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The redistributive preferences of the well-off

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Abstract

We argue that the structure of inequality (not only its level) has an impact on redistributive preferences. We test this argument on the well-off, as they stand in a pivotal position between households that have a reduced capacity to contribute to taxation due to limited labour income, and households with greater facility to achieve fiscal optimization thanks to capital income. Inequality is measured at different locations of the income distribution, nearby the income position of the well-off. Attitudes are measured through ISSP international survey, fielded from 1985 to 2006 across 19 countries. Consistent with Albert Hirschman's 'tunnel effect', our results show that support for redistribution amongst the well-off is conditioned by their prospect of mobility in both directions, proxied by the change in inequality next to them. Support amongst the well-off increases when their expected cost of downgrading rises, while it decreases when top incomes move further away in the income distribution.

Keywords: Preferences for redistribution; Inequality; Tunnel effect; Well-off
JEL classification: D31; D63; H23

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1 Introduction

Most advanced democracies have witnessed, over the last three decades, rising income inequality which mainly results from increases at the upper end of the income distribution (Atkinson, Piketty, and Saez, 2011; McCall and Percheski, 2010; Brandolini and Smeeding, 2008). The structure of inequality has changed, which might impact popular support for redistributive policies.

While there is a consensus in the literature that present and future income matter for people's attitudes towards redistributive policies (Alesina and La Ferrara, 2005), it has been shown that the level of inequalities, usually proxied by the Gini index, does not correlate well with the demand for redistribution (Alesina and Glaeser, 2004). The reason might be that the country inequality level is not informative enough of individual's income dynamics. Therefore, one has to find a better comparative reference group than the whole country. In this paper, we argue that demand for redistribution is actually conditioned by the level of inequalities people easily observe next to them, i.e. above and below them.

The paper focusses on the political preferences of the well-off that we consider to be of key interest for two reasons. First, they highly contribute to the tax-benefit system, as their income mainly comes from labour, as opposed to the Top 0.1% whose income comes from capital (Piketty, 2013). Second, their political influence might definitely prevail over their electoral weight (Gilens, 2012). Third, they are in a pivotal position between households that have a reduced capacity to contribute to taxation due to limited labour income, and households with greater facility to achieve fiscal optimization thanks to capital income. We statistically define the well-off as the fifth quintile in the income distribution (P80-P99). Therefore, individuals belonging to this group are clearly wealthier than the median income (to be found in the third quintile) but also distinct from the Top0.1% income who belong to the super rich.

We test the impact of the spreading in the allocation of income nearby individuals, using objective measures of income dispersion at several locations in the income distribution. Following Hirschman (1973), we consider that individuals predict their own future income based on the observation of the dynamics of others' income. Applying the 'tunnel effect' in this context, an increasing dispersion of income among the income group just below the well-off is considered as 'bad' news, as it is informative of the economic cost of moving downward in the social ladder (it increases the expected size of a negative income shock). This increasing cost of downgrading fosters the insurance motive of the well-off, as they now consider government redistributive policies likely to provide them with a safety net in case of adverse shock. Symmetrically, an increase in the income share captured by the super rich would be considered as ‘good’ news by the well-off, and lead them to predict an increase in their own future income. This can be viewed as an extension of the standard prospect of upward mobility argument, by which relatively deprived people might decrease their support for taxation/redistribution. Yet, we have in mind an alternative explanation: the fear of the well-off to become the ‘ultimate taxpayer’ might negatively impact their support for redistribution when the very rich move further away in the income distribution. Indeed, very high income (Top 0.1%) own a greater share of capital income, which is commonly both less taxed than labour income and less prone to raise when average taxation increases.

The paper is organised as follows. Section 2 presents the argument and the literature linking inequalities and preferences for redistribution. Section 3 presents the data and empirical strategy. Section 4 discusses the results. Section 5 displays robustness checks, while section 6 concludes.

2 The tunnel effect revisited

As we analyse objective income distribution nearby individuals, our argument relates to the impact of the structure of inequality on individuals’ attitudes towards redistribution. To our knowledge, there is almost no paper that clearly enters the structure of inequality in the analysis, while the literature linking relative income position and preferences for redistribution is large. This literature can be split in two branches.[1] The one highlighting the wealth effect of redistribution, and the one focussing on the insurance role of social policies.

The wealth argument highlights the redistributive motive for supporting social spending. It focuses exclusively on the winner/loser computation made by individuals while considering their support for redistribution. The seminal works by Romer (1975), Roberts (1977), or Meltzer and Richard (1981) use the relative income of agents to assess their final position as net contributors/net beneficiaries of the tax-benefit system. Standard political economy arguments à la Meltzer-Richard thus imply that opposition to taxation shall be high among the well-off. In a more dynamic view, Benabou and Ok (2001) assume that agents have prospects for upward mobility (POUM), which make a today’s net beneficiary of redistribution possibly opposing future redistribution because she might become net contributor tomorrow. The sole motive for supporting redistributive policies in this literature is thus the

[1] For a complete review of the literature on preferences for redistribution, see Alesina and Giuliano (2011). For the literature on attitudes to income inequality, see Clark and D’Ambrosio (2015).

(expected) individual cost for redistribution. Extending the winner/loser computation to social success, Corneo and Grüner (2000) highlight the impact of redistributive taxation on the relative social prestige of individuals. The authors show that the larger the gap between the median voter and the poor, the more conservative the former towards redistributive taxation, since smoothing inequalities would actually be harmful for her relative social success. Symmetrically, the larger the gap with the rich, the more the median voter would favour redistribution, since levelling inequalities would more rapidly decrease their distance to the rich. While the argument goes beyond a simple pecuniary motivation for redistribution, it neglects the insurance characteristic of redistributive policies.[2]

The insurance argument highlights the insurance motive behind preferences for redistributive policies. This literature, starting with Casamatta, Cremer, and Pestieau (2000), and Moene and Wallerstein (2001) considers the welfare state as also being useful for insuring against social risks (horizontal redistribution) that might face any income group, including high incomes. The result is that high income might be willing to support redistribution, even though their probability to be net contributors in the future is high, precisely because their probability of market income loss is non-zero. Guillaud (2013) tests the impact of subjective past mobility – different from mobility prospects – on individual support for redistribution, using ISSP data for a single year. Evidence shows that past mobility experience has a substantive effect on preferences, in the expected direction. People having experienced downward mobility in the past are more prone to support redistributive policies today, as they value social insurance.[3]

Very few papers reconcile these two branches of the literature, something we aim to do with the present paper. The closest empirical article to ours is probably the one of Ravallion and Lokshin (2000). The authors directly test the effect of prospects of mobility (in both directions) on demand for redistribution, using survey data on the Russian population for the year 1996. They analyse whether people support restricting the income of the rich, conditional on their subjective expectation of a rise or fall in their family welfare in the next twelve months. They conclude that the perceived dynamics of income does impact individual support for redistributive policies, especially among the well-off. In the same line, Rainer and

[2] In a recent extension of this argument of social competition, Lupu and Pontusson (2011) provide macro evidence that the skewness of inequality predicts the extent of redistribution within and across countries. The causal mechanism assumed by the authors is that a relatively small income distance between the middle and the poor as compared to the distance between the middle and the rich will push the middle-income voters to ally with the poor, for 'social affinity' reasons. Yet the authors do not provide micro evidence of the existence and direction of such a mechanism: the way the structure of inequality influences individual preferences still needs to be shown.

[3] In the present article, we do not measure past mobility of respondents for the whole sample, and therefore cannot control for this variable.

Siedler (2008), using probability expectation data, provide evidence that individuals with a sufficiently large risk of occupational downward mobility opt for more redistribution – and the symmetric effect is also shown. The effect of expected downward mobility (proxied by subjective probability of being demoted in their job within the next two years) on demand for redistribution is shown to be twice as large as the effect of expected upward mobility (proxied by the subjective prospect of pay raise within the next two years).

While these authors test the effect of subjective prospects of mobility on demand for redistribution in both directions, we actually test the impact of objective income dispersion nearby individuals on their attitudes towards redistributive policies. Thus introducing the idea of expectations based on the observation of others, our research strategy is consistent with the argument of Hirschman (1973), by which others' earnings provide information about my own future prospects. Given that expected income is computed by interacting the probability of moving the social ladder and the resulting income after mobility, one would need to distinguish which effect is at work. In his seminal paper presenting the 'tunnel effect', Hirschman (1973) simply considers that observing the mobility of others provides information on my own mobility, thus primarily impacting the subjective probability of an income change. Yet the observation of others also provides information on where one will be lending after an income change. While most papers, starting with Benabou and Ok (2001), highlight the probability of a change in income, we shed light on the expected size of the income change informed by inequality measures.

We expect an increased dispersion of income in the income group just below the well-off to raise their demand for redistribution. The larger the dispersion of income below one's income, the larger the step down if the bad state occurs, hence the higher her demand for insurance. We call it the 'cost of downgrading effect'. The intuition that an increased cost of downgrading might foster demand for insurance can be found in Chetty and Szeidl (2007).[4] Evidence shows that the fear of downgrading is higher, the richer you are, because you automatically face more possibilities of downgrading (Breen and Goldthorpe, 1997). We thus expect the cost of downgrading effect to be substantial for the well-off.

Symmetrically, one might expect that an increased concentration of income above the well-off would translate into expectations of higher future income, thus fostering their opposition to redistribution. This would be a slight extension of the so-called POUM effect: assuming a constant probability of upward mobility, the income gain of moving upward increases as the next income group gets further away in the income distribution.

[4]Chetty and Szeidl (2007) show that the marginal value of insurance depends on the difference in marginal utilities between the good and bad states (p. 20).

Yet, given the specific position of the well-off in the income distribution, another mechanism might be in place. Recent papers provide evidence that top incomes are less easily taxed than other social groups. This can be explained by the fact that capital is commonly less taxed than labour, or be viewed as a consequence of tax optimization practices to be found among the very rich (Slemrod, Blumenthal, and Christian, 2001), or tax avoidance as witnessed by Zucman (2014). Piketty and Saez (2007) indeed show that the tax rate of the Top 0.1% income is not correlated to the general level of taxation: when the general tax rate increases, the tax rate for top incomes is not necessarily raised. Actually, the expansion of the welfare state since the 1950s has come along with decreased marginal tax rates on top income (Piketty, 2013). Therefore, a higher income concentration at the very top of the distribution might well be viewed as a threat of increased tax burden for the well-off, who would accurately consider themselves as taxpayers in last resort. We call this alternative mechanism the 'ultimate taxpayer effect'.[5]

Some evidence shows that people value upward mobility less than they fear downward mobility (Rainer and Siedler, 2008). It is commonly assumed that "losses loom larger than gains" (Kahneman and Tversky, 1979). In the financial literature, downside risk aversion states that investors in the financial market care differently about downside losses than about upside gains (Menezes, Geiss, and Tressler, 1980). Empirical evidence of this mechanism operating in the financial sector has also been provided (Ang, Chen, and Xing, 2006). We thus expect the cost of downgrading effect to be more sizeable than the POUM or ultimate taxpayer effect.

3 Data and empirical strategy

3.1 Data

We match data on top income dispersion (WID- The World Wealth and Income Database) with LIS data on household income (LIS- Luxembourg Income Study), and micro survey data on preferences for redistribution (ISSP data, several modules) for a maximum of 19 countries over the time span 1985-2006.

We compute two indexes gathering information on the level of inequality immediately below and above our category of interest, i.e. people located between the 80th and the 99th

[5] To be clear, the evidence provided here does not allow us to distinguish between both explanations: POUM versus ultimate taxpayer hypotheses. To this aim, further data on the actual progressivity of the tax system would be needed.

percentile of income distribution. To measure income inequality just below the well-off, we compute a P80/P70 index indicating the spread of disposable income at the upper half of the distribution (LIS data). To measure inequality just above the well-off, we compute a S0.1/S1 index, which corresponds to the income share of the Top 0.1% relative to the income share of the Top 1% (WID data).[6]

Doing so, we directly test the impact of inequality structure on individual support for redistribution. As shown in Figure 1, those measures are two distinct dimensions of inequalities. Looking at countries with similar level of P80/P70 inequality, we notice different levels of S0.1/S1 income concentration: e.g. Netherlands-Australia-Germany. Similarly, countries with comparable levels of top income concentration have different levels of upper-half inequality: e.g. France-Sweden-Italy. As usually noted, the USA clearly stands as an outlier, with extreme values in both dimensions.

[Place Figure 1 here]

To proxy the individual preferences for redistribution, we use ISSP repeated cross-sectional survey data (modules "Role of Government I-IV" and "Religion I-II"). The support for redistribution is assessed by the following question: "On the whole, do you think it should or should not be the government's responsibility to reduce income differences between the rich and the poor?". Answers are measured on a 4 point agree-disagree scale. We group the categories to create a binary variable (agree and strongly agree are coded 1).

Our sample includes 1,000 to 2,000 respondents per country-year, across 19 countries in the largest sample (Australia, Canada, Czech Republic, Denmark, France, Germany, Hungary, Ireland, Israel, Italy, Japan, New Zealand, Norway, Poland, Spain, Sweden, Switzerland, United Kingdom, United States), and 10 countries (Australia, France, Germany, Italy, Japan, Norway, Spain, Sweden, Switzerland, United States) in the more restricted sample, over 6 years (1985, 1990, 1991, 1996, 1998, 2006).

ISSP recovers individuals' earnings as well as post-tax family income. We use the latter to compute income quintiles at the country-year level.[7] This makes data comparable and focusses the analysis on the relative income of individuals. We consider the fifth quintile as being the well-off, meaning that individuals belonging this quintile are assumed to range between P80 and P99. As a matter of fact, very rich people are under-represented in survey

[6] Income share's computation is based on gross income data, and excludes capital gains (Piketty and Saez, 2003). Even if we would have used disposable income shares if available, we do not see the fact that income shares are reported gross as a problem, since it remains informative of the stretching of the income distribution at the very top.

[7] Family income is coded specifically to each country-year, in national currency.

data due to top coding and sample bias.[8]

Figure 2 shows the high dispersion in preferences for redistribution between income quintiles, as well as across countries. Even though the fifth quintile is systematically less supportive of redistribution than the third quintile, the attitudes of the median do not predict the attitudes of the well-off (nor the distance between Q5 and other quintiles, not shown here).

[Place Figure 2 here]

3.2 Econometric strategy

We run binary logit regressions of individual support for redistribution with pooled data. We first look at the interaction between the P80-P70 income ratio (P80/P70 index) and the income quintiles (Model 1). When inequalities below the well-off increase (higher P80/P70 index), we expect the preference of the fifth quintile (the well-off) to converge towards the preference of the third quintile (the median income).

The equation to be estimated can be defined as follows:

(Model 1)

$$\begin{aligned} Y_i^* &= \alpha + \beta_1 Q_i + \gamma_1 P80P70 + \gamma_2 Q_i * P80P70 \\ &+ \eta_1 controls_i + \eta_2 country + \eta_3 year + \epsilon_i \end{aligned}$$

where Y_i^* is the latent variable, i.e. the intensity of preferences for redistribution. The observed variable, Y_i, is equal to 1 for individual i if $Y_i^* > 0$ and she therefore agrees with the statement that the government should reduce income differences between the rich and the poor (survey question answered by 'agree' or 'strongly agree'), and 0 otherwise. The vector Q_i defines the income quintile to which each individual belongs; $P80P70$ is a vector of P80/P70 indexes defined at the country-year level; and $Q_i * P80P70$ is a vector of interaction terms between individual income and inequalities below the well-off. The vectors α, β_1, γ_1, γ_2, δ_1, δ_2, η_1, η_2, η_3 and ϵ_i are parameters to be estimated.

Next, we are interested in the impact of an increasing distance of the very rich (Top

[8] ISSP and ESS surveys are often opposed in the literature. We chose ISSP surveys for two reasons. First, it covers a longer time period than ESS, and includes non-European countries. This makes our regressions more precise. Second, the non-response rate for income data is much lower in ISSP than in ESS surveys (Micklewright and Schnepf, 2010). This might reduce the selection bias inherent to survey data.

0.1%) relative to top income (Top 1%) – the S0.1/S1 index – on the preference of the well-off. To measure it, we interact the S0.1/S1 index with income quintiles (Model 2). We expect the well-off to be negatively affected by an increase in inequalities just above them: their preference diverges from the one of the median income.

(Model 2)

$$
\begin{aligned}
Y_i^* = \alpha &+ \beta_1 Q_i + \gamma_1 P80P70 + \gamma_2 Q_i * P80P70 \\
&+ \delta_1 S01S1 + \delta_2 Q_i * S01S1 \\
&+ \eta_1 controls_i + \eta_2 country + \eta_3 year + \epsilon_i
\end{aligned}
$$

where $S01S1$ is a vector of S0.1/S1 indexes measured at the country-year level; and $Q_i * S01S1$ is a vector of interaction terms between individual income and inequalities above the well-off. The vectors δ_1 and δ_2 are two additional parameters to be estimated.

All regressions include country and year fixed effects, such that the previous level of inequality and its trend is controlled for (as noted, inequality has been on the rise over the period under scrutiny). Standard individual controls are included: education level (highest degree achieved), work status (dummy for unemployed), marital status (dummy for single), age (linear and squared terms), and gender (dummy for female). The number of individuals in the household is also controlled for.

Because of the heterogeneous sample size across countries, data are weighed by the inverse of the number of observations available for each country-year.[9] This sample weights imply robust standard errors that treat heteroskedasticity. Finally, since we run interaction terms we compute marginal effects. To ease this computation, we essentially focus on binary logit regressions.[10]

4 Results

Table 1, Figure 3 and Figure 4 present our results, which highlight two key determinants of the preferences of the well-off.

The cost of downgrading effect, applied to the well-off (P80-P99), means that the spread of incomes located immediately below them (within P80-P70) raises their expected cost

[9]For a similar correction, see Bertola and Koeniger (2007) for instance.
[10]Results are left unchanged if we run ordered logit (not shown here).

of downward mobility. Their support for redistributive policies might thus increase, to cover this income risk. Our first key variable of interest is thus the interaction between the P80/P70 income ratio and income quintiles (Table 1: Model 0 without controls and Model 1 with the full set of controls). The positive and significant coefficient of the interaction term $Q5 * P80P70$ (Model 1) means that a higher dispersion in the upper half of the income distribution (high P80/P70 index) increases the demand for redistribution of the well-off. This presumably reflects the risk of downgrading: Q5 individuals who consider the size of the step turned out to be greater ask for more social insurance. The wealth effect is still dominant (the higher individuals' income, the lower their support for redistribution), but the insurance mechanism due to an increased cost of downgrading is at play for the well-off. Therefore, their preference converges to the one of the median income.

[Place Table 1 here]

Figure 3 presents the marginal effects based on Model 1. On average, one standard deviation of P80/P70 increases the probability of supporting redistribution by 1.8 percentage points (which is not significant).[11] This increase is only 0.7 point for the Q3, and significantly rises to 4.3 points for the Q5. Appendix A presents the marginal effects in level. Figure A1 shows that the preference of the Q3 individuals is left unaffected by an increase in P80-P70 index, while the predicted probability of supporting redistribution raises for the Q5 individuals. The convergence of the preference of the well-off to the one of the median income is thus due to a significant increase in the demand for redistribution of the well-off.

[Place Figure 3 here]

Next, we are interested in knowing whether a higher concentration of income at the very top (a higher Top 0.1% income share) does affect the support for redistribution of the well-off. We focus here on the interaction term between the relative share of income owned by the Top 0.1% and income quintiles (Table 1, Model 2), after controlling for the impact of the P80/P70 dispersion.

The upper middle class (i.e. the well-off) often appears in the media and in the political discourse as the primary taxpayer for the redistribution system. The ultimate taxpayer effect, applied to the well-off, means that the concentration of income at the top of the distribution (Top 0.1%) is informative of the tax burden that will ultimately rely on the well-off. We argue that an increase in the concentration of income at the top might reinforce the primary taxpayer perception of the well-off, because of the (exogenously) constraint taxation of top-incomes. Piketty and Saez (2007) show that the tax rate of the Top 0.1% income is not

[11] In the sample used for Model 1, P80/P70 index has the following range: min 1.12, max 1.25, average 1.17, standard deviation 0.03.

correlated to the general level of taxation: when the general tax rate increases, the tax rate for top incomes is not necessarily raised. The more distant the top incomes, the more visible the ultimate taxpayer position of the well-off, meaning that any increase in redistribution will be passed on them. Their support for redistribution might thus decrease, to limit their future contribution.

Our findings show that the share of income received by the Top 0.1% positively influences the support for redistribution of the entire population, except the well-off. As shown in Table 1, Model 2, the coefficient for $S0.1/S1$ is positive and slightly significant, while the interaction term $Q5 * S0.1S1$ is negative and significant at the 5% level.[12] Therefore, the preference of the the Q5 individuals diverges from the preference of median income individuals when they observe a distancing of the Top 0.1%. Indeed, households can expect a redistributive gain only to the extent that they are able to tax incomes above them. The well-off are aware that any tax increase will probably be passed on to themselves. This might be especially true at a time when capital tax is constrained by international tax competition and mechanisms of tax avoidance are publicly well-known.

[Place Figure 4 here]

Figure 4 presents the marginal effects based on Model 2.[13] An increase in the ratio S0.1/S1 by one standard deviation significantly raises the average probability of support for redistribution by 1.2 percentage points.[14] This increase is 1.6 points for the Q3, but only 0.01 point for the Q5, the difference between Q3 and Q5 being significant.

5 Robustness checks

Our analysis uses pooled regressions with time-series cross-section data, due to the lack of longitudinal or panel data. Pooled regressions assume the homogeneity of coefficients, which is a strong hypothesis that needs to be tested. We run robustness checks to partially relax this assumption. We present here the sensitivity of our results to the homogeneity assumption.

[12]See also Figure A2 in the Appendix, for the predicted probabilities in level.

[13]In the sample used for Model 2, one standard deviation of P80/P70 increases the probability of support by 5.2 points on average. P80/P70 index has the following range: min 1.13, max 1.21, average 1.17, standard deviation 0.03. For the central quintile (Q3), this increase is 3.2 points. By comparison, the same deviation increases the probability of supporting redistribution among Q5 individuals by 9.6 points, which is a significant impact.

[14]In the sample used for Model 2, S0.1/S1 index has the following range: min 0.19, max 0.44, average 0.32, standard deviation 0.06.

We run a Jackknife estimator for resampling, in order to correct for the potential bias induced by our unbalanced data. The Jackknife method estimates the coefficients after excluding clustered (country-years) observations one by one. To run it, we first need to withdraw singleton observations (i.e. single sampling unit) from our sample. This results in reducing our sample by 9% for Model 1, and 11% for Model 2. Results are shown in Appendix B.

The first column of Tables B1 and B2 reproduces the main models with the reduced sample (excluding singletons). Results of the main specifications are left unchanged. The second columns of each Table shows the results of the Jackknife estimator. Results are robust to the exclusion of country-years. The significance of coefficients is sometimes slightly affected by a change in the sample, but both the cost of downgrading effect and the ultimate taxpayer effect remain significant.

As a robustness check that stretches our econometric specification to the utmost, we run the regressions excluding the USA, which stands as an outlier in terms of inequality level in both dimensions. Results are even stronger for Model 1, and remain essentially unchanged for Model 2 (although they turn out to be slightly non-significant for this model). (See Appendix C.)

Finally, one may wonder about reverse causality. It is likely that individual support for redistribution transforms into electoral behaviour and eventually impacts redistributive policies, and therefore inequalities. As already stressed by Gilens (2012), the well-off presumably have a strong political influence in developed economies. One may suspect their relatively lower support for redistribution to translate into lower social spending and/or lower taxation of income, and thus into higher inequalities. However, the effect of (reduced) redistribution on our two measures of inequalities is not clear. Decreasing social spending may increase inequalities below the well-off, but let unchanged the income concentration of the very rich (moreover, the S0.1/S1 index is computed over pre-tax income). Decreasing taxation of income may affect the relative income of the well-off and income disparities next to them, but the direction of the effects depends on the design and progressivity of the tax-benefit system. In other words, the use of inequality measures at different points of the income distribution (instead of using a global Gini index for instance) prevents the analysis from being biased by such endogeneity issues.[15]

[15]Furthermore, we expect that solving for endogeneity issues would actually reinforce the positive relationship we find between inequalities below the well-off and support of the well-off towards redistribution. If one assumes well-designed redistributive policies aimed at reducing inequalities just below the well-off (the P80/P70 income ratio), this would end up with a reduced (not increased!) support for redistribution stemming from the well-off, since the cost of downgrading would actually decrease.

6 Discussion

Considering preferences for redistribution, our analysis focusses on the specific response of the well-off to an increase in inequality. An innovation of the paper is to distinguish several dimensions of inequality, therefore exploring differentiated impacts of income dispersion on preferences, depending on where this dispersion is located.

Our findings show that a higher dispersion of earnings in the upper-half of the fourth quintile (P80/P70 index) increases the support for redistribution of the fifth quintile (the well-off), while a higher compression of top incomes (S0.1/S1 index) decreases it.

We assume that the first mechanism is related to insurance reasons which we call the 'cost of downgrading effect'. Indeed, the higher distance with the income group below the well-off is indicative of the increased cost of downgrading they would have to face providing they move down the social ladder. Consequently, they ask for more social insurance.

The second mechanism might be related to the fear of the well-off to be the 'ultimate taxpayer', due to the renowned incapacity of the state to tax the super-rich. An alternative explanation in the literature on social mobility refers to the 'prospect of upward mobility', by which individuals would oppose redistribution if they expect to raise their income in the near future. Discriminating between both explanations would demand more data on the effective taxation of the super rich as well as on ascendant mobility, which is far beyond the scope of this paper.

In any case, we consider the ultimate taxpayer effect to be a second order effect, in the sense that one cannot assume that inequality at the very top of the income distribution entirely leads individuals' attitudes towards redistribution. More plausibly, a high concentration of income at the top impacts preferences additionally, once first order effects have been taken into account. In the same manner, Benabou and Ok (2001) clearly state that "the POUM effect can have a significant impact on the political equilibrium only if agents have relatively low degrees of risk aversion" (p. 452). A moderate or high degree of risk aversion thus leads the demand for social insurance (linked to the risks of downward mobility) to dominate the fear of future taxation (linked to the prospect of upward mobility). If one adds tax progressivity into the equation, then the magnitude of social mobility (i.e. the concavity of the transition function) must be even higher to let the POUM mechanism be effective. Therefore, it is not surprising that the estimated effect is both low and not very significant.

Finally, we call for further research in the formation of preferences for social spending.

Extending the argument of the paper, we assume the structure of inequality, not only its level, acts on the redistributive and insurance motives for social spending. This might be tested on various income groups, while the present paper has only focussed on the well-off. We thus believe there is a need of a systematic exploration of the inequality structure, in order to assess the response of other quintiles of income in terms of their support for redistribution.

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Figures

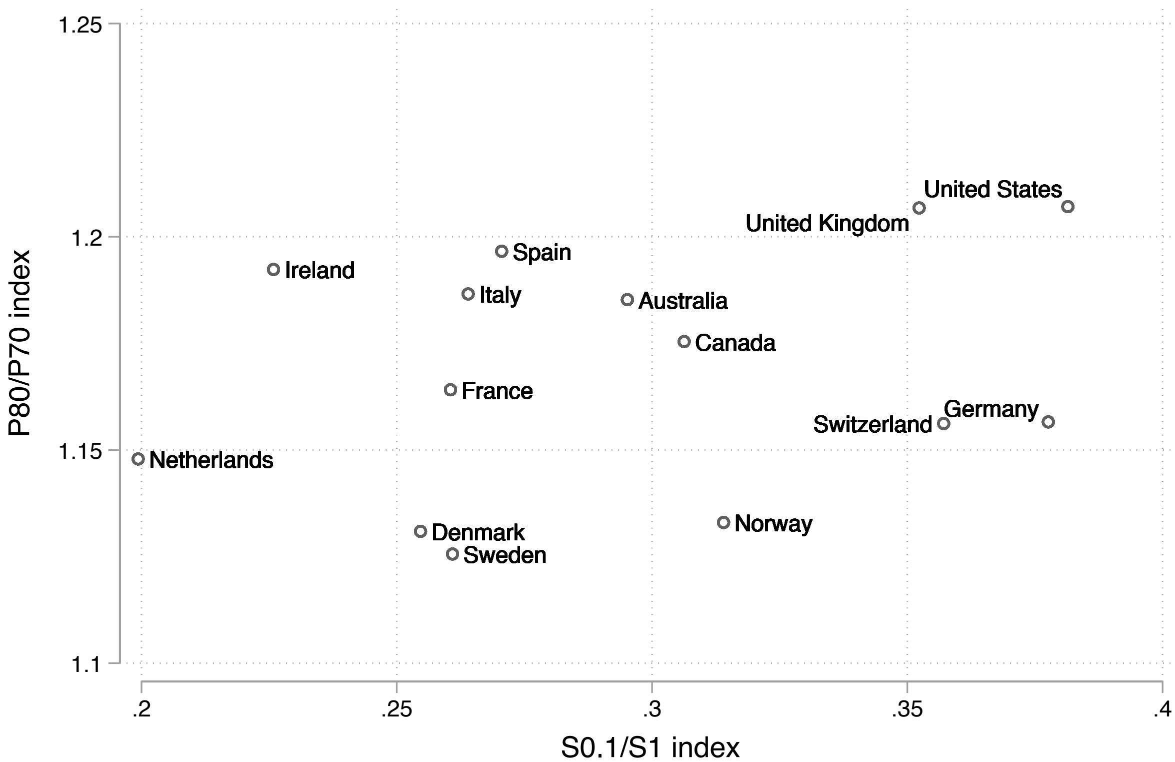

Figure 1: Two dimensions of inequalities.

Note: The dots represent the country values over the two dimensions of inequalities. The P80/P70 index is the disposable income ratio of the eightieth percentile to the seventieth percentile, averaged by country over the period 1980-2013. The S0.1/S1 index is the ratio of Top 0.1% income share over Top 1% income share, averaged by country over the period 1980-2012.

Source: author's computations based on LIS and WID data

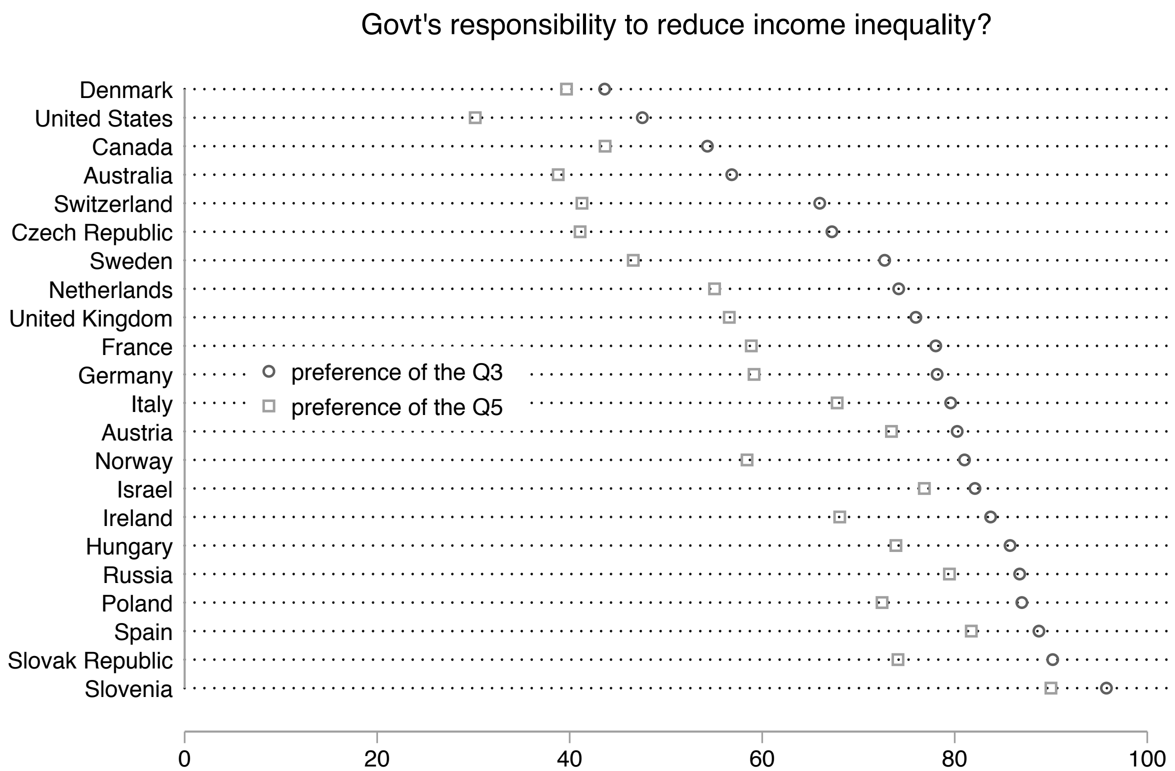

Figure 2: Distribution of support for redistribution by income quintile.

Note: Each dot represents the share of respondents supporting redistribution (agree or strongly agree with redistribution), by income quintile for each country over the period 1985-2006 (shares are averaged over several waves of the survey, except for Denmark and Slovak Republic where data are from 1998).

Source: ISSP data

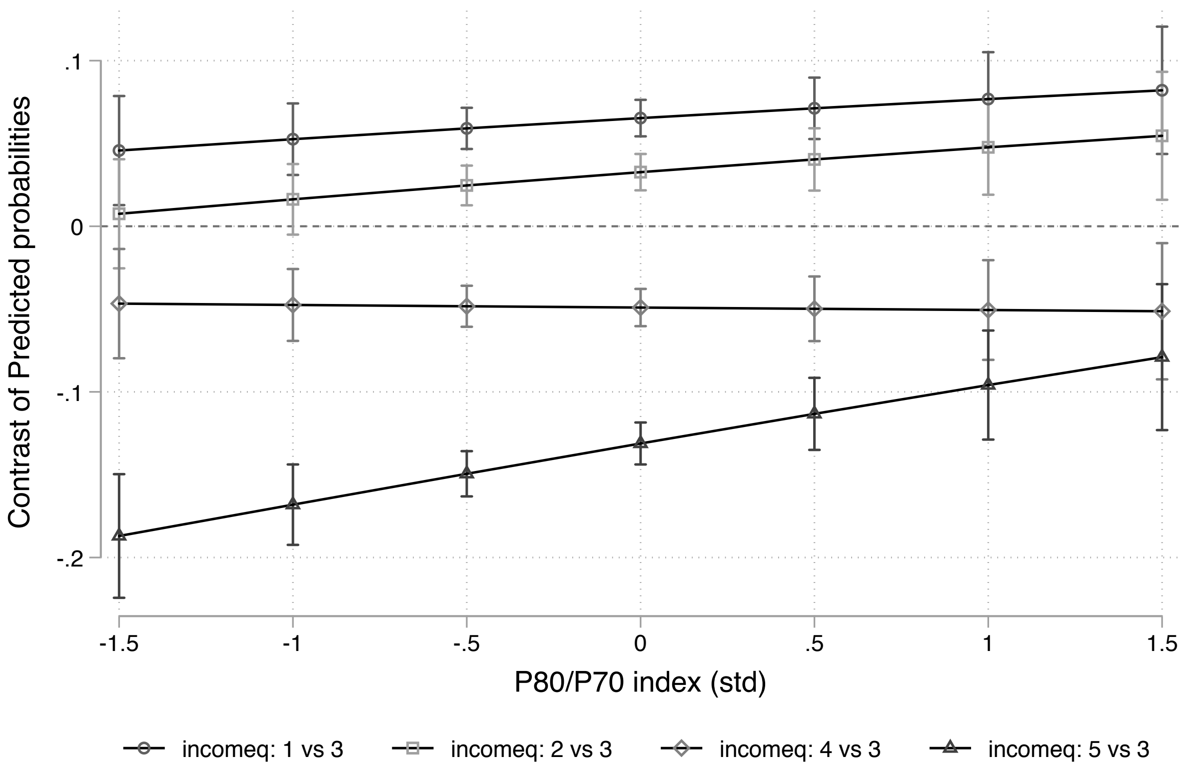

Figure 3: Impact of raising the expected cost of downgrading: Q5 converges towards Q3.

Note: Based on Model 1. The graph presents the contrast of predicted probability for each income quintile relative to the Q3, for different levels of inequality (P80/P70 standardized). The computed effect is the average effect of predicted probability for each single individual in the sample. The zero line represents the average effect of inequality (as of P80/70 dispersion) on the preferences of the Q3. All other variables taken at their observed value.

Source: author's computations based on LIS and ISSP data

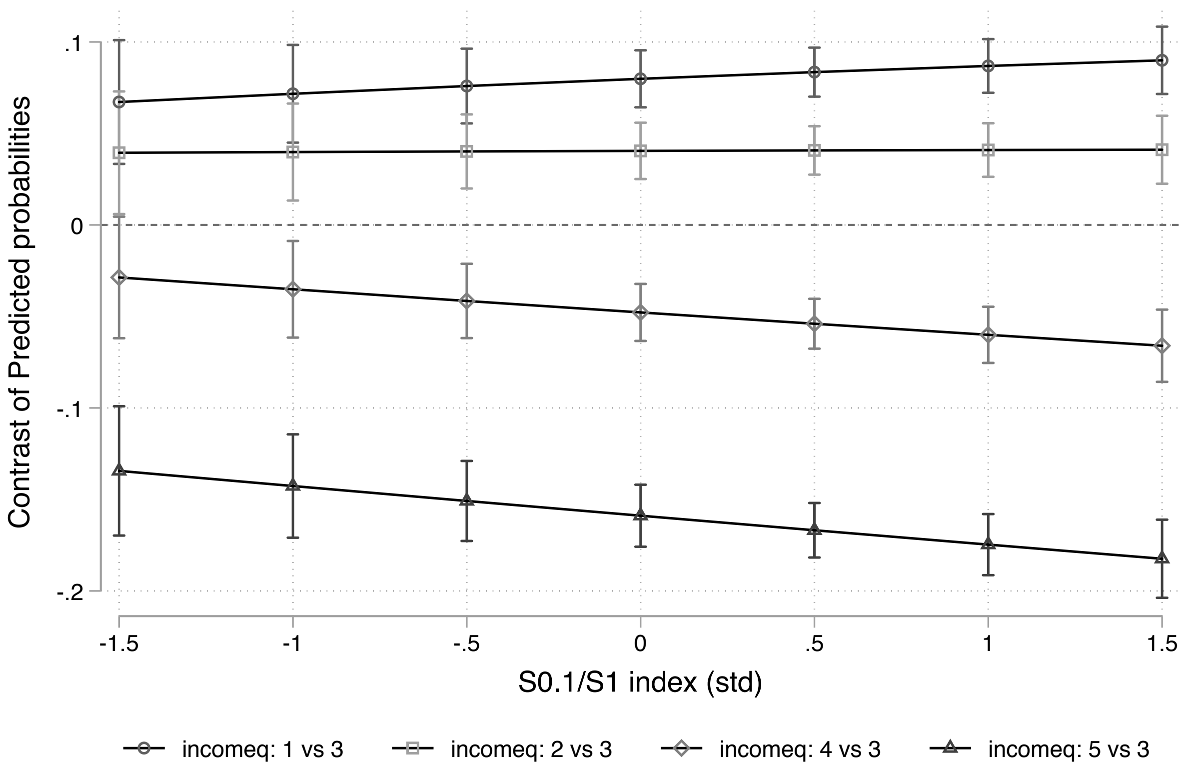

Figure 4: Impact of top income distancing the Q5: the ultimate taxpayer effect.

Note: Based on Model 2. The graph presents the contrast of predicted probability for each income quintile relative to the Q3, for different levels of inequality (different levels of S0.1/S1). The computed effect is the average effect of predicted probability for each single individual in the sample. The zero line represents the average effect of inequality (as of S0.1/S1 dispersion) on the preferences of the Q3. All other variables taken at their observed value.

Source: author's computations based on LIS, WID and ISSP data

Tables

Table 1: The redistributive preferences of the well-off.

	Model 0	Model 1	Model 2
Reference category: income Q3			
income Q1	0.615***	0.428***	0.469***
	(0.036)	(0.037)	(0.055)
income Q2	0.255***	0.203***	0.246***
	(0.034)	(0.035)	(0.054)
income Q4	-0.337***	-0.276***	-0.222***
	(0.032)	(0.032)	(0.050)
income Q5	-0.810***	-0.690***	-0.683***
	(0.033)	(0.034)	(0.052)
P80/P70	0.006	0.039	0.169
	(0.092)	(0.093)	(0.184)
*Reference category: Q3 * P80P70*			
Q1 * P80P70	0.166**	0.097	0.075
	(0.074)	(0.075)	(0.100)
Q2 * P80P70	0.109	0.106	0.108
	(0.072)	(0.073)	(0.098)
Q4 * P80P70	-0.029	-0.012	0.072
	(0.067)	(0.068)	(0.092)
Q5 * P80P70	0.163**	0.166**	0.263***
	(0.069)	(0.070)	(0.093)
S0.1/S1			0.084*
			(0.048)
*Reference category: Q3 * S0.1S1*			
Q1 * S0.1S1			0.063
			(0.041)
Q2 * S0.1S1			0.009
			(0.040)
Q4 * S0.1S1			-0.066*
			(0.038)
Q5 * S0.1S1			-0.084**
			(0.038)
Individual controls	No	Yes	Yes
Number of Obs	74 146	72 993	46 440
Pseudo R2	0.101	0.111	0.105

Note: Binary logit regressions of support for redistribution. Country and year fixed effects included. Control for the household size included. * $p<0.10$, ** $p<0.05$, *** $p<0.01$

Source: author's computations based on LIS, WID and ISSP data

A Results in level

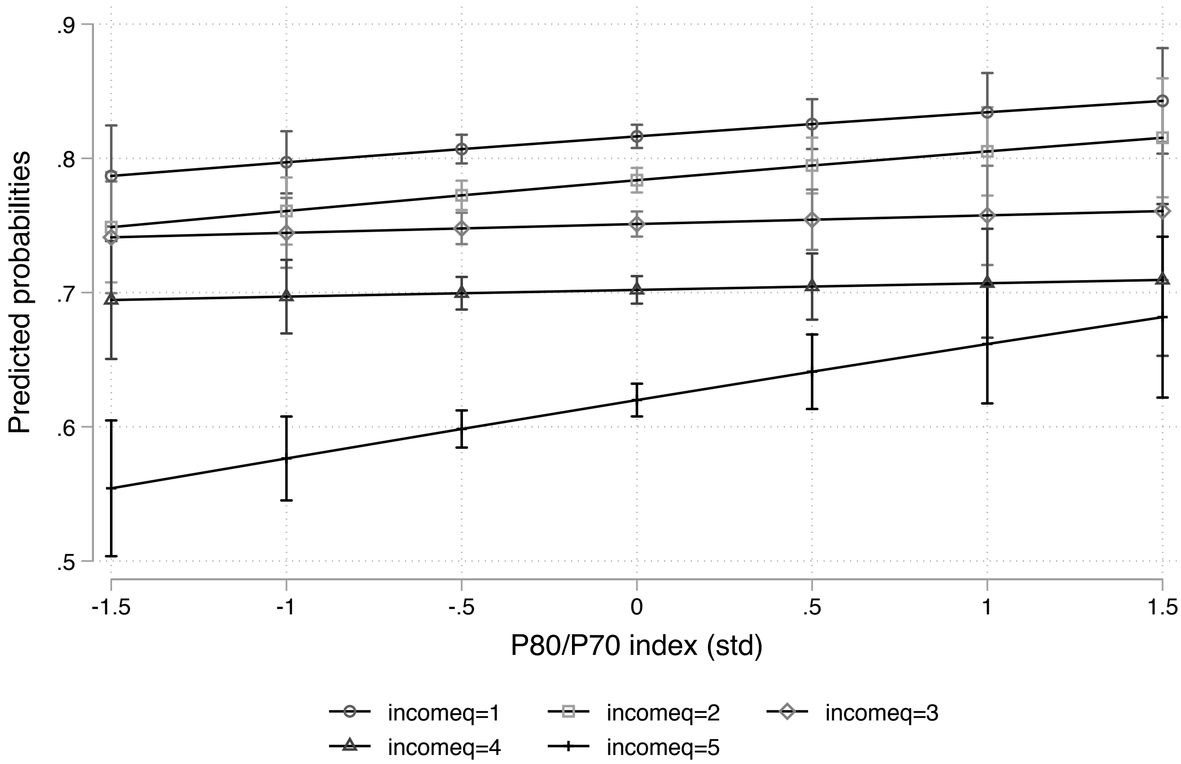

Figure A1: Raising the expected cost of downgrading: support by quantiles, in level.

Note: Based on Model 1. The graph presents the predicted probability to support redistribution, for each income quintile, at different levels of inequality (P80/P70 standardized). The computed effect is the average effect of predicted probability for each single individual in the sample. All other variables taken at their observed value.

Source: author's computations based on LIS and ISSP data

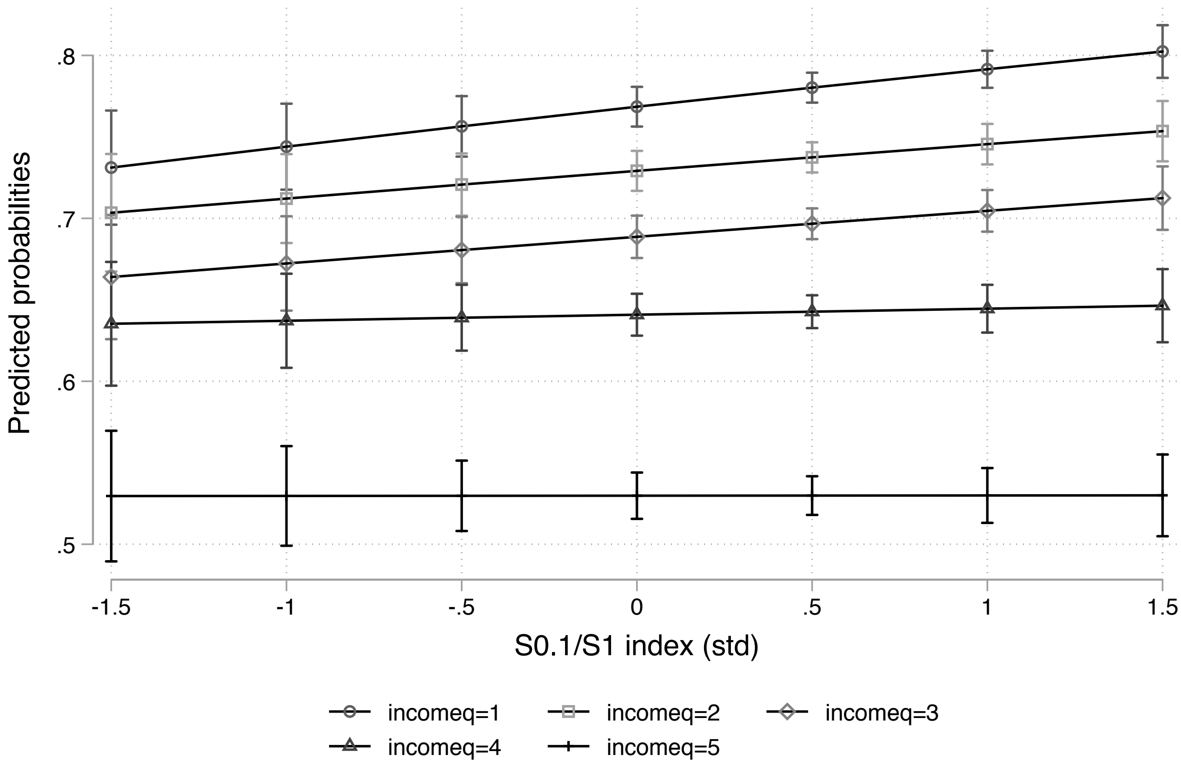

Figure A2: Top income distancing the Q5: support by quantiles, in level.

Note: Based on Model 2. The graph presents the predicted probability to support redistribution, for each income quintile, at different levels of inequality (different levels of S0.1/S1). The computed effect is the average effect of predicted probability for each single individual in the sample. All other variables taken at their observed value.

Source: author's computations based on LIS, WID and ISSP data

B Robustness check: Jackknife regressions

Table B1: Robustness check: jackknife (Model 1).

	Model 1 (no singleton)	Model 1 (jackknife)
Reference category: income Q3		
income Q1	0.434***	0.434***
	(0.039)	(0.045)
income Q2	0.207***	0.207***
	(0.037)	(0.040)
income Q4	-0.280***	-0.280***
	(0.034)	(0.034)
income Q5	-0.681***	-0.681***
	(0.036)	(0.040)
P80/P70 index	0.021	0.021
	(0.097)	(0.354)
*Reference category: income Q3 * P80/P70*		
income Q1 * P80/P70	0.099	0.099
	(0.085)	(0.087)
income Q2 * P80/P70	0.141*	0.141
	(0.083)	(0.090)
income Q4 * P80/P70	-0.013	-0.013
	(0.078)	(0.102)
income Q5 * P80/P70	0.211***	0.211*
	(0.079)	(0.106)
Individual controls	Yes	Yes
Number of Obs	66268	66268
Pseudo R2	0.108	0.108

Note: Binary logit regressions of support for redistribution. Robust standard errors. Singleton excluded from the sample (year 1985, Denmark, Netherlands, Russia, Slovak Republic). Jackknife regressions exclude clustered observations (country-years) one by one. Country and year fixed effects included. Control for the household size included. * $p<0.10$, ** $p<0.05$, *** $p<0.01$

Source: author's computations based on LIS and ISSP data

Table B2: Robustness check: jackknife (Model 2).

	Model 2 (no singleton)	Model 2 (jackknife)
Reference category: income Q3		
income Q1	0.484***	0.484***
	(0.063)	(0.071)
income Q2	0.231***	0.231***
	(0.060)	(0.067)
income Q4	-0.187***	-0.187***
	(0.057)	(0.060)
income Q5	-0.612***	-0.612***
	(0.058)	(0.054)
P80/P70 index	0.052	0.052
	(0.185)	(0.814)
*Reference category: income Q3 * P80/P70*		
income Q1 * P80/P70	0.137	0.137
	(0.110)	(0.131)
income Q1 * P80/P70	0.141	0.141
	(0.106)	(0.125)
income Q1 * P80/P70	0.120	0.120
	(0.101)	(0.116)
income Q1 * P80/P70	0.426***	0.426***
	(0.100)	(0.101)
S0.1/S1 index	0.121**	0.121
	(0.050)	(0.171)
*Reference category: income Q3 * S0.1/S1*		
income Q1 * S0.1/S1	0.026	0.026
	(0.047)	(0.056)
income Q2 * S0.1/S1	0.005	0.005
	(0.045)	(0.054)
income Q4 * S0.1/S1	-0.086**	-0.086*
	(0.043)	(0.048)
income Q5 * S0.1/S1	-0.102**	-0.102**
	(0.043)	(0.045)
Individual controls	Yes	Yes
Number of Obs	41303	41303
Pseudo R2	0.100	0.100

Note: Binary logit regressions of support for redistribution. Singleton excluded from the sample (Year 1985, Canada, Ireland, Denmark, Netherlands). Jackknife regressions exclude clustered observations (country-years) one by one. Reduced set of individual controls. Country and year fixed effects included. Control for the household size included. * p<0.10, ** p<0.05, *** p<0.01.

Source: author's computations based on LIS, WID and ISSP data

C Robustness check: excluding the USA

Table C1: Robustness check: excluding the USA.

	Model 1 (excl. USA)	Model 2 (excl. USA)
Reference category: income Q3		
income Q1	0.386***	0.443***
	(0.042)	(0.061)
income Q2	0.201***	0.262***
	(0.040)	(0.061)
income Q4	-0.267***	-0.220***
	(0.036)	(0.055)
income Q5	-0.678***	-0.693***
	(0.037)	(0.056)
P80/P70 index	-0.008	-0.291
	(0.098)	(0.229)
*Reference category: income Q3 * P80/P70*		
income Q1 * P80/P70	0.033	0.029
	(0.081)	(0.110)
income Q2 * P80/P70	0.104	0.126
	(0.080)	(0.110)
income Q4 * P80/P70	0.004	0.085
	(0.073)	(0.102)
income Q5 * P80/P70	0.201***	0.295***
	(0.075)	(0.104)
S0.1/S1 index		0.064
		(0.053)
*Reference category: income Q3 * S0.1/S1*		
income Q1 * S0.1/S1		0.051
		(0.046)
income Q2 * S0.1/S1		0.030
		(0.045)
income Q4 * S0.1/S1		-0.070
		(0.042)
income Q5 * S0.1/S1		-0.070
		(0.043)
Individual controls	Yes	Yes
Number of Obs	67483	40930
Pseudo R2	0.096	0.090

Note: Binary logit regressions of support for redistribution. USA excluded from the sample. Country and year fixed effects included, along with the household size. * $p<0.10$, ** $p<0.05$, *** $p<0.01$.

Source: author's computations based on LIS, WID and ISSP data