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WHOSE PREFERENCES MATTER FOR REDISTRIBUTION: CROSS-COUNTRY EVIDENCE

Michel Marechal (r)
Alain Cohn (r)
Jeffrey Yusof (r)
Raymond Fisman (r)

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ABSTRACT

Using cross-sectional data from 93 countries, we investigate the relationship between the desired level of redistribution among citizens from different socioeconomic backgrounds and the actual extent of government redistribution. Our focus on redistribution arises from the inherent class conflicts it engenders in policy choices, allowing us to examine whose preferences are reflected in policy formulation. Contrary to prevailing assumptions regarding political influence, we find that the preferences of the lower socioeconomic group, rather than those of the median or upper strata, are most predictive of realized redistribution. This finding contradicts the expectations of both leading experts and regular citizens.

Michel Marechal
University of Zurich
Bluemlisalpstr. 10
CH-8006 Zurich
Switzerland
and Rady School of Management,
UC San Diego
michel.marechal@econ.uzh.ch

Schoenberggasse 1 8001 Zurich Switzerland jeffrey.yusof@econ.uzh.ch

 (\mathbf{r})

Jeffrey Yusof

University of Zurich

 \bigcirc

Alain Cohn University of Michigan 105 S State St Ann Arbor, MI 48109 adcohn@umich.edu Raymond Fisman
Department of Economics
Boston University
270 Bay State Road, 304A
Boston, MA 02215
and NBER
rfisman@bu.edu

(r)

There are two dominant views of whose preferences drive policymaking. Most prominently, the median voter model posits that policies will reflect the preferences of the average citizen (Hotelling, 1929; Black, 1948; Downs, 1957). An alternative view is that the preferences of the economic elite — who possess the resources to have disproportionate influence — have greater impact on policy outcomes, whether through a stronger impact on public opinion, direct access to policymakers, or greater political participation. The narrative of elite capture has gained particular prominence in both academic and mainstream discourse, and populist politicians have exploited it to attract disaffected voters (Guriev and Papaioannou, 2022).

These theories, in turn, have shaped political economists' views on income redistribution, for which there is at least some inherent class conflict over preferred policies. In particular, the canonical model of Meltzer and Richard (1981) builds on the median voter framework, arguing that the preferences of median-income voters dictate the extent of taxation and redistribution. This has given rise to a rich empirical literature testing the central tenets of the median voter model (e.g., see Meltzer and Richard, 1983; Benabou, 1996; Perotti, 1996; Borge and Rattsø, 2004; Mulligan et al., 2004; Karabarbounis, 2011; Acemoglu et al., 2015; Fujiwara, 2015).

Approaches to testing theories of government redistribution usually assume that voters' preferences are determined by their economic circumstances, which then interact with political institutions to determine policy (e.g., Iversen and Soskice, 2006; Acemoglu and Robinson, 2006). Regardless of the political system, however, less redistribution is assumed to reflect more weight on the preferences of the rich and, conversely, more redistribution implies more weight on the preferences of the poor.

In this paper, we take a different approach by directly evaluating whose preferences are most predictive of actual redistribution. We do so by relating redistributive preferences (as captured by survey responses) to realized redistribution in a cross-section of 93 countries

¹See, e.g., Bullock (2011) for a discussion of the elite's influence via public opinion, Teso (2020) on the direct influence of corporate elites, and Schlozman *et al.* (2012) on unequal political activism.

representing roughly 87 percent of the world's population. We leverage two main datasets. First, to measure preferences for redistribution, we use a combination of data from the World Values Survey for the years 1995 to 2014. Specifically, we use responses to a standard income inequality question that asks respondents where they lie on the spectrum of, "We need larger income differences as incentives for individual effort" to "Incomes should be made more equal." We then construct a preference measure for different socioeconomic status (SES) groups, focusing on the bottom 5%, middle 5%, and top 5% in each country, in line with theories of political influence. Second, to capture actual government redistribution, we follow Solt (2020) and use the difference between net and gross Gini coefficients from the Standardized World Income Inequality Database (SWIID).

We find that the preferences of the *lowest* SES group are most predictive of realized redistribution. When we control for this measure, neither the median nor the top SES group's preferences have any incremental explanatory power. This pattern persists even when we analyze the preferences of each group separately, as the preferences of the highest SES group are not a significant predictor of realized redistribution. Including a range of country-level controls (e.g., GDP, pre-tax income inequality, population size, and democracy), or defining SES groups differently (e.g., 10% ranges or terciles instead of 5%) does not meaningfully change the results. The pattern also holds for both democratic and nondemocratic countries, alternative measures of government redistribution and preferences for redistribution, and it is stable over time.

The aim of this paper is not to test a particular model, such as the median voter framework, but to introduce a new empirical perspective that could potentially challenge commonly held views of policy influence, thereby stimulating further empirical and theoretical research. While we cannot pinpoint the exact mechanism underlying the observed pattern,

²See, e.g., Shayo (2009); Gorodnichenko and Roland (2011); Langsæther and Evans (2020); Margalit and Shayo (2021) among many others for work that also relies on this measure.

³As a robustness check, we explore alternative measures of redistribution, including post-tax Gini as a broad indicator, as well as taxes and social security expenditures from the latest version of the Relative Political Capacity dataset (Arbetman-Rabinowitz *et al.*, 2020).

additional analyses that we describe after presenting our main results help to narrow down the potential explanations.

Our work contributes to the vast literature on the determinants of government policy, particularly as they pertain to redistribution. In response to the apparent conflict between the Meltzer and Richard (1981) model and observed empirical facts, a large theoretical literature has proposed various explanations for muted demand for redistribution in the face of high or rising inequality. While too vast to survey here, notable theoretical contributions include Piketty (1995), Benabou (2000), Benabou and Ok (2001), Alesina and Angeletos (2005), and Benabou and Tirole (2006). In parallel, an ever-growing literature has explored the institutional and individual determinants of redistributive preferences, and also the determinants of actual redistributive policies, often guided by theoretical frameworks that build on either median voter or elite capture models. Karabarbounis (2011), for example, revisits the Meltzer-Richard in a panel of 14 OECD countries, employing an approach that uses wealth as the unit of political influence ("one dollar, one vote"), and finds that this is a better fit for the data than the standard median voter approach. Iversen and Soskice (2006) instead consider, in a sample of 17 countries, how different electoral systems impact the extent of redistribution, because of the resultant political coalitions that may emerge. Rather than looking at variation amongst democratic institutions, a more basic implication of Meltzer-Richard is that democracy should increase redistribution by giving more political voice to poor citizens. As Acemoglu et al. (2015) point out, however, democracies may be co-opted by the elites, and autocrats may also be responsive to lower-income citizens to maintain stability.

Our paper is distinct from these earlier efforts in that we look at the relationship between class preferences — rather than making assumptions of a direct link from own-income to redistributive preferences — and realized redistribution. Several single-country studies consider this relationship. Most notably, Gilens and Page (2014) provide a "preliminary and tentative" test of which income groups' preferences are most correlated with policy realizations in

the U.S. context. By comparing stated preferences of individuals at the median versus 90th percentile of the income distribution to actual policy realizations, they conclude that, while both groups agree on many issues, the preferences of wealthier Americans are more strongly correlated with policy outcomes (a finding that aligns with the broader literature discussed in the review article by Erikson, 2015). However, the U.S. setting may not be reflective of policy deliberation more generally — for example, the specifics of American politics may make it particularly susceptible to the influence of the affluent relative to other democratic countries. More recent work, again focused on single countries, uses a similar approach to document the link from preferences to policies in the Netherlands (Schakel, 2020), Germany (Elsässer et al., 2020), and Norway (Mathisen, 2022). The last of these in particular finds that the preferences of lower-income individuals are correlated with policy outcomes (as are the preferences of the affluent), indicating at least the possibility of the less well-off influencing policy in some countries.⁴ Our study goes beyond these single country analyses by linking preferences to policy outcomes on a global scale.

We conclude the introduction by noting that, although our analysis does not provide a direct test of any particular theory, the strong and robust relationship between the bottom 5%'s preferences and realized redistribution nonetheless poses a challenge to the most straightforward notions of political influence. At the very least, these findings are surprising and at odds with the elite capture view of policy formation. In addition to the main analysis, we present the results of an incentivized prediction survey which we conducted with two samples: leading academic economists and regular citizens. Both groups, when presented with our empirical exercise, are most likely to predict that either the top or median

⁴It would be interesting to explore how our results compare to the findings in these earlier studies. However, it is not possible to do so given the different types of data used across studies. Prior work relies on variation in preferences across multiple policy issues within a single country, whereas we utilize variation in preferences across countries for a single policy issue. As a result, it is not possible to use data from, for example, Gilens and Page (2014) to estimate the relationship between SES groups' preferences for redistribution and redistributive policy. Similarly, we cannot use our data to zoom in on a particular country, despite the existence of regional identifiers in our datasets. These identifiers are too coarse to provide sufficient variation in redistributive policies within individual countries.

group's preferences will be most correlated with realized policies — responses that align with median-voter or elite-capture intuitions. We hope that our findings will inspire researchers to develop theories and conduct further empirical tests to better understand and explain our results.

1 Data

We first describe the data selection and preparation process for the different datasets used in our analysis below. The sources and descriptions of each variable are summarized in Appendix D.

Preferences for Redistribution

We derive our country-level measure of redistributive preferences based on 237,986 observations from the World Values Survey (WVS) during the years 1995-2014 (Haerpfer *et al.*, 2022).⁵ The WVS is designed to provide nationally representative samples of the resident adult population.⁶

Specifically, respondents were asked to locate their preferences for redistribution in the 1-10 range, where 1 indicates agreement with the statement, "Income should be more equal" and 10 indicates agreement with, "We need larger income differences as incentives for individual effort." We coded answers such that higher values represent a stronger preference for redistribution (with a scale ranging from 0 to 9).

Since we are interested in how these preferences differ by socioeconomic status, we construct an SES index based on the following variables: relative household income (from 1

⁵See https://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp, last accessed November 20, 2023. We do not use data from waves 1 and 2 (pre-1995), nor from wave 7 (2016 and later), since the earlier waves do not include information on social class and/or income, and the most recent wave employs different coding for education relative to earlier waves.

⁶For more information about the survey and sampling methodology of the WVS, see https://www.worldvaluessurvey.org/WVSContents.jsp?CMSID=FieldworkSampling&CMSID=FieldworkSampling; last accessed October 28, 2023.

"lowest group" to 10 "highest group" in a given country); education (from 1 "inadequately completed elementary education" to 8 "university/higher degree"), and self-reported social class (from 1 "upper class" to 5 "lower class"). We rank respondents based on the first principal component of these three variables, and aggregate SES preferences for each country over all waves. In our main analysis, we define SES groups based on 5% ranges in this distribution. For example, top 5% represents the average preferences for redistribution of all respondents from a given country with an SES index above the 95th percentile. We similarly define the middle 5% and bottom 5%. We exclude countries for which a given SES group's redistributive preferences are based on fewer than 30 observations.

To provide a clearer sense of what it means to rank in the top or bottom 5% of the SES index, we regress various socioeconomic indicators on dummy variables for belonging to those groups, while including country and wave fixed effects (see Appendix Table B.1). The WVS contains data for a subset of the sample on households' (country-specific) income brackets in absolute terms. In the U.S., for example, the lowest and highest income brackets correspond to an annual household income of \$12,500 or less and \$175,000 or more, respectively. We show that top 5% respondents are 35 percentage points more likely to be in the highest income bracket (column 1), and that bottom 5% respondents are 38 percentage points more likely to fall in the lowest income bracket (column 2). We further show that the top 5% are 27 percentage points more likely to have a supervisory role at work (column 3), and that they are also 4.5 percentage points more likely to be a member of a political party (column 4). Appendix Table B.2 provides additional descriptive statistics for the background characteristics of the three SES groups.

A natural concern with our data on the top 5%'s preferences — as with earlier efforts at measuring elite preferences — is that those with very high incomes generally do not respond to surveys.⁸ We do have information on the redistributive preferences of the very wealthy for

⁷The median number of observations per country and SES group is 123, 140, and 122, respectively, if we define SES groups based on 5% ranges.

⁸As noted above, the WVS data only provide us an income range for each respondent; for the

the U.S., using data from Cohn et al. (2023). In Appendix E we show that the redistributive preferences of the very rich (annual incomes above \$750,000) are very similar to those of the merely very well-off (incomes between \$150,000 and \$200,000), and that the monotonic decline in desired redistribution continues in higher income brackets. While not conclusive, these findings suggest that the preferences of the highest ventile group in our data are a reasonable proxy for the preferences of the true elites.

Measures of Redistribution

Our measure of actual redistribution comes from the Standardized World Income Inequality Database (SWIID; see Solt, 2020 for more details). For our main analyses, we use a measure of relative redistribution, defined as the difference between the pre-tax and post-tax Gini index, scaled by pre-tax Gini (our results are robust to using the absolute difference between pre- and post-tax Gini; see Appendix Table B.3). This measure can be interpreted as the percentage change in income inequality caused by government intervention (i.e., taxes and transfers), with higher values indicating more redistribution. Since our preference data end in 2014, we focus on the SWIID data from the year closest to 2015, i.e., the first year following the end of our preference data.

We consider several alternative approaches to measuring redistribution. Our main alter-U.S., for example, the highest category is "above \$175,000" and while we cannot say for certain, we believe that it is unlikely that many respondents have incomes too far above this cutoff.

¹⁰To increase the sample size we use imputed values for pre- and post-tax Gini provided by Solt (2020). Appendix Table B.8 shows that the results do not meaningfully change when we exclude imputed observations.

⁹The SWIID dataset is not without controversy. For example, Jenkins (2015) criticized the complicated and opaque imputation procedure that was used to construct it. Some issues have been fixed in newer versions of the dataset (e.g., by adding external data as it becomes available) or represent inaccurate descriptions of the imputation procedure (e.g., whether all observations are imputed or only observations for which external data is missing). Other issues of imputation, such as adjustments that need to be made when data are drawn from multiple sources or when there is a change in the data compilation process, have been addressed in recent versions of the SWIID (Solt, 2020). As such, we believe that the SWIID offers the most comparable data for the most country-years of any cross-national dataset on income inequality. Nonetheless, in order to probe the robustness of our results, we use alternative measures of redistribution that either do not rely on imputed values or originate from other data sources (Relative Political Capacity dataset).

native is the post-tax Gini, which is an all-encompassing measure of a society's efforts to reduce income inequality. The post-tax Gini incorporates the consequences of progressive taxation, as well as any pre-distribution policies like minimum wage or unionization. The disadvantage of using the post-tax Gini is that it incorporates an array of considerations, including, e.g., factor endowments, that impact the pre-tax Gini but are unrelated to redistribution. We also use the updated Relative Political Capacity dataset to create several other measures of redistribution (see Arbetman-Rabinowitz et al., 2020, and also Acemoglu et al., 2015). In particular, we use data on taxes and social security expenditures scaled by GDP, as well as a principal component analysis to combine all four measures of redistribution (relative redistribution, post-tax Gini, taxes, social security) into a single redistribution index. Finally, we also use data on average tax rates for different income levels from the World Tax Indicators (Andrew Young School of Policy Studies, 2010).

Control Variables

Our basic controls include the log transformations of GDP per capita and population size, as well as a dummy variable for democratic countries, following the approach of Acemoglu et al. (2019).¹¹ We further include pre-tax Gini to control for initial differences in income inequality.

Basic data properties

Before proceeding to our main analyses, we provide a brief overview of the data and its properties. A limitation of our study is its relatively small sample size of 93 countries, which is further reduced when data is missing.¹² We thus use bootstrapped standard errors in the regression analyses.

¹¹As an alternative, we use the Polity IV data to classify countries as democratic (see Appendix Table B.12).

¹²We adopt the country classification of the WVS (e.g., Hong Kong, Puerto Rico, and Palestine are treated as separate countries).

Appendix Figure A.1 displays average preferences for redistribution across all countries by SES ventile. There is a clear, near-monotonic decline across all ventiles, with higher SES groups preferring less redistribution. Moreover, the standard errors are very similar across all ventiles, suggesting that we measure redistributive preferences equally precisely across SES groups. Appendix Figure A.2 demonstrates that this association also holds true across the majority of the countries in our sample. In most countries, the bottom SES group displays the strongest preference for redistribution, while the top SES group displays the weakest preference for redistribution.

There is nonetheless a substantial country-specific component to redistributive preferences, as shown in Appendix Figure A.3. Each panel of the figure depicts the pairwise relationship between average redistributive preferences for each pairing involving the bottom, middle, and top SES groups. There is a strong positive correlation for each pair; as expected, the relationship is weakest for the bottom-top comparison ($\rho = 0.535$, p < 0.001); the pairwise correlation is 0.781 (p < 0.001) for the bottom-middle and 0.697 (p < 0.001) for the middle-top comparison.¹³When we take the average preference across all SES groups by country, we see a strong positive correlation between redistributive preferences and realized redistribution ($\rho = 0.419$, p < 0.001). This provides further support for the validity of our survey measure of attitudes toward redistribution.

In Appendix Table B.4, we show that preferences for redistribution are relatively stable over time. Specifically, we regressed the most recently available inequality preference measure on the first inequality preference measure available (a gap of as much as 18 years) and observe a remarkably strong correlation for all SES groups between preferences expressed in early and late survey waves. Moreover, splitting the data into two periods (1995-2004 and 2005-2014)

¹³These relationships underscore the importance of focusing on redistributive policies. Even for this area for which there is natural class conflict, there is still a large degree of agreement across income groups regarding desired policy. As Gilens and Page (2014) note, there is broad agreement across socioeconomic groups on policy outcomes, which makes it challenging to identify the excess influence of any particular group when one considers, as they do, policy making across many domains.

further suggests that our findings are robust over time (see Appendix Table B.5). These results suggests that it is reasonable to aggregate data on redistributive preferences across all available years.

2 Results

Our main results, presented in Table 1, are based on the following equation:

$$Redistribution_c = \alpha + \beta * Preferences_{g(c)} + X_c + \epsilon_c, \tag{1}$$

where $Redistribution_c$ represents a relative measure of government redistribution in country c and $Preferences_{g(c)}$ denotes the average redistributive preferences of group g (bottom, middle, and top 5% SES groups) in country c. We include a set of country-level controls X_c , as described in section 1, and report bootstrapped standard errors from 1,000 replications throughout.

In columns (1) to (3) of Table 1, we look at the bivariate correlation between redistribution and each of the average redistributive preferences of the top, middle, and bottom 5% SES groups. The correlation is positive and significant for both the middle and bottom 5% (p < 0.001). Even in this bivariate comparison, preferences of the top 5% are not significantly correlated with actual redistribution, despite the sizable within-country correlation among SES groups as documented in Appendix Figure A.3. We provide a visual representation of the data in Figure 1, where we show the scatterplot of each group's preferences and redistribution. As evident in the figure, the bottom 5% exhibit the strongest link between redistributive preferences and realized redistribution. The correlation coefficients for the bottom and middle 5% are significantly larger than the coefficients for the top 5% (p = 0.006 and p = 0.010, respectively). The coefficients for the bottom and middle 5% do not differ significantly (p = 0.294). Overall, this set of bivariate relationships present a challenge to

¹⁴The relative redistribution measure is negative for Ukraine, Tanzania, and Indonesia. The results remain qualitatively the same if we exclude those three countries from the analysis (see

Table 1: Attitudes and Relative Redistribution

| | Relative redistribution | | | | | | | | |
|-------------------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|--|--|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | | | |
| Top 5% | 2.284 (1.709) | | | -4.293 (1.929) | -3.195 (1.804) | -2.655 (1.834) | | | |
| Middle 5% | | 5.622 (1.416) | | 1.529 (2.425) | 0.355 (2.226) | -0.747 (2.314) | | | |
| Bottom 5% | | | 6.575 (0.917) | 7.277 (1.605) | 5.904 (1.366) | 6.052 (1.414) | | | |
| ln(GDP per capita) | | | | | 2.330 (1.244) | 2.536 (1.250) | | | |
| ln(Population) | | | | | -1.923 (0.758) | -1.760 (0.700) | | | |
| Democracy | | | | | 7.476 (2.693) | 5.761 (2.724) | | | |
| Gini pre-tax | | | | | | 0.517 (0.257) | | | |
| Constant | 9.033 (6.032) | -6.619 (5.555) | -14.656 (4.145) | -9.441 (5.707) | -21.525 (11.388) | -43.923 (15.433) | | | |
| Top=Middle Top=Bottom Middle=Bottom | | | | 0.123 0.000 0.121 | 0.320 0.000 0.086 | 0.599 0.000 0.043 | | | |
| F-stat p-val R-squared N | 0.181 0.019 94 | $0.000 \\ 0.148 \\ 93$ | $0.000 \\ 0.301 \\ 94$ | 0.000 0.332 93 | 0.000 0.479 91 | 0.000 0.529 91 | | | |

Notes: This table reports OLS coefficient estimates with bootstrapped standard errors from 1,000 replications in parentheses. The dependent variable is relative redistribution, defined as the difference between pre-tax and post-tax Gini index, scaled by pre-tax Gini. This measure can be interpreted as the percentage change in income inequality caused by government intervention (i.e., taxes and transfers), with higher values indicating more redistribution. The variables Top 5%, Middle 5%, and Bottom 5% reflect the redistributive preferences of different socioeconomic status groups. Socioeconomic status groups are defined as the bottom 5%, middle 5%, and top 5% of respondents based on our socioeconomic status index. Missing values for realized redistribution are imputed using the estimates for pre-tax and post-tax Gini coefficients. The p-values from the Wald test comparing the coefficients of the different socioeconomic status groups are shown at the bottom of the table. See Appendix D for a detailed description of the control variables.

the elite capture view of policy determination.

In column (4), we include all three preference variables simultaneously, and in column (5) we add our basic set of controls (the log of GDP per capita, the log of population size, and a dummy for democracy). In the first case, only the coefficient of the bottom 5%'s preferences remains positive and significant, whereas the coefficient of the top 5% actually changes sign (p = 0.026). With the addition of basic controls in column (5), preferences of the bottom 5% remain a significant positive predictor (p < 0.001). Finally, we include pre-tax Gini as a control in column (6) to account for differences in initial levels of inequality. Neither the top nor the middle 5%'s preferences are significant predictors of redistribution, whereas the coefficient of the bottom 5% remains largely unchanged (p < 0.001). The Wald tests reported at the bottom of Table 1 shows that the coefficient of the bottom 5% is significantly different from the top 5% irrespective of the specification (p < 0.001). The difference between the coefficients of the bottom 5% and the middle 5% is significant (p=0.043) when we include all controls. The differences across SES groups are unlikely to be the result of greater variability of redistributive preferences in the middle and top SES groups compared to the bottom 5%, as Appendix Figure A.1 shows that preference variability is similar along the entire income distribution.

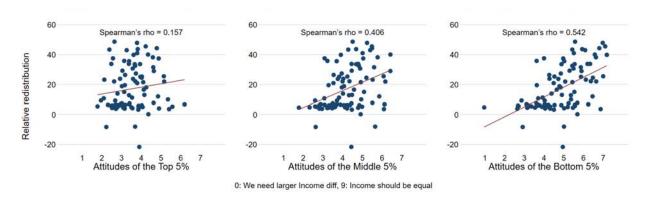
2.1 Prediction study

To highlight the contrast between our findings and the prevailing intuition about whose preferences matter for redistribution, we conducted a prediction study with two distinct groups: "experts" and "laypeople." We designed the prediction study after observing our main results, which led us to ask 140 experts (top 5% academic economists based on the repec.org ranking) and 500 laypeople (a representative sample of U.S. citizens in terms of age, gender,

Appendix Table B.9).

¹⁵The within-country overlap in preferences across SES groups should be taken into consideration when interpreting these results. However, it is crucial to investigate the conditional patterns captured in these specifications precisely because of the overlap.

Figure 1: Correlation between Preferences and Actual Redistribution



Notes: The figure shows the country-level correlations between redistributive preferences and actual redistribution for different socioeconomic status groups. Socioeconomic status groups are defined as the bottom 5%, middle 5%, and top 5% of respondents based on our socioeconomic status index.

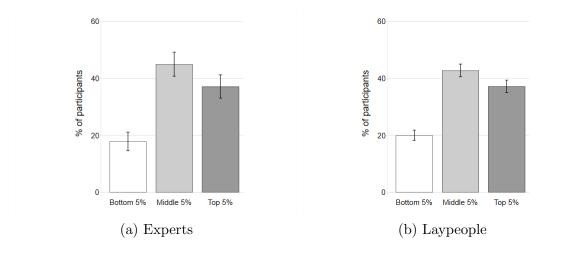
and ethnicity) to predict the results of our study (Dreber et al., 2015; DellaVigna and Pope, 2018; DellaVigna et al., 2019). We described our empirical design to participants in intuitive terms and then asked them to rank (i) which SES group's preferences for redistribution are most correlated with actual redistribution and (ii) which SES group's preferences for redistribution are most correlated with each other. Lay respondents received a participation fee of US\$1.59 and could earn up to an additional US\$4, depending on the accuracy of their predictions; expert respondents were entered into a lottery in which three participants received the choice between a US\$100 donation to charity or a US\$100 gift card. Details of the sample collection procedures and survey instruments are in Appendix F.

Figure 2 presents the main finding of the prediction study. Panel (a) shows that 45% of the experts predicted that the median respondent's preferences would be most correlated with realized redistribution, whereas 37% predicted that the top 5% would be. Only 18% of the experts predicted that the bottom group's preferences are most strongly correlated with actual redistribution. The results from the general population sample, shown in Panel (b), are virtually the same as for the experts.¹⁶ Thus, the prediction study highlights that both

¹⁶We find similar results when we analyze the general population sample's predictions separately by socioeconomic status (see Appendix Figure A.6).

groups' intuitions are guided by median-voter and elite-capture reasoning.

Figure 2: Predictions: Ranking SES Groups According to Correlation between Preferences and Actual Redistribution



Notes: Results from the prediction study with top economists (N=140) and laypeople (N=500). The figure shows for each SES group the share of experts and laypersons, respectively, who predicted the relationship between preferences and actual redistribution would be strongest. Error bars indicate standard errors of the mean. See Appendix F for more details about the prediction study.

To summarize, we document a strong positive correlation between the bottom 5%'s preferences for redistribution and actual redistribution. While we reiterate that the results are based on cross-country correlations and thus should be interpreted with caution, we also emphasize that the patterns are unexpected, as reflected in the incentivized prediction study with both expert economists and the general population.

2.2 Robustness checks

We now explore the robustness of our main result to (i) omitted variable bias, (ii) alternative proxies for redistributive preferences, (iii) alternative measures of realized redistribution, and (iv) alternative definitions of the SES groups. We further explore the robustness of our results across democratic versus nondemocratic countries.¹⁷

¹⁷We also assessed the robustness of our main results using population weights provided by the WVS when calculating country-level average preferences within each SES group. Appendix Tables B.24, B.25, and B.26 show that the results are almost identical to those obtained without using population weights.

Omitted variable bias. Our main results could be driven by omitted variables that correlate with redistributive preferences and realized redistribution. We therefore attempt to control for what what we see as the most likely candidates for such omitted variables: confidence in government, ethnic fractionalization, legal origin, and moral universalism. In particular, individuals in countries with poorly functioning institutions or political systems may distrust the state and be less supportive of government redistribution. These dysfunctional systems may lead to reduced levels of redistribution and lower confidence in redistribution, especially among low-income individuals. Moreover, studies suggest that both ethnic fragmentation and legal origin are important factors for the quality of government (e.g., La Porta et al., 1999). At the same time, both of these factors may also correlate with preferences for redistribution because, for example, individuals are typically less likely to support redistribution when the poor are mostly from other ethnic groups (see Alesina and Giuliano, 2011, for a review). We further consider moral universalism as a potential omitted variable, as recent research suggests that more universalist individuals are more supportive of federal redistribution given that the beneficiaries of redistribution are often socially or geographically distant strangers (Enke et al., 2023). Moral universalism can also shape the design of institutions responsible for redistribution (Cappelen et al., 2022). Appendix Table B.16 presents the results of regressions that additionally control for confidence in government, moral universalism, ethnic fractionalization, and legal origin. Reassuringly, the bottom 5%'s preferences for redistribution remain significant after controlling for these additional variables (p < 0.002). While we have tried our best to account for possible confounds in our analysis and our results are robust to these considerations, there may still be some factors that remain unaccounted for. For example, our results may be influenced by cultural or institutional factors, such as social norms or income mobility, which are difficult to measure globally in a comparable way. While we thus cannot fully rule out the possibility of omitted variable bias, our results are robust to the most plausible omitted variables that we may capture in the data.

Alternative measures of preferences. The question in the WVS may be interpreted by respondents as reflecting desired changes in redistribution rather than absolute levels. While the WVS does not contain any question that is framed in more absolute terms, we can use data from the International Social Survey Programme (ISSP) to examine how relative versus absolute framing might impact our results. The ISSP has four questions related to redistribution, two framed as preferences over the desired level of redistribution and two over desired changes relative to current circumstances. This allows us to assess the extent to which the patterns we observe in the WVS data are sensitive to the exact question wording. In particular, using the ISSP data, we may explore the robustness of our main results when we use measures of redistributive preferences that are more straightforwardly absolute in nature. Moreover, we can examine whether in the ISSP data subjects' responses to questions about desired levels versus changes in redistribution capture similar or distinct notions. The downside of the ISSP data is that it shrinks our sample size to 41 countries (as compared to 93 for comparable specifications using the WVS data).

Appendix Table B.13 replicates our main analysis with the four ISSP measures. The first two measures are based on questions about income differences and taxation, where the benchmark is explicitly set as relative to the current level in the respondent's own country ("Differences in income in <country> are too large 0: Strongly disagree, 4: Strongly agree"; "Generally, how would you describe taxes in <country> today for those with high incomes? 0: Much too high, 4: Much too low"). The other two measures correspond more closely to desired levels of redistribution as the questions ask about redistributive concerns in absolute terms ("It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes. 0: Strongly disagree, 4: Strongly agree"; "Do you think people with high incomes should pay a larger share of their income in taxes than those with low incomes, the same share, or a smaller share? 0: Much smaller, 4: Much larger"). It is reassuring to find the same pattern in the ISSP data as in the WVS data; the correlation between stated preferences and realized redistribution is almost always

more positive for the bottom 5%, relative to the middle or top 5%. This pattern is similar regardless of whether we use preferences for redistribution in levels or changes. However, due to the smaller sample size, the difference between the coefficients of the bottom 5% and the middle 5% is not significant for any measure (p > 0.079), at least when we include our basic set of controls (see the summary at the bottom of Appendix Table B.13). However, the difference between the coefficients of the top 5% and bottom 5% is statistically significant for all measures (p < 0.002).

The consistency of the results across all four questions then raises the question of whether respondents approach questions about relative versus absolute judgments in similar ways. Perhaps unsurprisingly, responses to these questions are highly correlated. We illustrate this in Appendix Table B.14, where we present, for each of the bottom, median, and top 5%, the correlations across countries in responses to each of the four ISSP questions. For all three groups, we observe very high correlations amongst these four measures. Focusing on the most relevant pair of questions that ask directly about income distribution, the correlation is approximately 0.8 in all three cases. This is remarkably high, particularly given that there are distinctions between the two questions beyond relative versus absolute: one question asks whether income inequality is too large relative to the current level, while the question on absolute preferences invokes government intervention explicitly in reducing income differences, which may differently color how some survey participants respond. Overall, we take these results as some indication that respondents treat these types of questions — which resemble the one we use from the WVS — as asking broadly about their attitudes toward societal inequities. As such, it is less surprising that the two types of preference measures generate similar patterns in the data.

Alternative measures of redistribution. Our main alternative outcome measure is the post-tax Gini, which is an all-encompassing indication of a society's efforts to reduce income inequality. The post-tax Gini incorporates the consequences of progressive taxation, as well as any pre-distribution policies like minimum wage or unionization. 18 For example, it could be that the rich prefer to reduce inequality through pre-distribution policies, whereas the poor may favor redistribution based on taxes and transfers. ¹⁹ We also consider proxies for redistribution that are not included in the SWIID dataset. In particular, we use two measures of a country's taxation from the updated Relative Political Capacity dataset (Arbetman-Rabinowitz et al., 2020): total taxes (Taxes) and social security taxes (Social Security), both as a fraction of GDP. We further compute a redistribution index using the first principal component of the two taxation measures, post-tax Gini, and our measure of relative redistribution. Table 2 presents the results for each of these alternative measures, both with and without controls. Overall, we find a similar pattern as with our main outcome measure: the bottom 5%'s preferences significantly predict actual redistribution (p < 0.048), while the other SES group's preferences do not (note that the sign of the coefficient for the bottom 5%'s preferences flips for post-tax Gini because less inequality means a lower Gini coefficient).²⁰ When we focus on the specifications that include our standard set of controls, the difference between the coefficients of the bottom 5% and the middle 5% (respectively, bottom 5% and top 5%) is significant for post-tax Gini (p = 0.039 and p < 0.001), the redistribution index (p = 0.022 and p = 0.001), and (marginally) significant for social security taxes (p = 0.059 and p < 0.001). The difference is not significant for total taxes (p = 0.317)and p = 0.181), as shown at the bottom of Table 2.

Alternative definitions of SES groups. We consider broader definitions of the SES groups, based on 10% and tercile groupings of the SES index, and re-estimate our main regressions using these alternative grouping schemes (see Appendix Tables B.6 and B.7). The results are similar to those based on the 5% groupings, except that the coefficients

¹⁸The disadvantage of using the post-tax Gini is that it includes an array of considerations, such as factor endowments, that impact the pre-tax Gini but are unrelated to redistribution.

¹⁹However, a recent study by Kuziemko *et al.* (2023) suggests that it is the other way around, at least in the U.S. Low SES individuals appear to prefer pre-distribution to redistribution policies.

 $^{^{20}}$ Appendix Table B.15 shows that the results also do not change meaningfully when we focus on non-mineral taxes.

Table 2: Alternative Measures of Redistribution

| | Gini post-tax | | Taxes | | Social security | | Redistribution index | |
|--|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Top 5% | 1.293 (1.304) | 1.306 (0.850) | -1.842 (1.540) | -0.181 (1.169) | -1.128 (0.695) | -0.850 (0.637) | -0.446 (0.267) | -0.230 (0.203) |
| Middle 5% | 1.205 (1.256) | 0.274 (0.999) | 0.611 (1.927) | -0.325 (1.346) | 0.116 (0.753) | -0.100 (0.719) | 0.014 (0.272) | -0.107 (0.222) |
| Bottom 5% | -3.396 (0.880) | -2.764 (0.656) | 3.343 (1.160) | 1.688 (0.851) | 2.326 (0.470) | 1.820 (0.434) | 0.887 (0.180) | $0.640 \\ (0.146)$ |
| ln(GDP per capita) | | -1.226 (0.587) | | 4.546 (0.848) | | 0.855 (0.456) | | 0.525 (0.131) |
| ln(Population) | | 0.747 (0.334) | | -1.116 (0.450) | | -0.142 (0.294) | | -0.199 (0.077) |
| Democracy | | -2.956 (1.152) | | 2.066 (1.641) | | 2.122 (0.999) | | 0.786 (0.280) |
| Gini pre-tax | | $0.669 \\ (0.099)$ | | -0.049 (0.104) | | -0.018 (0.077) | | -0.028 (0.022) |
| Constant | 43.625 (3.675) | 24.982 (6.439) | 10.509 (4.026) | -18.947 (7.307) | -2.007 (2.089) | -7.208 (5.040) | -2.807 (0.709) | -5.132 (1.484) |
| Top=Middle Top=Bottom Middle=Bottom F-stat p-val R-squared N | 0.968 0.004 0.019 0.000 0.171 93 | 0.521 0.000 0.039 0.000 0.590 91 | 0.438 0.002 0.347 0.000 0.194 88 | 0.949 0.181 0.317 0.000 0.556 88 | 0.339 0.000 0.046 0.000 0.296 87 | 0.534 0.000 0.059 0.000 0.383 87 | 0.333 0.000 0.034 0.000 0.349 87 | 0.734 0.001 0.022 0.000 0.573 87 |

Notes: This table reports OLS coefficient estimates with bootstrapped standard errors from 1,000 replications in parentheses. The dependent variable in columns 1 and 2 is the post-tax Gini, in columns 3 and 4 the dependent variable is taxes in percent of GDP, and in columns 5 and 6 the dependent variable is social security taxes in percent of GDP. The dependent variable in columns 7 and 8 is a redistribution index, computed as the first principal component of the post-tax Gini, taxes, social security taxes, and our measure of relative redistribution. The variables Top 5%, Middle 5%, and Bottom 5% reflect the redistributive preferences of different socioeconomic status groups. Socioeconomic status groups are defined as the bottom 5%, middle 5%, and top 5% of respondents based on our socioeconomic status index. The p-values from the Wald test comparing the coefficients of the different socioeconomic status groups are shown at the bottom of the table. Taxes is missing for Andorra, Hong Kong, Palestine, Puerto Rico, and Taiwan, Social security is further missing for Vietnam. Taxes exclude social security contributions. Social security are actual revenues receivable by social security schemes organized and operated by government units, for the benefit of the contributors to the scheme. See Appendix D for a detailed description of the control variables.

of the top SES groups are actually negative and significant in our preferred specification that includes all controls (p = 0.071 and p = 0.030, respectively). This may reflect the higher level of collinearity between the preferences of the different SES groups when we have nearly-overlapping groupings.

Our preferred definition of SES groups is based on multiple dimensions, including relative household income, education, and self-assessed social class. This approach has the advantage of resulting in a relatively fine-grained index, which allows us to estimate redistributive preferences across SES groups with equal precision (see Appendix Figure A.1). Nevertheless, we assess the robustness of our results to using household income alone, with the caveat that the 10-point scale does not allow us to characterize the preferences of different social groups with equal precision. We define the top, middle, and bottom SES groups based on the response options 1 ("Lowest group"), 5, and 10 ("Highest group"), respectively. However, this method has a further limitation: it reduces the sample size to 56 countries if we apply the same minimum threshold (at least 30 observations per country) to construct each SES group's average preference in a country, as we did with the social index approach. Despite these limitations, we find that the results are very similar, but less precise, compared to our findings when we use the multidimensional definition of SES groups. If all three preference variables are included simultaneously, only the coefficient of the bottom income group remains significant (p < 0.024), except when also controlling for the pre-tax Gini (see Appendix Table B.10).

Democratic vs. nondemocratic countries. Finally, we examine whether our results generalize across democratic and nondemocratic countries, given that policymakers in democratics may be more responsive to the demands of the less well-off. We split the sample into democratic and nondemocratic countries based on the classification from Acemoglu *et al.* (2019). Appendix Table B.11 shows that the correlation between the preferences of the bottom 5% and realized redistribution is similar for democratic and nondemocratic countries

 $^{^{21}}$ For example, only about 3% of the sample places themselves in the top income category (= 10), while a much larger share of the sample (about 17%) places themselves in the middle income category (= 5).

(p = 0.784). This may seem surprising at first, given that in theory democracy provides more direct accountability. However, as has been well documented, autocrats have a similar need to minimize dissent (Knutsen and Rasmussen, 2018; Kammas and Sarantides, 2019), and thus they may be similarly responsive to the demands of the less well-off, at least in the countries included in our sample.²²

2.3 Potential mechanisms

While our cross-country data of modest size does not allow us to pin down a specific mechanism that accounts for the findings, we can provide some evidence on the plausibility of certain classes of explanations by bringing in additional data and examining heterogeneity (or lack thereof) in the correlation between the bottom 5%'s preferences and realized redistribution. First, we consider a possible version of reverse causality in which high inequality leads low-income individuals to accept inequality as just. Second, we examine the role of political activism as a potential explanation. Third, we consider whether a coalition of lower- and higher-income individuals might together influence redistributive policies, as suggested by Iversen and Soskice (2006). In Appendix C, we further explore whether greater political extremism and conformism in the bottom SES group can explain our results. We conclude with a discussion of what we believe is the most plausible mechanism for our results, namely that policymakers are more responsive to the bottom SES group's preferences for redistribution because it is more of a policy priority for low-income individuals.

Reverse causality. It is possible that actual redistribution influences preferences for redistribution. For example, in countries with little redistribution, lower SES individuals may come to believe that distributional outcomes are beyond their control and that they are fated to be poor.²³ This is consistent with the psychological phenomenon of "learned"

²²See also Acemoglu *et al.* (2015) for a fuller discussion of why democracy may only lead to a limited increase in influence of lower income groups. Note that their discussion largely takes as a point of departure that higher-income groups have more influence in autocracies, which we do not find in our data.

²³A similar argument can be made about higher SES individuals, but in the form of a backlash

helplessness" (Maier and Seligman, 1976), which suggests that individuals who feel they cannot change their circumstances may adopt views that reflect reality to make the world seem more tolerable. In our context, this theory implies that if the bottom 5% believe that change is infeasible, they may develop a sense of helplessness and state preferences for redistribution that reflect current levels of redistribution. To test this hypothesis, we split our sample at the median of the extent to which the bottom 5% feel they are in control of their lives. Hiroto (1974) shows that people who believe they have little or no control over their lives experience more helplessness than others. If reverse causality based on this explanation is present in our data, we would expect to see a stronger association between the bottom 5%'s preferences and actual redistribution in countries where the bottom 5% believe they have relatively less control and are thus more likely to accept their current circumstances. However, as shown in Appendix Table B.17, we find no evidence to support this hypothesis. The results are invariant to how much control low SES individuals think they have (p = 0.742). These findings are inconsistent with the reverse causality mechanism in which lower SES individuals simply accept their fate.

Political activism. Lower SES individuals may be more likely to express their discontent through demonstrations, strikes, and protests, which may make policymakers more responsive to this group, especially when it comes to demands for redistribution. However, our analysis of political activism in the WVS data does not support this hypothesis. Appendix Table B.18 shows that the top 5% are more politically active, more likely to join boycotts, go on strike, attend demonstrations, and sign petitions (p < 0.001). Moreover, effect. Higher SES individuals may have particularly unfavorable opinions toward redistribution in

effect. Higher SES individuals may have particularly unfavorable opinions toward redistribution in countries with relatively high redistribution. This could explain the negative correlation between the top 5%'s preferences and realized redistribution.

²⁴Specifically, we use the following question from the WVS as a measure of locus of control: Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. (0: No choice at all; 9: A great deal of choice). Appendix Figure A.4 shows that lower SES individuals have weaker locus of control than higher SES individuals.

 $^{^{25}}$ These results are consistent with the findings of Cicatiello *et al.* (2015) and Botero *et al.* (2013), among others.

our main results are virtually unchanged when we add controls for each SES group's level of political participation, as shown in Appendix Table B.19.

Coalition formation. It is possible that top SES groups tend to form coalitions with the bottom SES groups to redistribute income to themselves at the expense of middle-income voters (Iversen and Soskice, 2006). Such a coalition could account for the more pronounced correlation between the bottom 5%'s preferences and actual redistribution, and it would still be consistent with the elite capture view. To explore this possibility, we use data from the World Tax Indicators on the average tax rates for different income levels in 2005, normalized by GDP per capita (Andrew Young School of Policy Studies, 2010). We focus on the average tax rate for households with an income of one, two, three, and four times GDP per capita. For example, a household in the U.S. that earns four times GDP per capita has an annual income of \$254,000 in 2020.²⁶ If the hypothesis of a bottom-top coalition is correct, we should see a stronger relationship between the bottom 5%'s preferences and the tax rate for average income earners compared to the tax rate for top income earners. However, Appendix Table B.20 reveals that, if anything, the bottom 5%'s preferences are more strongly correlated with the top income tax rate than the tax rate for the middle class. This difference, however, is not statistically different (p = 0.115). These findings are inconsistent with the view that lower and upper SES groups form a coalition to tax the middle class.

Policy priorities We believe that the most plausible mechanism for our results is that policymakers may be more responsive to the redistribution needs and preferences of the less well-off, because redistribution is a top policy priority for them. Consistent with this view, data from the WVS suggest that the bottom SES group cares the most about poverty reduction. In wave 5, the WVS asks respondents to identify the most serious problem in their country from a list of five options.²⁷ Appendix Table B.21 shows that the bottom SES

 $^{^{26}}$ According to the report of the US Census Bureau, households with an annual income of \$274,000 in 2020 belong to the top 5% of the income distribution (Shrider *et al.*, 2021).

²⁷Subjects can pick from the following choices: people living in poverty and need, discrimination against girls and women, poor sanitation and infectious diseases, inadequate education, and environmental pollution.

group cares significantly more about poverty reduction than the middle and top SES groups (p < 0.001). Conversely, the top SES group prioritizes addressing inadequate education and environmental pollution more than the other two groups (p < 0.001). Although this evidence is still some distance from identifying a causal mechanism for our results, it points to a promising avenue for future work.

Overall, our results challenge conventional notions of political influence, such as the median voter and elite capture views. While we cannot offer a definite causal interpretation of the results, we can narrow the set of plausible explanations for the observed pattern. The data seem to be most consistent with explanations based on policymakers responding more to the needs and preferences of the less well-off than the middle or upper class, at least in terms of redistribution, because poverty reduction (and thus redistribution) is the focal issue for low-income citizens.

3 Conclusion

This paper documents the relationship between citizens' preferences for redistribution and realized redistribution in a cross-section of 93 countries. We focus on redistribution because it is an outcome for which there is inherent conflict in desired policies across socioeconomic status groups, and thus affords an opportunity to examine whose preferences are reflected in policymaking. Our main finding is that the lowest SES group's preferences are most predictive of redistribution. Controlling for preferences at the bottom of the SES distribution, neither the middle nor the top SES group's preferences have any additional explanatory power. This finding stands in contrast to the dominant notions of policy influence and also to the predictions of both expert economists and laypeople.

We see two natural directions for research based on these findings. First, given the gap between existing theories and patterns in the data (and relatedly, economists' expectations of these patterns), we hope our results will spur the development of theoretical frameworks that can accommodate the observed relationships. Second, as we acknowledge throughout, we see our analysis as a step toward understanding the drivers of redistributive policy and government intervention more generally. We hope that future work will use more fine-grained data and causal inference methods to explore the underlying reasons for the robust correlation between lower SES preferences and policy outcomes.

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