress treatment dummies on observable characteristics and reassuringly, we do not find any significant effects (see Table 8 in the Appendix). Following standard conventions, we understand statistical significance being at the 5% level and will note weak significance at the 10% level explicitly. We now move on to testing our hypotheses.

4.1 Testing the Comparative-Static Predictions

Following the order of our hypotheses, we begin with the analysis of the tax choices of the rich and continue with their migration choices. We then address whether the comparative statics of the migration choices of the rich are reflected in the beliefs of the poor and whether these beliefs are affected by the political ideology of the poor. Finally, we investigate whether these migration beliefs and the poor's ideology affect their tax choices.

We test Hypothesis 1 by examining the relationship between tax choices of the rich and their political party preferences and redistribution preferences. In line with the hypothesis, the rich who support left-of-center parties are 6.8 percentage points less likely to choose the low tax rate and 4.6 percentage points more likely to choose the high tax rate than rich who support right-of-center parties (see columns 1 to 3 in Panel A of Table 2).[17] Similarly, those participants who state to be in favor of redistribution are significantly less likely to choose the low tax rate and more likely to choose the medium or high tax rate than those opposed to redistribution, with participants who state to be indifferent in between (see columns 1 to 3 in Panel B of Table 2). We summarize these findings in

Result 1 (tax choices and political attitudes of the rich)**.** *In the role of the rich player, left-leaning participants vote for higher tax rates than right-leaning participants, as predicted in Hypothesis 1.*

[17]The lower number of observations in Panel A compared to Panel B is because of a higher number of participants not stating their party preference. Results for the individual political parties can be found in Table 9 in Appendix B.

Table 2: Tax choices and ideology: by role

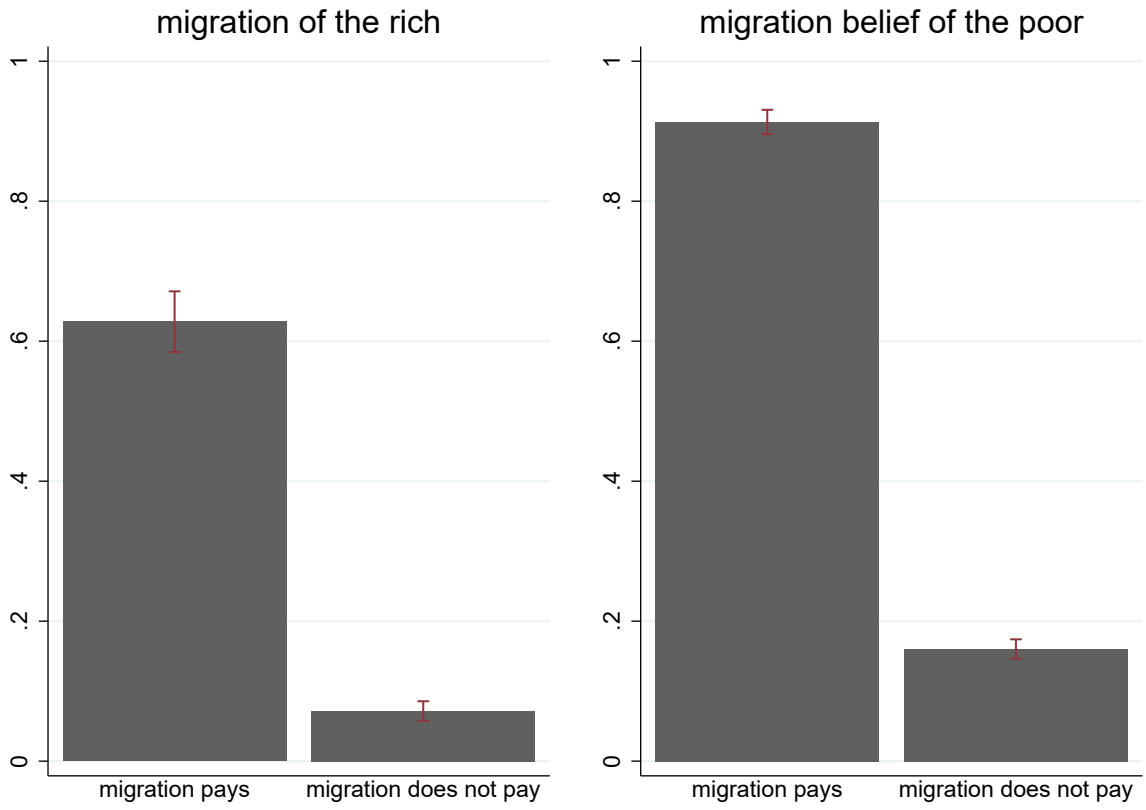
	only rich players			only poor players		
	(1)	(2)	(3)	(4)	(5)	(6)
tax choice	low	medium	high	low	medium	high
Panel A *ideology* reference category: right-wing						
left-wing	-0.068***	0.022**	0.046***	-0.022	0.001	0.020
	(0.025)	(0.010)	(0.017)	(0.015)	(0.002)	(0.014)
controls	yes	yes	yes	yes	yes	yes
mean	0.169	0.725	0.106	0.146	0.717	0.137
N	686	686	686	1,429	1,429	1,429
Panel B *redistribution preference* reference category: against redistribution						
indifferent	-0.062**	0.020*	0.042**	-0.024	0.001	0.023
	(0.030)	(0.011)	(0.021)	(0.019)	(0.002)	(0.018)
pro redistribution	-0.084***	0.027**	0.058***	-0.062***	0.002	0.060***
	(0.027)	(0.011)	(0.019)	(0.016)	(0.004)	(0.016)
controls	yes	yes	yes	yes	yes	yes
mean	0.170	0.723	0.107	0.147	0.712	0.140
N	887	887	887	1,825	1,825	1,825

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is the tax choice, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Robust standard errors in parentheses. Each horizontal line indicates a new regression.

Next, we turn to Hypothesis 2a, i.e., we test whether the rich understand and act on the migration incentives given by different domestic and foreign tax rates. We first plot migration rates of the rich both for the setting in which migration pays in material terms (high domestic tax and low or medium foreign tax) and for the setting in which it does not pay. As Figure 1 shows, 62.6% of rich players migrate if it pays. By contrast, if migration does not pay, only 9.8% do migrate. The regression analysis in column 1 of Table 3 confirms these findings and reveals their significance. Compared to the constellation where migration does not pay materially, i.e., where foreign taxes are high or domestic taxes are not, the propensity to migrate increases significantly when migration pays in material terms. To summarize, the rich seem to understand and react to migration incentives, confirming Hypothesis 2a.

While the rich migrate much more often when it pays in material terms than when it does not, more than a third of them still do not migrate even when it pays. In line with our model, this can be driven by inequality aversion, which we expect to be reflected in

Figure 1: Migration choices by migration incentives



their political ideology. We hence compare migration choices of the left- and the right-leaning rich, both when migration pays and when it does not pay.

As one can see in columns 1 and 2 of Table 4, participants supporting left-of-center parties or being in favor of redistribution are 12 to 14 percentage points less likely to migrate than right-wing participants when migration pays, supporting Hypothesis 2b.[18] When migration does not pay, however, migration choices are unrelated to the political party preferences (see columns 3 and 4 of Table 4) or the redistribution preferences, as predicted in Hypothesis 2c. We summarize our results on the impact of political ideology on migration choices in

[18] When looking at individual political parties, the effect is mainly driven by supporters of the right-wing populist party AfD. Ironically, thus, supporters of an anti-immigration party are most likely to be economic migrants in our study (see Table 10 in Appendix B). The rich made migration choices for each possible tax rate. Columns 1 and 2 of Table 4 include for each individual in the treatments with low or medium foreign tax the migration choice for high domestic tax. Columns 3 and 4 include three data points for the individuals in the treatment with high foreign tax (one for each domestic tax) and two data points for the individuals in the treatments with low or medium foreign tax (one for low domestic tax and one for medium domestic tax).

Table 3: Migration choices and beliefs

	(1) migration choice	(2) migration belief
migration incentives reference category: migration does not pay		
migration does pay	0.348***	0.492***
	(0.007)	(0.007)
mean	0.238	0.378
N	2,175	4,442

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following logistic regression: $Y_i = \beta T_i + \epsilon_i$, where Y_i is either a dummy equaling one if i migrates or a dummy equaling one if i beliefs that the rich will migrate and T_i is a dummy equaling one if migrations pays (high tax rate in the home country and low or medium tax rate in the foreign country). Robust standard errors in parentheses are clustered at the individual level.

Result 2 (migration choices and political attitudes of the rich)**.**

(i) The rich react to material migration incentives as predicted by Hypothesis 2a.

(ii) The reaction to incentives is mitigated by their political ideology with the left-leaning rich being less likely to migrate than the right-leaning rich when migration pays materially, confirming Hypothesis 2b.

(iii) There is no difference in the migration choices with respect to political ideology when migration does not pay, confirming Hypothesis 2c.

We have seen that the rich react to the incentives to migrate. We have also seen, though, that the degree to which they do so depend on their ideology. In order to understand whether the migration incentives of the rich affect the tax choices by the poor, we analyze whether the beliefs of the poor are affected by the incentives to migrate for the rich. Further, in order to understand if and how the tax choices by the poor are affected by their own political ideology, we need to understand whether it influences their beliefs that the rich would migrate. Hence, we move on to test Hypothesis 3.

As a first step, we plot migration beliefs both for the setting in which migration pays in material terms (high domestic tax and low or medium foreign tax) and for the setting in which migration does not pay. As Figure 1 shows, the migration beliefs of the poor closely align with our model with 90.2% of the poor expecting the rich player to migrate when it pays materially, compared to only 18.1% when it does not pay. The difference is shown to be highly significant by the regression analysis presented in column 2 of Table 3. Hence, the migration threat seems to be perceived as credible by most of the poor players, supporting Hypothesis 3a. In fact, the beliefs of the poor even vary more with the migration incentives for the rich than the actual migration choices of the rich themselves. This suggests that a substantial part of the rich in our sample are driven by

Table 4: Migration and ideology

	migration pays		migration does not pay	
	(1) migration choice	(2) migration choice	(3) migration choice	(4) migration choice
Panel A *ideology* reference category: right-wing				
left-wing	-0.137***	-0.124***	0.012	0.013
	(0.046)	(0.048)	(0.018)	(0.018)
controls	no	yes	no	yes
mean	0.625	0.626	0.084	0.081
N	405	401	1,146	1,123
Panel B *redistribution preference* reference category: against redistribution				
indifferent	-0.063	-0.054	-0.012	-0.036
	(0.064)	(0.063)	(0.025)	(0.024)
pro redistribution	-0.137**	-0.129**	-0.009	-0.034
	(0.055)	(0.055)	(0.022)	(0.021)
controls	no	yes	no	yes
mean	0.629	0.629	0.095	0.093
N	536	529	1,477	1,448

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i migrates, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the rich for each possible tax rate whether they would migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate.

inequality aversion, given that only 62.6% of them migrate when it pays materially, but that this is not anticipated by the poor, 90.2% of whom expect the rich to migrate.[19]

That the migration threat is perceived to be real by the majority of the poor raises the question whether this perception is affected by their ideology. As Table 5 shows, there is no difference in migration beliefs by political party preference or redistribution preferences when we restrict the analysis to the constellations in which migration pays (high domestic tax and low or medium foreign tax).[20] When migration does not pay, there is also no difference by party preference, but those who are indifferent towards redistribution are significantly more likely to state that they expect the rich to migrate than those who oppose redistribution. Given that there is no good reason to migrate

[19]One could argue, of course, that the beliefs of the poor are well calibrated because we only elicited a binary belief, which makes it optimal to guess the modal choice of the rich, which in our data is indeed to migrate.

[20]Results for the individual parties can be found in Table 11 in Appendix B.

Table 5: Migration beliefs and ideology

	migration pays		migration does not pay	
	(1) migration belief	(2) migration belief	(3) migration belief	(4) migration belief
Panel A *Ideology* reference category: right-wing				
left-wing	0.003	0.002	0.025	0.023
	(0.020)	(0.020)	(0.016)	(0.016)
controls	no	yes	no	yes
mean	0.907	0.906	0.177	0.175
N	872	855	2348	2300
Panel B *Redistribution preference* reference category: against redistribution				
indifferent	-0.028	-0.025	0.057***	0.045**
	(0.026)	(0.026)	(0.021)	(0.021)
pro redistribution	-0.004	-0.004	0.033*	0.026
	(0.023)	(0.023)	(0.019)	(0.019)
controls	no	yes	no	yes
mean	0.902	0.901	0.183	0.182
N	1,113	1,086	2,990	2,921

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i beliefs that the rich will migrate, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, > 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the poor for each possible tax rate whether they believe the rich will migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate.

in this setting, this difference is likely just due to random variation Therefore, we reject Hypothesis 3b. We can hence rule out differential migration beliefs as a possible reason for potential differences in tax choices between the left- and the right-leaning poor. We summarize the results on the poor players' beliefs about the rich players' migration choices in

Result 3 (beliefs and political attitudes of the poor)**.**

(i) The poor believe the rich to be more likely to migrate when it pays in material terms than when it does not, confirming Hypothesis 3a.

(ii) Migration beliefs do not differ between the left- and the right-leaning poor, contrary to Hypothesis 3b.

Finally, we turn to Hypothesis 4 and investigate how migration incentives for the rich, migration beliefs of the poor and political attitudes of the poor affect the tax choices

Table 6: Tax choices, mobility and migration beliefs

tax choice	(1) low	(2) medium	(3) high
Panel A *mobility* reference category: immobile or foreign tax high			
foreign tax low or medium	0.062***	-0.004	-0.059***
	(0.013)	(0.004)	(0.013)
mean	0.151	0.710	0.139
N	2,038	2,038	2,038
Panel B *migration belief* reference category: rich does not migrate if domestic tax is high			
rich migrates if domestic tax is high	0.099***	-0.018**	-0.081***
	(0.024)	(0.008)	(0.021)
mean	0.157	0.720	0.123
N	1,416	1,416	1,416

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta T_i + \epsilon_i$, where Y_i is the tax choice and T_i is either a dummy equaling one if the foreign tax rate is low or medium or a dummy equaling one if i beliefs that the rich will migrate if the home tax rate is high. Robust standard errors in parentheses.

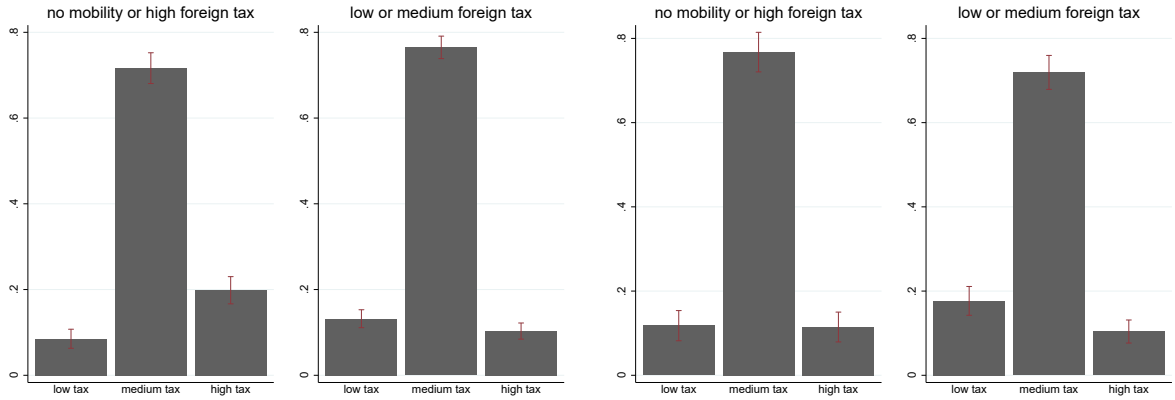
of the poor. Given the credible threat of the rich to leave the country, the poor have an incentive to vote for a lower tax rate (Hypothesis 4a). We test this hypothesis by comparing the tax choices of the poor in the mobility treatment with low or medium foreign taxes to the tax choices of the poor pooled from the no-mobility treatment and from the mobility treatment with a high foreign tax. Figure 2a shows that the threat of migration indeed induces the poor to be less likely to vote for the high tax. As panel A of Table 6 shows, this difference amounts to 5.9 percentage points and is statistically significant at the 1% level. This is in line with Hypothesis 4a, but the effect is quantitatively small.

In line with Hypothesis 4b, we also find that the poor are significantly less likely to vote for the high tax if they believe that the rich will migrate when taxes are high (see Panel B of Table 6), but again the effect is quantitatively small.[21]

Regarding the impact of political ideology on the tax choices of the poor, we considered two possible channels how the political ideology of the poor could affect their tax choices. First, the left-leaning poor could be more optimistic than the right-leaning poor about the migration choices of the rich. Second, the left-leaning poor could be more likely to be extremely inequality averse. Since we do not find an impact of the political ideology of the poor on their beliefs about the migration choices of the rich (see Result 3(ii)), there is no evidence for the belief difference underlying the first chan-

[21] We note that the optimal tax rate is the medium one when the rich migrate if and only if it pays, while we observe an increase in choosing the low tax rate in both panels of Table 6 and even a decrease in the frequency of choosing the medium tax rates in Panel B. This may be caused by calculating the optimal tax incorrectly or by an expectation that the rich might even be spiteful and also migrate for medium domestic taxes.

Figure 2: Tax choices by migration incentives



a) Tax choices of the poor

b) Tax choices of the rich

nel. Hence, support for 4c would point to the second channel. We find mixed support for this hypothesis. While there is no difference between the poor who support left-of-center parties and right-of-center parties (see columns 4 to 6 of Panel A in Table 2), we do find that the poor who are in favor of redistribution are significantly more likely to vote for the high tax than those opposed to redistribution (see Panel B of Table 2). This could indicate that some participants have extreme inequality aversion and that this affects both stated redistribution preferences as well as tax choices in our experiment. The incidence of extreme inequality aversion, however, does not appear to be systematically related to party preferences. We summarize our results on political ideology and tax choices of the poor in

Result 4 (tax choices and political attitudes of the poor)**.**

(i) The tax choices of the poor react to the possibility of the rich migrating as predicted by Hypothesis 4a, but the effect is quantitatively small.

(ii) The poor are less likely to choose high taxes if they believe that the rich will migrate when domestic taxes are high, supporting Hypothesis 4b, but the effect is quantitatively small.

(iii) The poor players' political party preference is not significantly related to their tax choices, but those with a high preference for redistribution vote for a higher tax rate. Hence, we find mixed evidence with respect to Hypothesis 4c.

As the main insight regarding the role of political ideology in tax choices, we find that it matters when our participants are in the role of the rich but it does not when they are in the role of the poor. This is in line with our model as far as inequality aversion relates to political ideology because for the rich already moderate levels of inequality aversion can affect their choices, while only extreme levels do so for the poor. We

do find some weak evidence of extreme aversion towards disadvantageous inequality, which does not seem to be systematically related to political party orientation, though. An alternative channel that predicts political preferences to impact tax choice of the poor via their beliefs does not find support, either. Our results therefore suggest that political attitudes can moderate the effects of mobility on tax competition and a race to the bottom. The channel is not, however, over-optimistic beliefs or ideology-driven taxation choices of the (left-leaning) poor but rather benevolence of a sizable part of the (left-leaning) rich.

Overall, our findings confirm the hypotheses derived from the comparative statics of our model. However, one finding is notable. Although the poor, when choosing taxes, react to migration incentives of the rich as predicted, the effect is quantitatively small (Result 4(i)). This is puzzling in light of the fact that migration beliefs of the poor react strongly to migration incentives (Result 3(i)). In the next section, we discuss this result in more detail.

4.2 Levels of Tax Choices

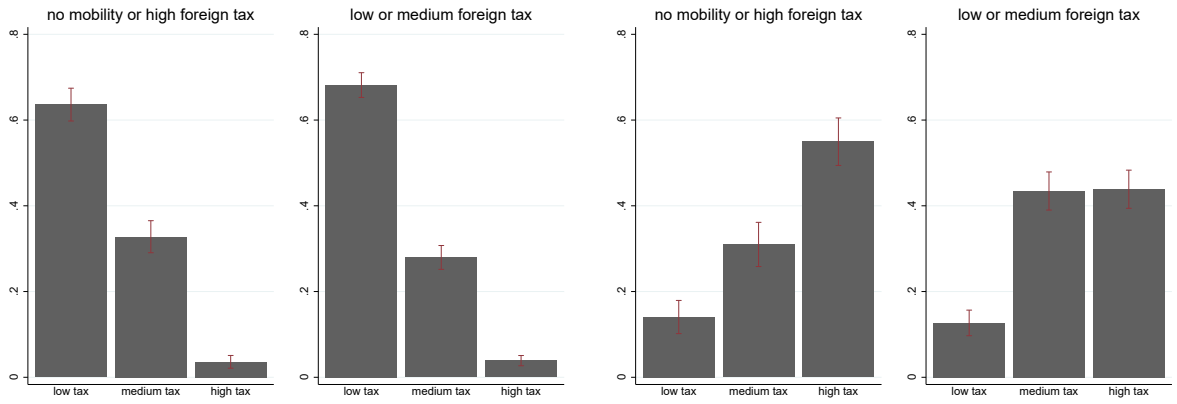
Considering levels of tax choices in our experiment, we find a strong concentration on the medium tax and a relatively weak difference between player types and treatments (see Figure 2). Why is this a puzzle? The choice of the rich, choosing medium instead of low taxes, is in principle consistent with our model, because for an intermediate level of inequality aversion they could be indifferent between all tax rates (see comparative statics 1). However, it appears surprising that such a high share of the rich is concentrated on the intermediate level of inequality aversion that just makes them indifferent and makes them break indifference in favor of the medium tax.[22] More importantly, the poor also primarily choose medium taxes even when the rich are not mobile or foreign taxes are high; and this can no longer be rationalized within our model.[23] Hence, we find a notable and unpredicted pattern: A large part of the rich and the poor choose medium taxes, with only a small reaction to treatment conditions (see Result 4(i)).

A possible reason for the concentration of tax choices on the medium tax rate that comes to mind is a potential misunderstanding of the experimental task. This is arguably more likely in a survey experiment than in a laboratory experiment: First, participants in the former cannot ask clarifying questions. Second, a sample with a larger variety in terms of education and age than a typical student sample may on average have more problems understanding the task (Snowberg and Yariv, 2021).

[22] The inability to explain intermediate choices is a problem that is often encountered in applications of the Fehr-Schmidt model due to its linearity. Assuming instead that the utility loss is convex in the inequality allows for explanations of intermediate choices by intermediate levels of inequality aversion.

[23] As we argued in our model section, the inequality aversion of the poor is irrelevant in these cases, because even with high taxes, the rich still have higher payoffs than the poor. Choosing high taxes therefore increases a poor's own payoff while also reducing inequality. Hence, the inequality-averse poor should choose high taxes when the rich are not mobile or foreign taxes are high.

Figure 3: Tax beliefs by migration incentives



a) Tax beliefs of the poor

b) Tax beliefs of the rich

However, for two reasons, we do not believe that misunderstanding is the dominant factor behind our relatively weak support for the point predictions of our model. To see this, consider the benchmark equilibrium of our model with zero inequality aversion, i.e., the equilibrium in which monetary incentives fully determine decisions. First, note that beliefs are much closer to the point predictions of this benchmark equilibrium than choices are (see Figure 3). This suggests that most participants do understand the monetary incentives in the tax game. At least they appear to understand the incentives for the other type, which makes it implausible that they would not understand them for their own type.

Second, we run robustness checks for our tests, excluding participants who appear most likely to be confused, namely those who are either the fastest or the slowest in completing the experiment. Very fast participants are likely to not have carefully read the instructions and to not have thought deeply about their decisions. Very slow participants are likely to have thought long because they have had trouble understanding. Excluding both the fastest 10% and the slowest 10% does not overall affect our test results much.[24] Furthermore, we create a dummy for deviating from the benchmark equilibrium. We regress this dummy on the respondents' education level, the time they took to complete the survey, and a dummy equaling one if the respondent interrupted the survey at some point. As one can see in Table 12 in Appendix B, none of these factors can explain deviations from the benchmark equilibrium both in tax choices and beliefs. Hence, none of these factors points towards a possible misunderstanding of incentives, either.

Nonetheless, for many of our participants the experiment was probably an unusual situation. Hence, they may have been unsure about the appropriate action. Choosing

[24] See Appendix B for details. Results are also robust to excluding the slowest or fastest 20% (available upon request).

the "middle" may then have appeared to them a good compromise that made them look or feel neither too greedy, as in the model by Benabou and Tirole (2006), nor like a fool for forgoing too much. Choices that avoid extremes and favor compromises between various motives have frequently been observed in other contexts, notably marketing research (for a discussion of extremeness aversion and compromise effects, see, e.g., Simonson and Tversky (1992) and Simonson (1989).) We therefore check whether answers to questions in the GIP that are not related to our experiment have a tendency to center in the middle, too. We find that other questions with three or five item response options show a tendency towards the center, though much weaker. Across all questions with three items in waves 17 and 18 of the GIP, the distribution across left, middle, and right is 37%, 41%, and 23%, respectively. Participants shy away more from extremes in questions with five items, where the distribution of answers across the five options from left-most to right-most is (11%/36%/27%/26%/2%). These questions were typically less complicated than ours and hence participants may have felt less unsure and thus may have shown a weaker tendency towards the center.

One further possibility is that participants take real tax rates as sensible benchmarks into account. For instance, they may refer to their personal tax rate as a guidance of what is appropriate. If that was true, we would expect that tax-rate choices in the experiment correlate with actual household income, because that correlates with the personal tax rate. However, we do not find such an effect (see Table 13 in Appendix B for detailed results).[25]

The most plausible explanation for the concentration of tax choices on the medium level seems to be that people confronted with unusual decisions exhibit a tendency toward a compromise between conflicting motives. This leaves the question, however, why beliefs about tax choices of the other type are much closer to the predictions for rational selfish individuals than actual choices are. Possibly, while our participants trade-off the motives of maximizing earnings with a desire not to appear too greedy (by only sharing the minimum if they are rich or asking for the maximum if they are poor), they may underestimate how much others also want to avoid to appear too greedy. When thinking about what other people do, it is easy to understand their material incentives, but much more difficult to predict which further, more complex, motives affect choices. People often have complex motivations, but may underestimate how complex others' motivations are as well.

[25] Alternatively, one might argue that $20/90 = 22.2\%$ is a reasonable approximation for the average tax rate of the median-income person in Germany, while $40/90 = 44.4\%$ is much higher. However, people have a tendency to confuse average and marginal tax rates (De Bartolome, 1995). Coupled with the fact that we explicitly talk about taxing the "rich" in this experiment and that Germany has a "rich tax" with a marginal tax rate of 45% (for incomes above 250,000€ for unmarried individuals and 500,000€ for married couples), the 44.4% tax rate actually appears rather appropriate.

5 Conclusion

We study voting on taxation in the presence of mobility of high-income earners in a simple game that we implemented in an online survey experiment, based on a fairly large, representative sample of the German population. Tax-induced mobility has been at the center of recent theoretical and empirical research, as it is a key component in understanding and quantifying the link between international economic integration on the one hand and the government's ability to provide public goods and to shape the degree of inequality on the other hand. We contribute to this literature by analyzing the role of political attitudes that may correlate with the preferred choice of tax rates, migration decisions, and beliefs of participants in our experiment. Controlling for demographic characteristics such as age, income, and education, we find that behavior does correlate with political attitudes, and in a predictable way. In the role of the rich, left-leaning participants tend to be more likely than right-leaning ones to vote for higher taxes despite hurting themselves. Compared to the right-leaning, the left-leaning also migrate less when migration pays, but exhibit no difference when it does not. Beliefs of the poor about the migration choices of the rich, however, are not systematically related to political attitudes. Our finding that the right-leaning are less prone to redistribution when it hurts them is in line with the result by Karadja et al. (2017) that only those right of center become more averse to redistribution when they learn that they rank higher in the income distribution than they thought.[26]

There are three interesting implications of our results. First, our findings attenuate the race-to-the-bottom argument that the increasing mobility of labor (and capital) leads to sub-optimally low taxes and public spending (for a survey of this literature, see Keen and Konrad, 2013). A sizable share of participants migrate less and stick to higher tax rates than would be expected in the absence of social preferences. Second, political attitudes do not simply reflect easily measurable demographic characteristics. Third, the possible impact of political attitudes on behavior does not seem to be the result of politically biased expectations about others' behavior but of a correlation between political attitudes and social preferences.[27] We note that in our experiment, the income distribution depends purely on luck and not on effort or skill. In the study by Almås et al. (2020) Norwegians and US-citizens differ in their redistribution preferences when inequality is based on luck but not in the degree to which they acknowledge merit. Similarly, left-leaning participants might be less inequality-accepting than the right-leaning when inequality is based on luck. We do not know, however, whether they would also be less inequality-accepting when it was driven by merit.

[26] In an earlier study, Cruces et al. (2013) found that informing survey participants that they are poorer than they thought increases their support for redistribution but they did not assess the relationship to political ideology.

[27] Klimm (2019) finds in a laboratory experiment with a treatment variation whether outcomes can be affected by cheating that left-leaning participants redistribute more when cheating is possible, whereas right-leaning participants do not react to the treatment. In line with our results, he finds that this difference is not driven by differences in beliefs.

Our paper also provides a methodological contribution to the analysis of the role of political attitudes. Stated preferences in surveys lack incentive compatibility. A standard alternative to surveys are therefore laboratory experiments. Our study, however, reveals advantages of a survey experiment over a laboratory experiment. Prior to conducting our survey experiment, we had studied the impact of migration on tax choices and their relation to political attitudes in a laboratory experiment. In this laboratory experiment, choices are overall much closer to the selfish equilibrium prediction than in our survey experiment.[28] Furthermore, we find little impact of political preferences on the choices in the laboratory experiment. This is apparently due to the fact that most of our participants support one of three main parties (CDU, SPD, Greens) who tend to have moderate views on economic issues. There is some indication in our data that supporters of smaller parties make different choices, but they are too rare in our laboratory sample for a meaningful statistical analysis.[29]

More important than the difference in the overall pattern of choices between the survey experiment and the laboratory experiment is thus the insight that the laboratory sample is not suitable to study the relation of political ideology, tax, and migration choices. Our survey experiment suggests that while the effects of political ideology are relevant, they can only be detected if two conditions are met. First, sample sizes have to be sufficiently large in order to have a sizable share of supporters also for smaller parties, which are more likely to hold strong views. This holds in particular in Germany and similar countries where the majority of people support economically moderate parties. Second, political ideologies need to be sufficiently firmly established. The first condition is hard to meet in a laboratory experiment due to constraints on the budget and subject-pool size.[30] The second condition is arguably also harder to satisfy with a student pool. In contrast to a typical laboratory experiment, our survey experiment is based on a large representative sample of the adult German population, enhancing the external validity of our results. Therefore, for studying the impact of ideology, integrating the experiment into online surveys is a more fruitful approach. It is a general insight that surveys, field experiments, and laboratory experiments are complementary. Survey experiments may be a good compromise for research questions such as ours. They provide exogenous variation, can be incentivized and have the necessary sample size as well as variation in political ideology to permit a thorough investigation of the effects of political attitudes.

[28] See Appendix D for detailed results and a discussion of possible reasons for the differences.

[29] Our results are overall in line with those of a study by Esarey et al. (2012). They also find that the behavior of participants in a laboratory experiment on voting about redistribution with earned income is well explained by selfishness and that participants that are more pro-redistribution according to a set of questions from a questionnaire do not vote for higher taxes in general. Interestingly, though, they find that those participants more opposed to redistribution react more to their selfish incentives, which is broadly in line with the more selfish voting and migration behavior of the right-wing participants in our survey experiment.

[30] Selective recruiting based on party preferences does not appear to be a viable way either.

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A Summary Statistics and Randomization Check

Table 7: Summary statistics

variable	mean	sd	min	max	N	GIP wave
tax choice	1.97	0.54	1	3	3,020	18
tax belief	1.68	0.76	1	3	3,015	18
migration	0.24	0.43	0	1	2,175	18
migration belief	0.38	0.48	0	1	4,442	18
female	0.49	0.50	0	1	3,019	18
age: 16 - 29	0.17	0.40	0	1	3,018	18
age: 30 - 39	0.15	0.42	0	1	3,018	18
age: 40 - 49	0.20	0.43	0	1	3,018	18
age: 50 - 59	0.24	0.49	0	1	3,018	18
age: >60	0.24	0.50	0	1	3,018	18
married	0.60	0.49	0	1	3,019	18
higher education	0.48	0.50	0	1	2,955	18
household size: 1	0.16	0.37	0	1	3,014	18
household size: 2	0.43	0.50	0	1	3,014	18
household size: 3 or more	0.41	0.49	0	1	3,014	18
left-wing	0.51	0.50	0	1	2,160	16
NPD	0.01	0.09	0	1	2,349	16
AfD	0.10	0.30	0	1	2,349	16
FDP	0.06	0.23	0	1	2,349	16
CDU/CSU	0.28	0.45	0	1	2,349	16
SPD	0.22	0.41	0	1	2,349	16
Green Party	0.16	0.36	0	1	2,349	16
Pirate Party	0.02	0.12	0	1	2,349	16
The Left	0.09	0.29	0	1	2,349	16
non voter	0.07	0.25	0	1	2,349	16
redistribution: in favor	0.54	0.50	0	1	2,776	16
redistribution: indifferent	0.25	0.44	0	1	2,776	16

Table 8: Randomization check

	(1) mobile	(2) rich	(3) foreign tax low	(4) foreign tax medium	(5) foreign tax high
gender reference category: male					
female	-0.024	0.030*	-0.001	-0.006	0.006
	(0.016)	(0.017)	(0.021)	(0.021)	(0.017)
N	3,019	3,019	2,250	2,250	2,250
age reference category: < 30					
30 to 39	-0.021	-0.003	0.006	-0.017	0.011
	(0.028)	(0.030)	(0.036)	(0.037)	(0.030)
40 to 49	-0.007	-0.001	0.035	-0.030	-0.005
	(0.026)	(0.028)	(0.034)	(0.034)	(0.027)
50 to 59	-0.025	-0.042	-0.029	-0.012	0.041
	(0.025)	(0.027)	(0.033)	(0.033)	(0.027)
> 60	0.004	-0.037	0.023	-0.020	-0.003
	(0.025)	(0.027)	(0.032)	(0.032)	(0.026)
N	3,018	3,018	2,249	2,249	2,249
marital status reference category: not married					
married	-0.013	-0.032*	0.012	-0.008	-0.004
	(0.016)	(0.017)	(0.021)	(0.021)	(0.017)
N	3,019	3,019	2,249	2,249	2,249
educational status reference category: lower education					
higher education	0.006	0.009	0.022	-0.032	0.009
	(0.016)	(0.017)	(0.021)	(0.021)	(0.017)
N	2,955	2,955	2,205	2,205	2,205
household size reference category: 1					
2	0.020	-0.006	-0.034	0.005	0.029
	(0.024)	(0.025)	(0.031)	(0.030)	(0.024)
3 or more	0.023	-0.011	-0.048	0.027	0.021
	(0.024)	(0.025)	(0.031)	(0.031)	(0.024)
N	3,014	3,014	2,249	2,249	2,249
ideology reference category: right-wing					
left-wing	0.009	-0.000	-0.007	0.003	0.004
	(0.019)	(0.020)	(0.024)	(0.024)	(0.020)
N	2,160	2,160	1,624	1,624	1,624
redistribution preferences reference category: against redistribution					
indifferent	-0.027	0.027	0.007	-0.008	0.001
	(0.024)	(0.026)	(0.032)	(0.032)	(0.025)
pro redistribution	-0.001	0.029	-0.002	-0.037	0.039*
	(0.021)	(0.023)	(0.028)	(0.028)	(0.022)
N	2,776	2,776	2,079	2,079	2,079

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented results are based on a linear regression of the form $Y_i = \beta X_i + \epsilon_i$, where Y_i is a dummy for the respective treatment variable (mobile, rich, foreign tax low, foreign tax medium, foreign tax high) and X_i is the respective covariate. Robust standard errors in parentheses. Each horizontal line indicates a new regression.

B Robustness Checks

Table 9: Tax choices and party preference: by role

	only rich players			only poor players		
	(1)	(2)	(3)	(4)	(5)	(6)
tax choice	low	medium	high	low	medium	high
Panel A *party preference* reference category: far-left (The Left)						
right-wing populist (AfD)	0.112*	-0.036	-0.076*	0.080**	-0.004	-0.076**
	(0.064)	(0.023)	(0.044)	(0.033)	(0.006)	(0.031)
liberal (free market) democrats (FDP)	0.159**	-0.051**	-0.108**	0.112***	-0.006	-0.106***
	(0.062)	(0.023)	(0.045)	(0.036)	(0.008)	(0.034)
christian democrats (CDU/CSU)	0.124**	-0.040**	-0.084**	0.081***	-0.004	-0.077***
	(0.054)	(0.020)	(0.038)	(0.026)	(0.006)	(0.025)
social democrats (SPD)	0.097*	-0.031*	-0.066*	0.106***	-0.005	-0.100***
	(0.053)	(0.018)	(0.038)	(0.027)	(0.008)	(0.026)
environmentalist (Green Party)	0.039	-0.012	-0.026	0.040	-0.002	-0.038
	(0.056)	(0.018)	(0.038)	(0.028)	(0.003)	(0.027)
controls	yes	yes	yes	yes	yes	yes
mean	0.170	0.724	0.105	0.149	0.712	0.140
N	740	740	740	1,560	1,560	1,560

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is the tax choice, P_i is a set of party dummies and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, > 60), and two dummies for household size (2 and 3 or more household members). Robust standard errors in parentheses. Each horizontal line indicates a new regression. Results for very small parties (NPD and Pirate Party) as well as non-voters are not presented.

Table 10: Migration and party preference

	migration pays		migration does not pay	
	(1) migration choice	(2) migration choice	(3) migration choice	(4) migration choice
Panel A *party preference* reference category: far-left (The Left)				
AFD	0.239**	0.237**	0.010	0.008
	(0.113)	(0.113)	(0.036)	(0.034)
FDP	0.181	0.181	0.010	0.014
	(0.127)	(0.121)	(0.051)	(0.047)
CDU/CSU	0.053	0.034	-0.049	-0.059**
	(0.085)	(0.083)	(0.031)	(0.030)
SPD	-0.007	-0.012	-0.009	-0.019
	(0.087)	(0.086)	(0.030)	(0.028)
The Greens	-0.062	-0.070	-0.038	-0.031
	(0.092)	(0.091)	(0.035)	(0.033)
controls	no	yes	no	yes
mean	0.639	0.640	0.089	0.086
N	443	439	1,231	1,208

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i migrates, P_i is a set of party dummies and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, > 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the rich for each possible tax rate whether they would migrate. Columns (1) and (2) show results when domestic taxes are high and foreign taxes are low or medium, while columns (3) and (4) cover all other combinations of domestic and foreign taxes. Results for very small parties (NPD and Pirate Party) as well as non-voters are not presented.

Table 11: Migration beliefs and party preference

	migration pays		migration does not pay	
	(1) migration belief	(2) migration belief	(3) migration belief	(4) migration belief
Panel A Panel A *party preference* reference category: far-left (The Left)				
AFD	0.027	0.026	0.012	0.014
	(0.053)	(0.053)	(0.034)	(0.034)
FDP	-0.028	-0.026	-0.060	-0.040
	(0.053)	(0.053)	(0.042)	(0.042)
CDU/CSU	-0.043	-0.043	-0.044	-0.035
	(0.039)	(0.039)	(0.028)	(0.028)
SPD	-0.012	-0.014	-0.002	-0.002
	(0.042)	(0.042)	(0.028)	(0.029)
The Greens	-0.052	-0.052	-0.001	0.019
	(0.041)	(0.042)	(0.030)	(0.030)
controls	no	yes	no	yes
mean	0.906	0.905	0.182	0.180
N	939	920	2,548	2,498

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i beliefs that the rich migrates, P_i is a set of party dummies and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the poor for each possible tax rate whether they believe the rich will migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate. Results for very small parties (NPD and Pirate Party) as well as non-voters are not presented.

Table 12: Deviation from the selfish equilibrium

deviation from selfish EQ	(1) tax choice	(2) tax choice	(3) tax belief	(4) tax belief
educational status reference category: lower education				
higher education	-0.0327*	-0.0282	-0.0356	-0.0219
	(0.0187)	(0.0217)	(0.0188)	(0.0219)
interruption reference category: did not interrupt the survey				
interrupt	0.0022	0.0058	0.0165	0.0208
	(0.0317)	(0.0345)	(0.0316)	(0.0343)
minutes spend on the survey	0.0001	0.0001	-0.0000	0.0000
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
controls	no	yes	no	yes
mean	0.592	0.596	0.415	0.412
N	2,754	2,299	2,750	2,296

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following logistic regression: $Y_i = \beta E_i + \gamma X_i + \epsilon_i$, where Y_i is either a dummy equaling one if the tax choice deviates from equilibrium or a dummy equaling one if the tax belief deviates from equilibrium, E_i includes a dummy for having a higher education, a dummy for interrupting the survey and the minutes spend on the survey and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Robust standard errors in parentheses. The mean time spend on the survey is 11 minutes.

Table 13: Tax choice and income

tax choice	low	low	medium	medium	high	high
Income reference category: $<$ 2000€						
2000€ - 4000€	-0.011	-0.005	0.002	0.001	0.009	0.005
	(0.013)	(0.014)	(0.002)	(0.002)	(0.010)	(0.012)
$>$ 4000€	0.015	0.034	-0.002	-0.005	-0.012	-0.029
	(0.024)	(0.026)	(0.004)	(0.004)	(0.021)	(0.022)
controls	no	yes	no	yes	no	yes
mean	0.156	0.155	0.718	0.719	0.126	0.127
N	2,331	2,285	2,331	2,285	2,331	2,285

Notes: * p<0.1, ** p<0.05, *** p<0.01 The presented coefficients are average marginal effects of the following logistic regression: $Y_i = \beta E_i + \gamma X_i + \epsilon_i$, where Y_i is the tax choice, E_i includes income dummies and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Robust standard errors in parentheses.

Table 14: Tax choices and ideology: by role (drop 10% slowest and fastest participants)

	only rich players			only poor players		
	(1)	(2)	(3)	(4)	(5)	(6)
tax choice	low	medium	high	low	medium	high
Panel A *ideology* reference category: right-wing						
left-wing	-0.066**	0.021*	0.045**	-0.019	-0.001	0.020
	(0.027)	(0.011)	(0.019)	(0.015)	(0.002)	(0.016)
controls	yes	yes	yes	yes	yes	yes
mean	0.166	0.731	0.104	0.131	0.729	0.139
N	550	550	550	1,134	1,134	1,134
Panel B *redistribution preference* reference category: against redistribution						
indifferent	-0.034	0.010	0.024	-0.034*	-0.002	0.035*
	(0.032)	(0.010)	(0.023)	(0.020)	(0.003)	(0.021)
pro redistribution	-0.088***	0.025**	0.063***	-0.066***	-0.003	0.069***
	(0.029)	(0.012)	(0.022)	(0.018)	(0.006)	(0.018)
controls	yes	yes	yes	yes	yes	yes
mean	0.163	0.730	0.108	0.135	0.724	0.141
N	706	706	706	1,447	1,447	1,447

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is the tax choice, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Robust standard errors in parentheses. Each horizontal line indicates a new regression. The 10% slowest and fastest participants are dropped from the sample.

Table 15: Tax choices, mobility and migration beliefs (drop 10% slowest and fastest participants)

tax choice	(1) low	(2) medium	(3) high
Panel A *mobility* reference category: immobile or foreign tax high			
foreign tax low or medium	0.072***	0.001	-0.073***
	(0.014)	(0.006)	(0.014)
mean	0.137	0.724	0.139
N	1,602	1,602	1,602
Panel B *migration belief* reference category: rich does not migrate if domestic tax is high			
rich migrates if domestic tax is high	0.117***	-0.017	-0.100***
	(0.027)	(0.011)	(0.023)
mean	0.148	0.730	0.123
N	1,109	1,109	1,109

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta T_i + \epsilon_i$, where Y_i is the tax choice and T_i is either a dummy equaling one if the foreign tax rate is low or medium or a dummy equaling one if i beliefs that the rich will migrate if the home tax rate is high. Robust standard errors in parentheses. The 10% slowest and fastest participants are dropped from the sample.

Table 16: Migration choices and beliefs (drop 10% slowest and fastest participants)

	(1) migration choice	(2) migration belief
migration incentives reference category: migration does not pay		
migration does pay	0.343***	0.479***
	(0.006)	(0.009)
mean	0.227	0.371
N	1,794	3,476

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following logistic regression: $Y_i = \beta T_i + \epsilon_i$, where Y_i is either a dummy equaling one if i migrates or a dummy equaling one if i beliefs that the rich will migrate and T_i is a dummy equaling one if migrations pays (high tax rate in the home country and low or medium tax rate in the foreign country). Robust standard errors in parentheses are clustered at the individual level. The 10% slowest and fastest participants are dropped from the sample.

Table 17: Migration and ideology (drop 10% slowest and fastest participants)

	migration pays		migration does not pay	
	(1) migration choice	(2) migration choice	(3) migration choice	(4) migration choice
Panel A *ideology* reference category: right-wing				
left-wing	-0.171***	-0.150***	0.005	0.002
	(0.051)	(0.053)	(0.020)	(0.020)
controls	no	yes	no	yes
mean	0.621	0.621	0.072	0.072
N	322	319	902	893
Panel B *redistribution preference* reference category: against redistribution				
indifferent	-0.036	-0.022	-0.001	-0.024
	(0.068)	(0.069)	(0.027)	(0.027)
pro redistribution	-0.118**	-0.108*	0.001	-0.018
	(0.059)	(0.060)	(0.024)	(0.023)
controls	no	yes	no	yes
mean	0.624	0.623	0.083	0.082
N	420	414	1,155	1,140

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i migrates, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the rich for each possible tax rate whether they would migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate. The 10% slowest and fastest participants are dropped from the sample.

Table 18: Migration beliefs and ideology (drop 10% slowest and fastest participants)

	migration pays		migration does not pay	
	(1) migration belief	(2) migration belief	(3) migration belief	(4) migration belief
Panel A *Ideology* reference category: right-wing				
left-wing	-0.021	-0.020	0.041**	0.040**
	(0.021)	(0.022)	(0.018)	(0.018)
controls	no	yes	no	yes
mean	0.915	0.915	0.168	0.166
N	681	670	1,843	1,813
Panel B *Redistribution preference* reference category: against redistribution				
indifferent	-0.004	0.003	0.043*	0.032
	(0.029)	(0.029)	(0.023)	(0.023)
pro redistribution	-0.003	-0.005	0.030	0.020
	(0.025)	(0.025)	(0.019)	(0.019)
controls	no	yes	no	yes
mean	0.907	0.907	0.174	0.172
N	875	858	2,356	2,313

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i beliefs that the rich will migrate, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the poor for each possible tax rate whether they believe the rich will migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate. The 10% slowest and fastest participants are dropped from the sample.

Table 19: Tax choices and ideology: by role (probit)

	only rich players			only poor players		
	(1)	(2)	(3)	(4)	(5)	(6)
tax choice	low	medium	high	low	medium	high
Panel A *ideology* reference category: right-wing						
left-wing	-0.065***	0.018**	0.047***	-0.022	0.001	0.021
	(0.024)	(0.008)	(0.017)	(0.014)	(0.002)	(0.014)
controls	yes	yes	yes	yes	yes	yes
mean	0.169	0.725	0.106	0.146	0.717	0.137
N	686	686	686	1,429	1,429	1,429
Panel B *redistribution preference* reference category: against redistribution						
indifferent	-0.062**	0.017*	0.045**	-0.025	0.001	0.024
	(0.030)	(0.009)	(0.022)	(0.019)	(0.002)	(0.018)
pro redistribution	-0.083***	0.022**	0.060***	-0.062***	0.002	0.060***
	(0.027)	(0.009)	(0.020)	(0.016)	(0.004)	(0.016)
controls	yes	yes	yes	yes	yes	yes
mean	0.170	0.723	0.107	0.147	0.712	0.140
N	887	887	887	1,825	1,825	1,825

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following probit logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is the tax choice, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Robust standard errors in parentheses. Each horizontal line indicates a new regression.

Table 20: Tax choices, mobility and migration beliefs (probit)

tax choice	(1) low	(2) medium	(3) high
Panel A *mobility* reference category: immobile or foreign tax high			
foreign tax low or medium	0.062***	-0.003	-0.058***
	(0.013)	(0.003)	(0.012)
mean	0.151	0.710	0.139
N	2,038	2,038	2,038
Panel B *migration belief* reference category: rich does not migrate if domestic tax is high			
rich migrates if domestic tax is high	0.094***	-0.015**	-0.079***
	(0.023)	(0.007)	(0.020)
mean	0.157	0.720	0.123
N	1,416	1,416	1,416

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered probit regression: $Y_i = \beta T_i + \epsilon_i$, where Y_i is the tax choice and T_i is either a dummy equaling one if the foreign tax rate is low or medium or a dummy equaling one if i beliefs that the rich will migrate if the home tax rate is high. Robust standard errors in parentheses.

Table 21: Migration choices and beliefs (probit)

	(1) migration choice	(2) migration belief
migration incentives reference category: migration does not pay		
migration does pay	0.368***	0.526***
	(0.009)	(0.006)
mean	0.238	0.378
N	2,175	4,442

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following probit regression: $Y_i = \beta T_i + \epsilon_i$, where Y_i is either a dummy equaling one if i migrates or a dummy equaling one if i beliefs that the rich will migrate and T_i is a dummy equaling one if migrations pays (high tax rate in the home country and low or medium tax rate in the foreign country). Robust standard errors in parentheses are clustered at the individual level.

Table 22: Migration and ideology (probit)

	migration pays		migration does not pay	
	(1) migration choice	(2) migration choice	(3) migration choice	(4) migration choice
Panel A *ideology* reference category: right-wing				
left-wing	-0.138***	-0.125***	0.012	0.013
	(0.046)	(0.048)	(0.018)	(0.018)
controls	no	yes	no	yes
mean	0.625	0.626	0.084	0.081
N	405	401	1,146	1,123
Panel B *redistribution preference* reference category: against redistribution				
indifferent	-0.062	-0.054	-0.012	-0.041*
	(0.063)	(0.062)	(0.025)	(0.024)
pro redistribution	-0.136**	-0.128**	-0.009	-0.037*
	(0.054)	(0.055)	(0.022)	(0.021)
controls	no	yes	no	yes
mean	0.629	0.629	0.095	0.093
N	536	529	1,477	1,448

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following ordered probit regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i migrates, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the rich for each possible tax rate whether they would migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate.

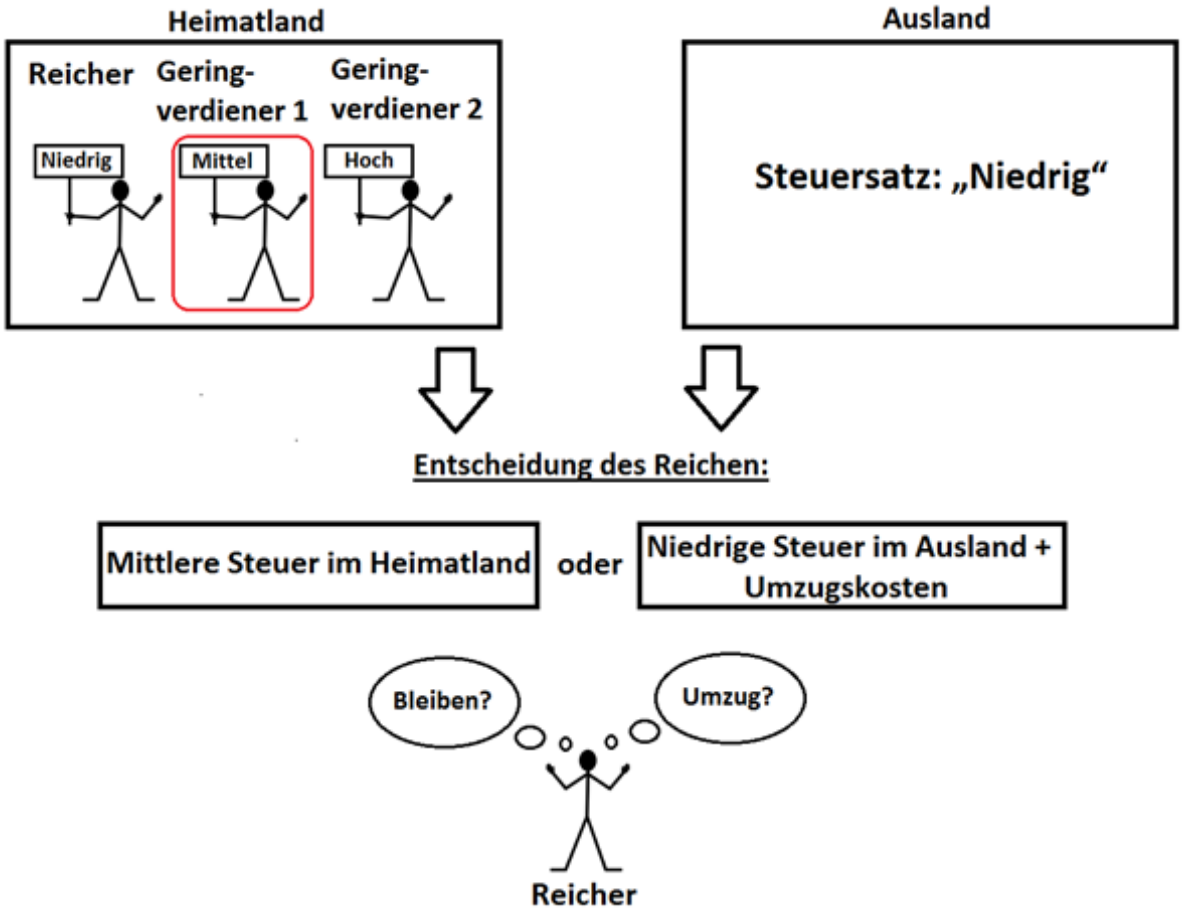
Table 23: Migration beliefs and ideology (probit)

	migration pays		migration does not pay	
	(1) migration belief	(2) migration belief	(3) migration belief	(4) migration belief
Panel A *Ideology* reference category: right-wing				
left-wing	0.003	0.000	0.025	0.022
	(0.020)	(0.020)	(0.016)	(0.016)
controls	no	yes	no	yes
mean	0.907	0.906	0.177	0.175
N	872	855	2,348	2,300
Panel B *Redistribution preference* reference category: against redistribution				
indifferent	-0.028	-0.025	0.057***	0.043**
	(0.026)	(0.026)	(0.021)	(0.021)
pro redistribution	-0.004	-0.004	0.033*	0.024
	(0.023)	(0.023)	(0.019)	(0.019)
controls	no	yes	no	yes
mean	0.902	0.901	0.183	0.182
N	1,113	1,086	2,990	2,921

Notes: * p<0.1, ** p<0.05, *** p<0.01. The presented coefficients are average marginal effects of the following probit logistic regression: $Y_i = \beta P_i + \gamma X_i + \epsilon_i$, where Y_i is a dummy equaling one when i beliefs that the rich will migrate, P_i is either a left-wing dummy or dummies for redistribution preferences and X_i represents control variables including dummies for gender, marital status, higher education, four age dummies (30-39, 40-49, 50-59, $>$ 60), and two dummies for household size (2 and 3 or more household members). Standard errors in parentheses are clustered at the individual level. Each horizontal line indicates a new regression. We asked the poor for each possible tax rate whether they believe the rich will migrate. Columns (1) and (2) show results when the domestic tax is high and the foreign tax is low or medium, while columns (3) and (4) cover all other combinations of the domestic and foreign tax rate.

C Questionnaire

Figure 4: Instruction example



The following survey differs from the usual format. You are participating in an experiment about taxation and redistribution in a fictitious scenario.

The experiment works as follows: You are assigned a role, make decisions and get rewards depending on your own decision as well as the decisions of other participants.

You do not need any prior knowledge to answer any of the questions. You get the usual payment of 4€ for participating in the GIP survey. On top of that you can win up to 80€ based on the decisions that you make. You cannot lose any money under any circumstances.

Imagine that you are living a small country (henceforth called home country) consisting of three people: One person with a high income and two people with low income.

Your role, poor or rich, will be assigned to you randomly. The rich has to pay a tax that is redistributed by the government to the two poor. The rich has an income of 90 and the poor both have an income of 20. The tax on the rich can take three values: low, the rich pays 5 to each of the poor (10 in total), medium, the rich pays 10 to each of the poor (20 in total) and high, the rich pays 20 to each of the poor (40 in total).

[Only for mobility treatment] There is a second foreign country. The rich can migrate to the foreign country. If she does so, she does not have to pay taxes in the home country. Instead, she has to pay taxes in the foreign country. The tax rate in the foreign country is (low/medium/high). Furthermore, she has to pay migration costs of 15.

We will ask you to vote on the tax rate in the home country. The tax rate is then determined by a randomly choosing the preferred tax rate of one of the three people in the home country.

[Only for mobility treatment] The rich can decide to migrate after observing the chosen tax rate.

You are in the role of the (poor/rich). We will form countries by randomly choosing groups of three participants (one rich, two poor) after all participants have finished the survey. You will get notice of the tax rate chosen in your country via email. Furthermore, we will randomly choose 20 countries, in which all participants will be paid according to their after-tax income.

What tax rate are voting for in your home country? (low/medium/high)

What tax rate do you think will the (rich/two poor) vote for? (low/medium/high)

[Only for mobility treatment and role of the poor] **Do you think the rich will migrate?**

The rich will migrate if the home tax rate is high. (yes/no)

The rich will migrate if the home tax rate is medium. (yes/no)

The rich will migrate if the home tax rate is low. (yes/no)

[Only for mobility treatment and role of the rich] **Will you migrate to the foreign country?**

I will migrate if the home tax rate is high. (yes/no)

I will migrate if the home tax rate is medium. (yes/no)

I will migrate if the home tax rate is low. (yes/no)

D Laboratory Experiment

D.1 Experimental Design

Prior to the survey experiment we ran a more conventional laboratory experiment, in which 108 individuals (mostly students) participated. The general setup parallels the one described above in Section 2. In particular, we kept the composition of a country with one rich and two poor individuals, the distribution of gross incomes, the set of tax rates, the cost of mobility, and the random-dictator voting mechanism. There were, however, also important differences conceptually and in the implementation.

At the conceptional level, there are a number of important differences. One concerns the nature of strategic interaction. In the survey experiment we paired subjects ex post to determine payoffs and used the strategy method to see how subjects make choices conditional on assumed behavior elsewhere. By contrast, in the lab experiment we paired subjects into countries during the experiment and thereby created full strategic interaction. This also allowed us to match countries into pairs where tax choices were endogenously chosen in both rather than being matched with a foreign country with exogenously given tax rate. As a result, countries could not only lose a rich player, but also attract one from another country. A further consequence is that tax payments of a rich player who migrates are not lost because they are paid in another country consisting of experimental participants. As a further difference, the laboratory setting with strategic interaction allowed us to study behavioural dynamics as we repeated rounds of tax and migration choices. After each round subjects are informed about tax rate and migration choices in both countries. Role assignments and the matching of participants into countries and countries into pairs remained fixed during the course of the experiment.

In addition, the assignment of roles differed. In the lab experiment the roles of rich and poor were based on the outcome of a simple, five-minute calculating exercise. The best performing third of subjects in adding four two-digit numbers were awarded the role of a rich person, who has much higher gross income. Finally, in the survey experiment we have a representative sample of the German adult population, while subjects in the lab experiment are mostly students.

In the lab experiment we considered two treatments. In the *ImmobMob* treatment subjects repeated the *no mobility* setup with no migration option for the rich 15 rounds, followed by another 15 rounds of the *mobility* setup with potential migration of the rich. In the second treatment *MobMob*, subjects interacted 30 rounds in the same setup with the migration option. In both treatments subjects were informed about the nature of the interaction in the second phase only after phase 1. At the beginning of the experiment, however, subjects were told that the experiment lasts for 30 periods and new instruc-

tions are provided after 15 rounds of play. The two treatments allow us to compare the role of mobility both across subject pools (periods 1-15 in the two treatments) as well as within the same subject pool (periods 16-30 versus periods 1-15).

Subjects were paid on the basis of one randomly chosen period of each phase. Four points in the experiment translated into one Euro payout. No show-up fee was paid. The experiment was conducted in the computerized mLab at the University of Mannheim, using z-Tree (Fischbacher, 2007) and ORSEE (Greiner, 2015).

D.2 Results

Table 24 displays the distribution of tax votes by treatment, phase, and type. A large majority of tax votes is in line with the equilibrium prediction assuming selfishness. Particularly noteworthy are the 92% of poor voting for high tax rates in the absence of mobility, as well as the almost fully selfish play by rich subjects who choose almost always low tax rates, although there are some votes for medium tax rates in the absence of mobility. Interestingly there are also some votes for high taxes among the poor when the rich are mobile. Note that phase-2 behavior is nearly identical across treatments.

Table 24: Tax choices in the lab

		Poor			Rich		
Treatment	Phase	Low	Medium	High	Low	Medium	High
ImmobMob	no mobility	2.4%	5.6%	92.0%	88.5%	11.1%	0.4%
	mobility	7.0%	73.0%	20.0%	97.8%	2.2%	0.0%
MobMob	mobility	5.4%	57.2%	37.4%	99.6%	0.4%	0.0%
	mobility	5.2%	69.3%	25.6%	97.4%	2.6%	0.0%

We test for treatment differences using linear and ordered probit regressions with standard errors clustered at individual level and linear regression with individual-level random effects. For poor subjects we find that they vote for higher taxes without mobility (as expected) and vote for lower taxes in the second than in the first phase of treatment 2 (*MobMob*). As for rich subjects, they vote for higher taxes without mobility (contrary to expectation), and there are no differences across phases, as well as no treatment difference in the second phase.

We also take a closer look at the role of party preference for the tax vote. We use linear regressions with individual-level random effects in which the omitted category are those without stated party preference. In the role of poor players, voters of the Green Party choose higher taxes ($p < 0.05$), while FDP ($p < 0.05$) and Left Party ($p < 0.1$) voters choose lower taxes. Among rich players Pirate-party supporters choose higher taxes ($p < 0.05$). There are no other significant differences. In general, these results are derived from a low number of observations and thus have little statistical power

(40 out of 108 subjects in the lab experiment did not answer the question about party preference). An exception are the results for supporters of the Green Party.

As substitute for party preference, we use survey questions on political attitudes among participants in the lab experiment. We ask to rate various statements such as (1) socialism/capitalism is a good idea, (2) the rich should show solidarity with the poor, and (3) society is largely fair. Essentially none of them has a significant impact once we control for dependence of observations. Only the attitude toward socialism and a dummy for the role of luck for economic outcomes are significant for the tax choice of the rich if we include treatment and other controls. However, many coefficients do not even have the expected sign. An example is that the belief that luck determines income is related to lower tax choices of the rich.

We finally turn to an analysis of the migration behavior by rich subjects. Rich players almost always switch when they should: When the tax rate in the own country is high, while low or medium in the other country, and thus the condition for profitable migration is met, the switch rates are between 82% and 100%. Rich players very rarely switch when they should not. Exceptions are the following: Migration rates are 19% from a medium tax country to a low tax country, and 12.5% between high tax countries. These choices could be attempts to try to force poor participants in one's own country to vote for lower taxes even if these migrations choices are costly in the short term. Overall, out of 131 migration choices made by rich players only 19 are not in line with the equilibrium prediction assuming selfishness.

More systematic analysis using probit regression with individual-level random effects shows that the probability to migrate increases in the tax rate in own country and decreases in the tax rate in other country, as one would expect. Supporters of the center-left Social Democrats (SPD) are more and supporters of center-right Christian Democrats are less likely ($p < 0.05$) to migrate than those without stated party preference.

D.3 Discussion

There are several potential reasons related to differences in design and implementation why we see fewer deviations from the selfish equilibrium predictions in the laboratory than in the survey experiment. First, it is (primarily) a student sample. However, there are also a number of students among the participants of our survey experiment and they do not show substantially different behavior than the non-student participants. Second, the game in the laboratory is repeated. However, play in the first period is not substantially different than in later periods. Third, roles are earned. Possibly, this may have created a feeling of entitlement for those players in the "rich" role, in line with earlier findings for dictator games by Cherry et al. (2002), whereas those in the "poor" role do not agree that the "rich" deserve their better position. This may be driven by a self-serving interpretation whether effort and skill or luck determine the outcome of the real-effort task. Fourth, participants in the laboratory experiment are experienced and

self-selected into taking part in the experiment and might therefore be more in a mode to earn money while the participants in the online survey might consider it more appropriate to answer what is "right". This is consistent with the finding of Snowberg and Yariv (2021) that generosity in student populations reflects a lower bound of generosity in the overall population.