

Supplementary Information for

Global evidence on people's belief in the selfish rich inequality hypothesis

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This PDF file includes:

- Supplementary text
- Figs. S1 to S8 (not allowed for Brief Reports)
- Tables S1 to S8 (not allowed for Brief Reports)
- Legends for Dataset S1 to S3
- SI References

Other supplementary materials for this manuscript include the following:

- Datasets S1 to S3

Supporting Information Text

This document contains the supplementary information for the paper “Global evidence on people’s belief in the selfish rich inequality hypothesis”

1. Methods

A. Data collection—infrastructure and selection of countries. We implemented a “Fairness-Across-the-World” module as part of the Gallup World Poll 2018, which is a probability based and nationally representative sample of the resident adult (aged 15 and older) population (1). Our module was implemented in 60 countries, with a median of 1000 respondents in each country and, in total, 65,856 observations. One person, drawn at random, was interviewed in each sampled household. In countries with 80% phone coverage or where phone interviews are customary, interviewing took place by telephone (15 countries), in the remaining countries interviews were face-to-face. Face-to-face interviews were clustered, with sampling procedure varying with the amount of information available in each country. We cluster at the level of primary sampling units (PSUs), see discussion of weighting in Section G. Our main question about “Belief in Selfish Rich Inequality” was asked of 40% of the respondents. In the subset of respondents that were asked the “Belief in Selfish Rich Inequality” question, there were on average 4.4 (standard deviation 3.2) respondents in each cluster in the face-to-face countries. There was no cluster sampling of the phone-based interviews.

Table S1 accounts for how many respondents were sampled in each country, what languages and which modes of interviewing were used, and the exceptions to random sampling from the full population (mostly because of internal conflicts and very sparse population).

B. Data availability policy. There are no restrictions on the data used that were collected as part of the Fairness-Across-the-World module; these outcomes are publicly released with a core set of individual background variables. The remaining set of background variables will be made available upon request; other Gallup World Poll variables are subject to licensing from Gallup.

C. Outcome variables. In this subsection we describe the three main outcome variables used in the analysis.

The main outcome variable, “Belief in Selfish Rich Inequality,” is the response to the question: “Do you generally agree, disagree, or neither agree nor disagree with this statement: In (name of country of the respondent), one of the main reasons for the rich being richer than the poor is that the rich have been more selfish in life than the poor.” In case of agreement/disagreement, a follow up question asks if they agree/disagree “strongly” or “somewhat.” Respondents could also choose not to answer or state that they don’t know. The degree of agreement is coded numerically 1–5, with 5 being strong agreement and 3 is “neither agree nor disagree.” In our sample, 40% of the respondents in each country (chosen randomly) were asked the main outcome question “Belief in Selfish Rich Inequality,” in total 26,172. Out of these 0.4% refused to answer and 5.2% answered “don’t know”, giving us 24,717 responses for the main analysis. Polarization in the “Belief in Selfish Rich Inequality” is measured as the sample standard deviation in the reported belief, scaled by the maximum attainable standard deviation (which would happen if people were equally divided between “strongly disagree” (1) and “strongly agree” (5)).

All respondents were asked two attitude questions on inequality and unfairness. The variable “Current inequality is unfair” is the response to the question: “Do you generally agree, disagree, or neither agree nor disagree with this statement: In [country], the economic differences between the rich and poor are unfair.” The variable “Government should aim to reduce economic differences” is the response to the question: “Do you generally agree, disagree, or neither agree nor disagree with this statement: In [country], the national government should aim to reduce the economic differences between the rich and the poor.” These questions were asked with the same branching structure and coded in the same way as the main outcome variable about the “Belief in Selfish Rich Inequality.” Restricting attention to the subset that were asked about the “Belief in Selfish Rich Inequality,” the proportions of “don’t know”s and refusals are quite similar to those for “Belief in Selfish Rich Inequality;” we had 4.9% missing responses for “Current inequality is unfair” and 4.8% missing responses for “Government should aim to reduce economic differences.” In total, we have complete sets of answers to the three outcome questions from 23,504 respondents.

D. Other variables. In this subsection we describe the other variables used in the analysis, some that were part of the Gallup World Poll 2018 and some collected from other sources.

The variable “Belief in the role of crime” used in Figure 2b in the main paper is the response to the question: “Do you generally agree, disagree, or neither agree nor disagree with this statement: In [country], one of the main reasons for the rich being richer than the poor is that the rich have been more involved in illegal activities than the poor.” In our 60 countries, 40% of the respondents in the Gallup World Poll 2018 (chosen randomly) were asked this question, in total 24,535; we have 6.9% “don’t know”s and a total of 7.4% missing responses. For calculation of the national averages, we use the full Gallup World Poll 2018 sample without restricting to the subset that answered the question on “Belief in Selfish Rich Inequality.” Belief in mobility in Figure 2d is measured using the Gallup World Poll question “Can people in this country get ahead by working hard, or not? (yes/no).”

Individual level background information was collected as part of the Gallup World Poll 2018. Household income is calculated by Gallup asking first about “monthly [in some countries yearly] household income in local currency before taxes,” and they are asked to include all income from wages and salaries in the household, including remittances and other sources. Participants

that are unsure are provided a set of income ranges and Gallup imputes a within-range income using hot deck imputation. We normalize to household size using the OECD-standard of a square-root equivalence scale, and construct a rank ordering within each country (scaled such that a rank order of 1 is highest, 0 is the lowest household income). In 2018, income data was not collected in Venezuela. Information on education is collected using the classification: “elementary,” “secondary,” and “tertiary.” We recode to an indicator variable for “high” education, in which the “secondary” group is allocated to the “high” or “low” group such that it maximizes the size of the smallest group. We also use individual data on gender (indicator for male), age (in years), a married indicator, the number of children in household (below age 15), an immigrant status indicator, and employment status indicator, and a living-in-an-urban-environment indicator. Most individuals answered the background questions in full, and the difference between the number of answers to the “Belief in Selfish Rich Inequality” (24,717) and the number of observations supporting Figure 3b (24,301), see Table S6, is to a large extent explained by 387 Venezuelans for which we have data on “Belief in Selfish Rich Inequality” but lack income data. The remaining missing responses are due to a small number of “don’t know”s and refusals to answer about the number of children in the households. Similarly, the missing Venezuelan income responses and the missing responses about the number for children in the household account for the difference between the number of complete answers to all three main outcome variables (23,504) and the number of observations in Table 1 (23,103).

The background variables used in the country level analysis are taken from different sources. We use the Worldwide Governance Indicators (WGI) (2) for variables on institutional quality. The variable “Corruption” captures the population’s perception of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests. “Corruption” is the negative of the indicator “Control of corruption,” for robustness we also look at “Government” which is the negative of “Government Effectiveness,” “Stability” which is the negative of “Political Stability and Absence of Violence/Terrorism,” “Regulation” which is the negative of “Regulatory Quality,” “Law” which is the negative of “Rule of Law”, and “Voice and accountability” which is the negative of the “Voice and Accountability” Indicator—all from the Worldwide Governance Indicators. The variant measures of corruption used in Table S3 (in business and in government) are taken from the Gallup World Poll, with the questions “Is corruption widespread within businesses located in (country), or not? (yes/no)” and “Is corruption widespread throughout the government in (country), or not? (yes/no).” These Gallup World Poll questions on corruption were not asked in all countries, the business corruption measure is not available in Cambodia, China, Egypt or Jordan; the government corruption measure is not available in Algeria, Cambodia, China, Egypt, Jordan, Morocco or Vietnam.

We use the World Development Indicators for Gross National Income per capita, “GNI,” in each country (3) and include the logarithm of this in the analysis. We use World Income Distribution (WYD) (4, 5) for the variable “Inequality,” which is the Gini-coefficient of disposable income in each country. We do not have the inequality variable for Afghanistan. We construct the variable “Education” at the country level from the mean years of schooling (6) for 2010 (all countries except Ethiopia and Nigeria). The variable “Age” is the average age (in years) of all Gallup World Poll 2018 respondents in each country.

In the robustness analysis (only reported in Supporting Information), we also extend the analysis with the size of the shadow economy as percentage of GDP, 2015 (7), as well as the Human Development Index for 2017 reported by the United Nations Human Development Report 2020. We also include a measure of organized crime in 2018 taken from an executive opinion survey (8) and The Global Peace Index from the Institute for Economics and Peace, 2019 (9).

The Global Peace Index, the organized crime measure, and the shadow economy indicator were extracted from the Quality of Governance Standard Dataset (10). While the Global Peace Index contains information for all 60 countries in our analysis, both the organized crime measure and the shadow economy indicator miss information for Afghanistan and therefore only report values for 59 of the 60 countries in our analysis.

In the text, we compare our results to the “warmth”-indicators for rich and poor groups in the data presented by Durante et al (11). In this paper, the warmth data is not directly available, but scatter-plots of groups in warmth/competence space are available for most countries. Our reported numbers are based on a visual examination of these graphs and taking note of which group has the highest location on the warmth axis. The figures we have examined are those explicitly referenced in the paper (11) paper: those that are reported in the paper, those that are available at the Fiske lab website, and those that are separately reported for Norway and Germany in the original papers. We are not able to classify all samples because some samples seem to be missing, and some figures do not clearly identify rich and poor as groups. If the figures report groups that are conceptually close to rich/poor (such as “upper class”/“working class”) we use these categories. We rely on 44 scatter graphs, and find groups that corresponds directly or closely to a rich/poor distinction in 39 of these. In 30/39 of these graphs, we find that the rich score lower on the warmth indicator than the poor.

E. Cognitive interviews. We conducted cognitive interviews to test for comprehension. The first set of cognitive interviews were conducted between July and November 2017 in Colombia, Ecuador, Egypt, Indonesia, Kenya, Portugal, Zimbabwe, Ukraine, and Ethiopia. Respondents represented a balanced mix of important demographic characteristics including geographic location (urban/rural), gender, age, education and income. The majority of interviews were conducted at the in-country partner’s offices or at the respondent’s residence. In each country, 12 cognitive interviews were conducted. Each interview lasted about 60 minutes. Representatives from the research team were present in Colombia, Ethiopia, Indonesia, Ukraine, and Zimbabwe.

After the first set of cognitive interviews and subsequent adjustments to the survey instrument, the Gallup team conducted a second set of cognitive interviews with all the new survey questions in Bolivia, Cameroon, Germany, Italy, Kenya, Nigeria, Pakistan, Portugal, Ukraine, and Venezuela in December 2017; again interviewing a balanced mix of respondents. Ten interviews were completed per country in this round.

F. Translation, piloting and local adjustments. After the final survey instrument for the Fairness-Across-the-World module was finalized in English, translations were made and tested in the field. First, the English text was translated into the target language, and a test of this version was made on a small sample (on the order of 10-20 persons). A back-translation into English was made by an independent translator. The translation and the back-translation, together with comments on reception in the testing, sometimes about ambiguities in the target language version, were submitted to a team of two Gallup employees and one representative of the research team. Comparing the English source with the back-translated version, sometimes consulting people familiar with the languages and research practices, this process was iterated until the back translations were considered to convey the meaning of the English source version. Interviewers were instructed to follow the interview script without deviations. For some languages that are in use in more than one country, multiple translations into localized versions were made (Arabic, French, and Spanish).

Some adaptations to local customs and regulations were necessary. In China and Jordan, the question for the variable “Belief in the role of crime” could not be asked. In Jordan, the questions on “Belief in Selfish Rich Inequality,” “Current inequality is unfair,” and “Government should aim to reduce economic differences” were asked in terms of “generally speaking” rather than “In Jordan, . . .”

Also for the general Gallup World Poll 2018 questions on background characteristics, some adaptations were made. In Venezuela, it was impossible to collect income data because of hyperinflation. In a number of countries (Algeria, Egypt, Jordan, Morocco, and Vietnam), a question on the importance of religion in daily life was not asked. This variable is therefore not included in the present analysis, even though it was listed as a control variable in the pre-analysis plan. Table S8 shows that there is no practical importance of including or not including this variable on the subset of countries for which it is available (the parameter estimates on this variable are not significant and the impact on the coefficients of interest is very small).

G. Population weighting. The Gallup World Poll 2018 data include population weights to reweigh data to be nationally representative for each country, and indicators for PSUs for countries in which data were collected in clusters (face-to-face interview countries). The Gallup World Poll is based on a probabilistic sample of households (and then sub sampling individuals within the household). The population weights first account for individuals from larger households being less likely to be sampled. Second, the distribution of demographics and socioeconomic characteristics (such as age, gender, urbanicity, and education) in the sample is compared to what is available of official statistics for each country. Post-stratification weights are then constructed with iterative proportional fitting (“raking”) that ensures weighted sample statistics replicate official population statistics; as is customary (12), some trimming is applied to the weights to balance the bias vs. variance trade-off.

We apply the population weights for all the analysis of individual data and calculation of national averages. All inference accounts for the clustering at the PSU level. We weight each country equally regardless of its size or the number of respondents in the Gallup World Poll 2018. For the within-country analysis this is accomplished by rescaling the weights for each country such that they sum to the same in each of the 60 countries.

In Figure S1, we plot the weighted and non-weighted country-specific averages for four basic descriptives used in the construction of weights (age, gender, urbanicity, and higher education). For age, urbanicity, and higher education, the weighted and non-weighted averages scatter around the 45-degree line, indicating that the role of the weights is modest. For gender, the non-weighted averages are in the range of 0.34–0.61, while the weighted averages are in the reasonable range of 0.44–0.53.

H. Empirical specifications and details on the statistical analysis. This section describes details of the statistical analysis. We first comment on how we calculate standard errors for the descriptive statistics, before we detail the between-country and within-country analysis.

H.1. Descriptive statistics. Standard errors for the descriptive statistics are calculated using the R `survey` package (13). For the polarization measure, we apply the Δ -rule to the estimate of population variance provided by the `survey` package.

H.2. Between-country analysis. In the between-country analysis, we aggregate the individual level variables to country averages using the population weights. In addition, we make use of the external country level data. The external country level variables are standardized to unit variance for the 60 countries in our sample. All estimates, except where specifically noted, are estimated with ordinary least squares. p -values in the main text are calculated using two-sided Wald tests, and since outcomes are averages, we assume normality.

Figure 2a in the main paper reports from the following regression specification:

$$B_c = \alpha + \beta_x x_c + \varepsilon_c, \quad [1]$$

where B_c is the average value of “Belief in Selfish Rich Inequality” question in country c , and x_c is one of the country level characteristics: Corruption, GNI, Inequality, Age, or Education. We also report the joint specification

$$B_c = \alpha + \beta \mathbf{x}_c + \varepsilon_c, \quad [2]$$

in which \mathbf{x}_c is the full vector of these country-level explanatory variables. Estimates of the regression specifications Eq. (1) and Eq. (2) are also reported in Table S2. Results for corresponding specifications showing robustness to including HDI and the Global Peace Index as well as an alternative measure of corruption, are displayed in Table S3.

As a specification check on our use of Corruption as representing quality of governance, we run a separate analysis in which we regress “Belief in Selfish Rich Inequality” on a battery of governance indicators: Corruption, Government, Stability,

Regulation, Law, and Voice and accountability. We regress “Belief in Selfish Rich Inequality” on each of the governance indicators separately:

$$B_c = \alpha + \gamma g_c + \varepsilon_c, \quad [3]$$

where g_c is one of the governance indicators in country c . We then consider two different ways of incorporating all governance indicators simultaneously. First, we regress “Belief in Selfish Rich Inequality” on all the governance indicators jointly:

$$B_c = \alpha + \gamma \mathbf{g}_c + \varepsilon_c, \quad [4]$$

with γ_c and \mathbf{g}_c as vectors of parameters and governance indicators in country c . Second, we reduce the dimension of the governance indicators by constructing a governance index based on predictions using the first principal component from a principal component analysis, and regress “Belief in Selfish Rich Inequality” on the constructed governance indicator:

$$B_c = \alpha + \gamma_p p_c + \varepsilon_c, \quad [5]$$

where p_c is the prediction using the first principal component. Estimates of specifications Eq. (3), Eq. (4), and Eq. (5) are reported in Table S4.

In Table 1 (columns 1-2), we report how the responses to “Current inequality is unfair” and “Government should aim to reduce economic differences” relate to “Belief in Selfish Rich Inequality.” This analysis is based on the following regression specification:

$$Y_c = \alpha + \delta B_c + \boldsymbol{\xi} \mathbf{x}_c + \varepsilon_c, \quad [6]$$

where Y_c is either “Current inequality is unfair” or “Government should aim to reduce economic differences.” We report estimates of these regression specifications with and without the same set of controls as used in Eq. (2). In Table 1, column 3, we also report estimates with Lasso-selected regressors (with the selection from a quadratic form in \mathbf{x}_c). This analysis is run with the “partialling out” method (14), using 10-fold cross-fits with the `xporegress` command in Stata 16.1.

H.3. Within-country analysis. All within-country analysis includes country-specific intercepts (“fixed effects”). We refer to an individual as being indexed by i in the country c . All estimates, except where specifically noted, are estimated with population-weighted least squares. The weights are discussed in Section G. Sandwich standard errors for the linear regressions are clustered at the primary sampling unit level. p -values in the main text are calculated using two-sided Wald tests and asymptotic approximations to the distribution of the test statistics.

The “separate” specifications for Figure 3b, are of the form

$$B_{ci} = \alpha + \zeta_z z_{ci} + \theta_c + \varepsilon_{ci}, \quad [7]$$

with B_{ci} being the “Belief in Selfish Rich Inequality” of individual i in country c , z_{ci} is the relevant explanatory variable, and θ_c is a country fixed effect. The joint specification (also in Figure 3b) is of the form

$$B_{ci} = \alpha + \boldsymbol{\zeta} \mathbf{z}_{ci} + \theta_c + \varepsilon_{ci}, \quad [8]$$

with \mathbf{z}_{ci} now being a vector of explanatory variables: Income rank within country, High education, gender (male), age, a married indicator, the number of children in the household, immigrant status, employment status, and an indicator for living in an urban environment. The full set of regression estimates can be found in Table S6. Figure S6 reports the distribution of coefficients on income rank, estimated with the joint specification, for each country separately.

For the within-specifications of Table 1 (columns 4-6), the outcome Y_{ci} (“Current inequality is unfair” or “Government should aim to reduce economic differences”) is regressed on B_{ci} :

$$Y_{ci} = \alpha + \eta B_{ci} + \boldsymbol{\lambda} \mathbf{z}_{ci} + \theta_c + \varepsilon_{ci}. \quad [9]$$

We estimate both without (column 4) and with the control variables \mathbf{z}_{ci} (column 5). The full set of regression estimates can be found in Table S7b. These specifications are estimated for the two outcomes “Current inequality is unfair” and “Government should aim to reduce economic differences.” Figure S7 reports the distribution of coefficients on “Belief in Selfish Rich Inequality” estimated with the joint specification for each country separately. In Table 1, column 6, we also report estimates with Lasso-selected regressors (with the selection from a quadratic form in \mathbf{z}_{ci}). This analysis is run with the “partialling out” method (14), using 10-fold cross-fits with the `xporegress` command in Stata 16.1.

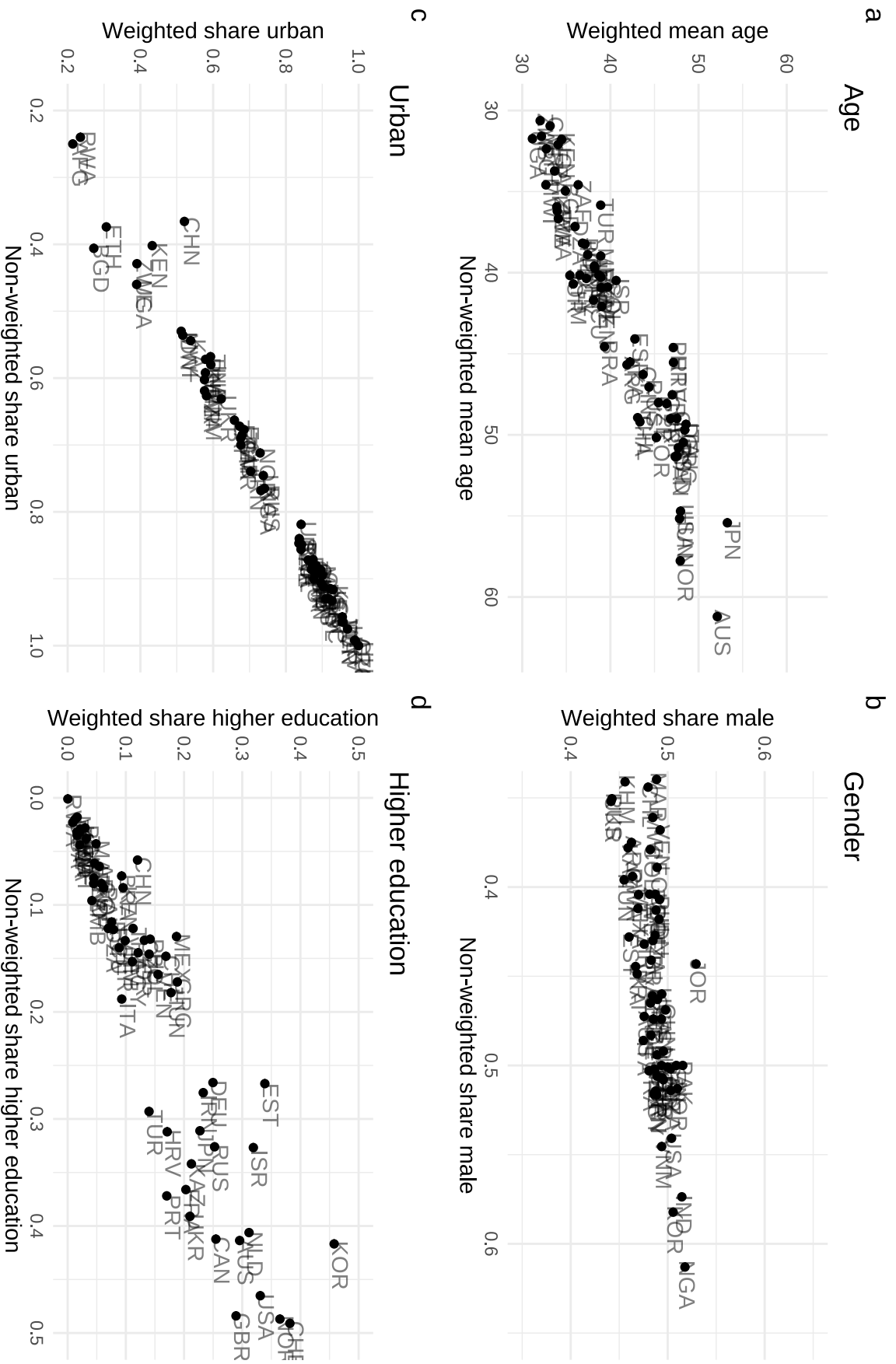


Fig. S1. The effect of weighting

Note: The figure shows the weighted and non-weighted country-specific averages for four basic descriptors - age, gender, urbanicity, and higher education.

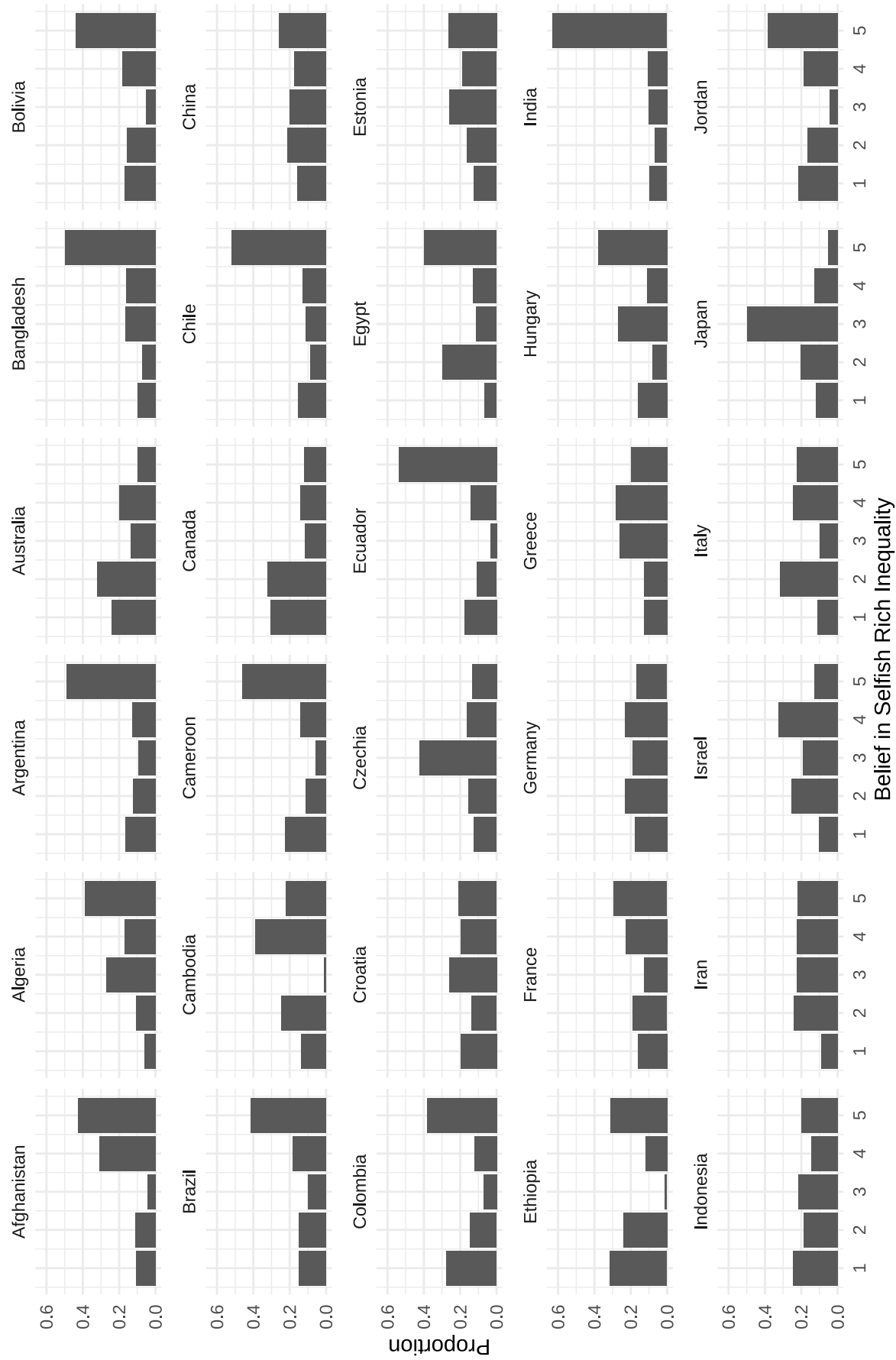


Fig. S2a. Histogram of "Belief in Selfish Rich Inequality"

Note: Histograms of "Belief in Selfish Rich Inequality" responses. The value 1 corresponds to "strongly disagree" and 5 to "strongly agree." The estimated proportions at each level account for population weights.

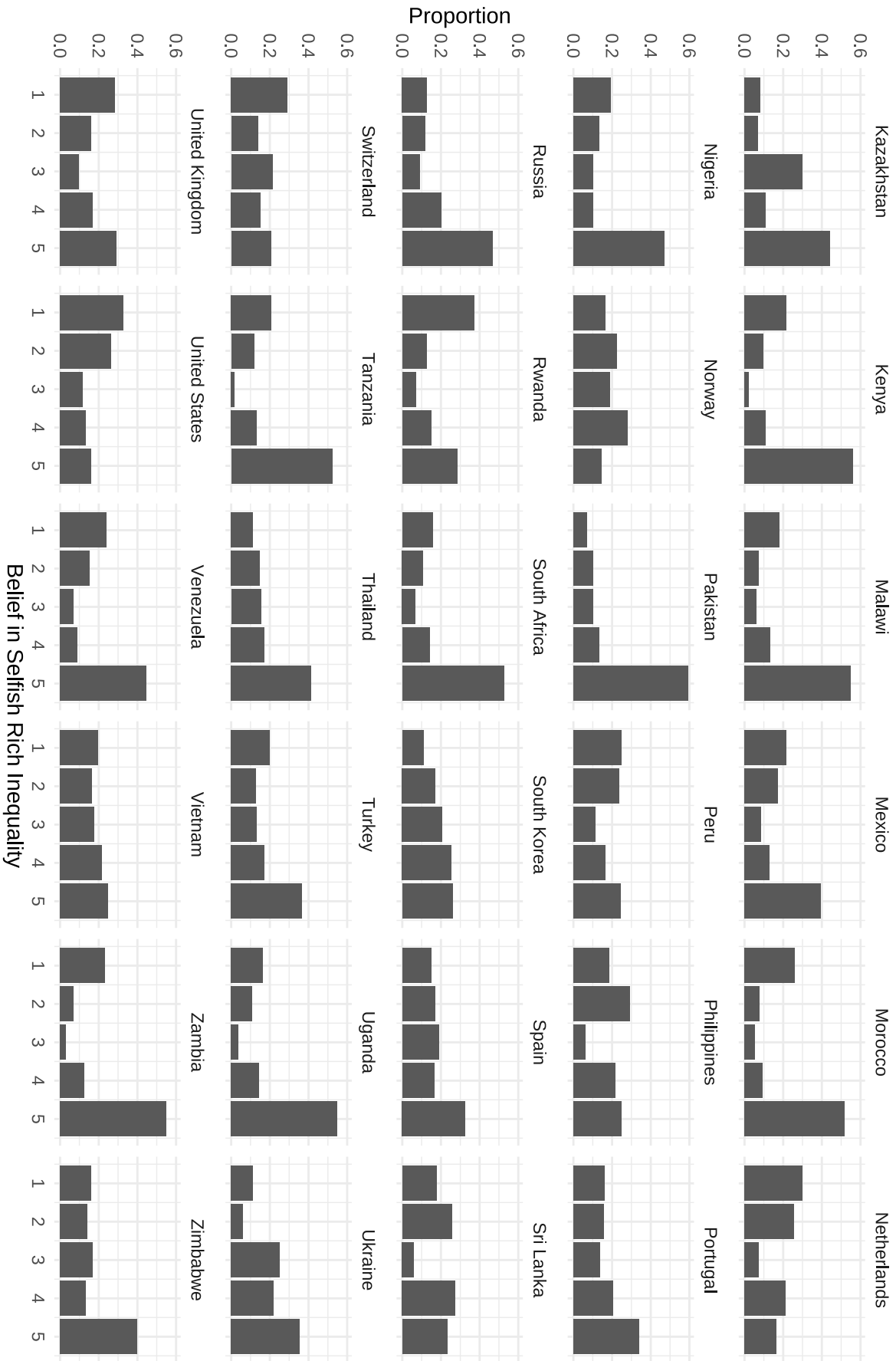
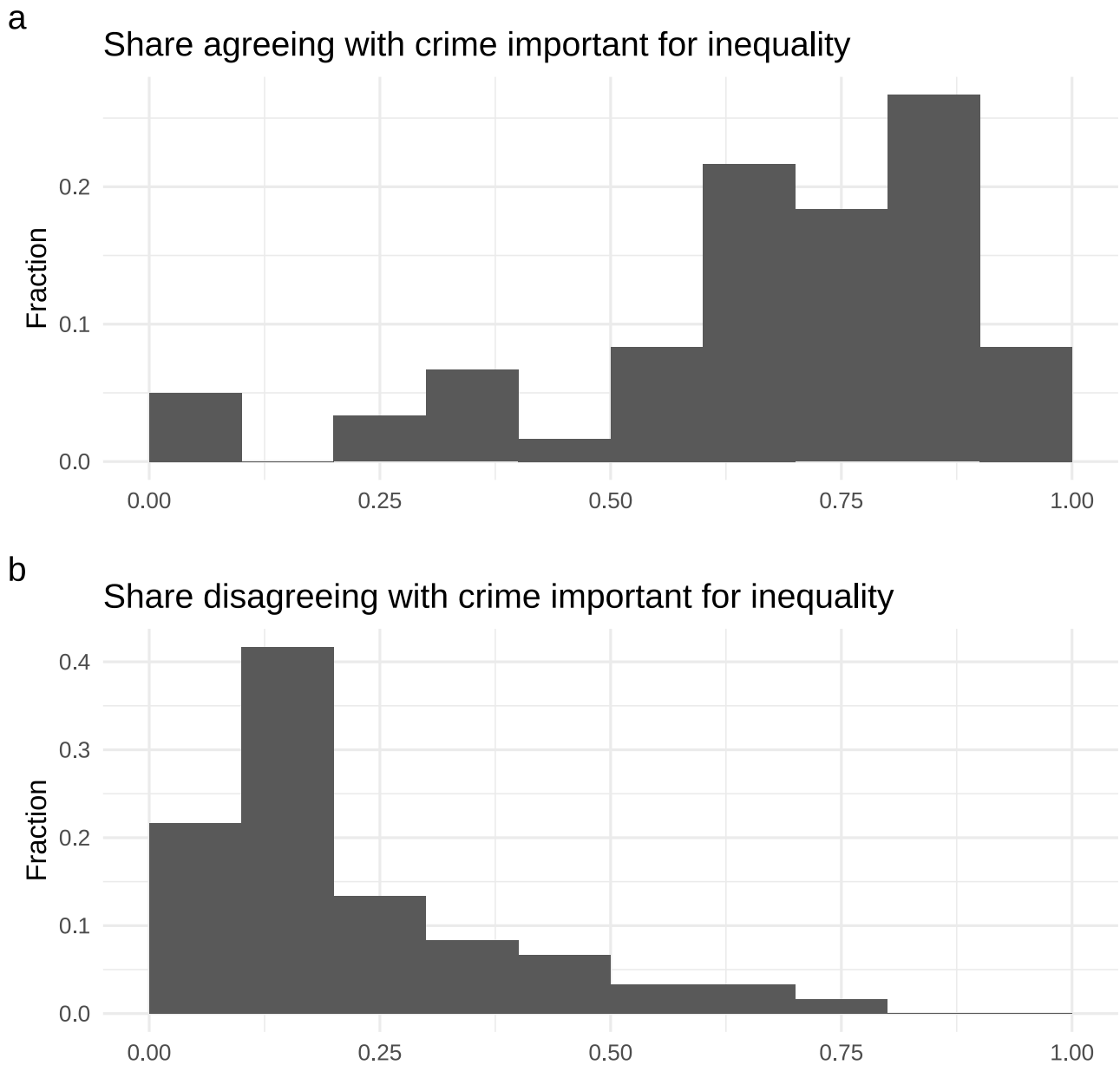


Fig. S2b. Histogram of “Belief in Selfish Rich Inequality” (cont.)

Note: Histograms of “Belief in Selfish Rich Inequality” responses. The value 1 corresponds to “strongly disagree” and 5 to “strongly agree.” The estimated proportions at each level account for population weights.



Both panels: Among those who believe in Selfish Rich Inequality

Fig. S3. Distribution of support for the role of crime among those with “Belief in Selfish Rich Inequality”

Note: Among those with “Belief in Selfish Rich Inequality”, the two panels show histograms of shares of those that agree (panel a) and disagree (panel b) with illegal activity being a main cause of inequality. Those that neither agree nor disagree are excluded from both panels.

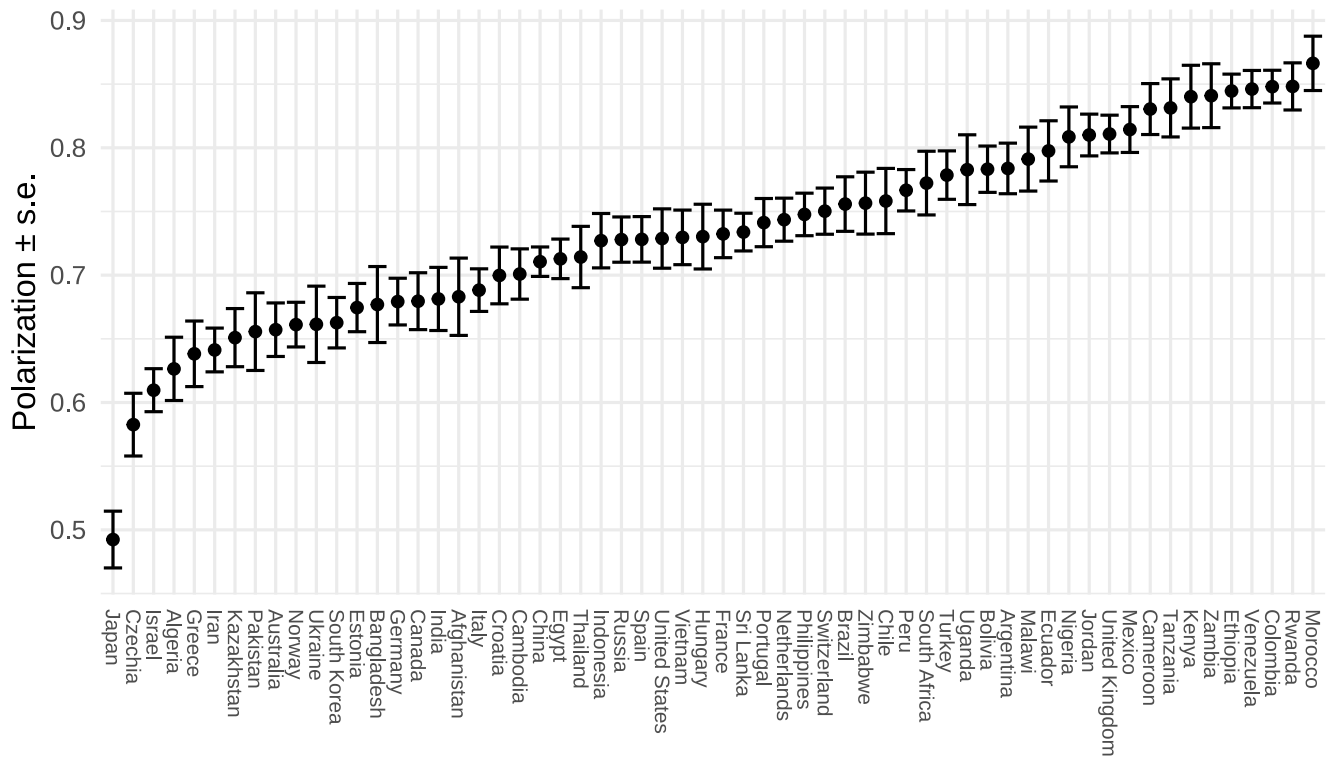


Fig. S5. Polarization in “Belief in Selfish Rich Inequality”

Note: The figure shows the polarization in “Beliefs in the Selfish Rich Inequality” for each country. Polarization is measured as the standard deviation of the belief normalized to a [0, 1] scale. Standard errors account for PSU clustering.

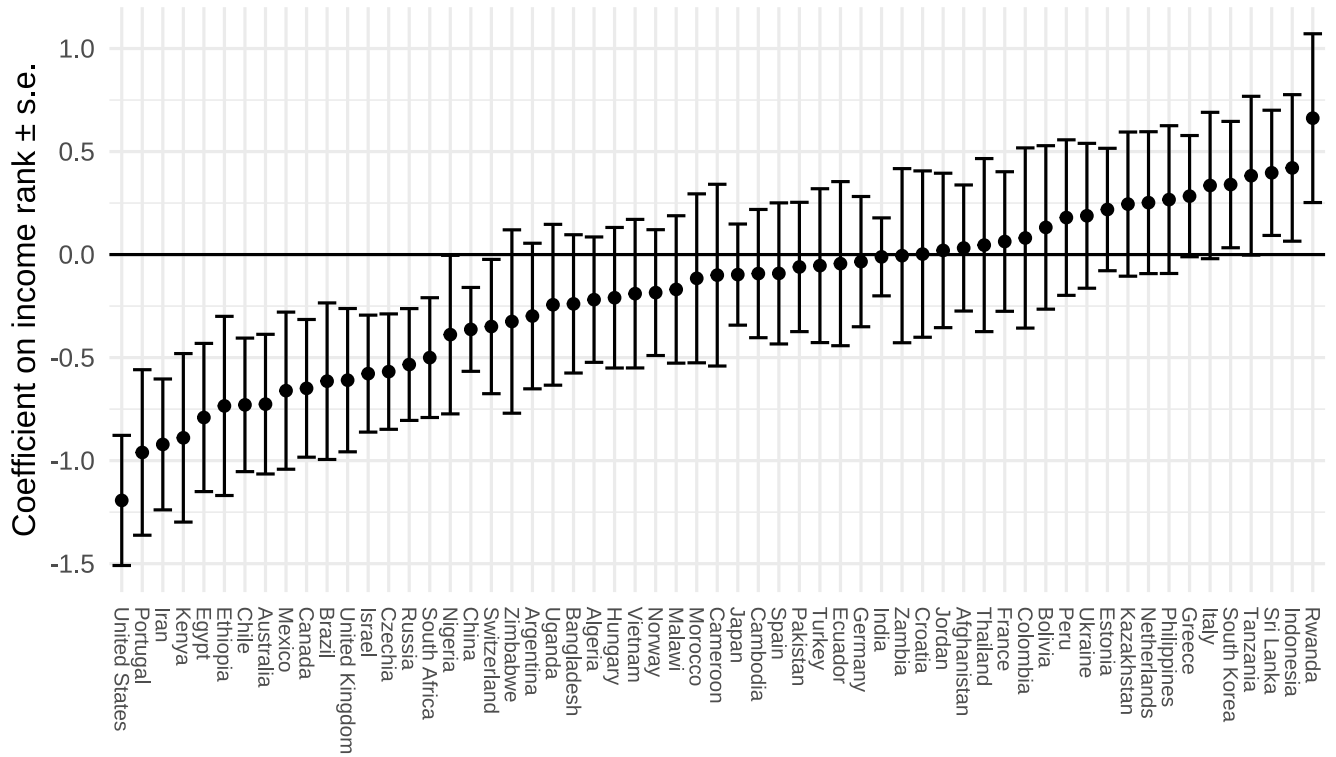


Fig. S6. The relationship between “Belief in Selfish Rich Inequality” and income rank in each country

Note: The figure shows the coefficient on income rank in a regression of “Belief in Selfish Rich Inequality” background variables (see Table S6, column 10, for the full set of background variables). The regressions are estimated separately for each country. Sandwich standard errors account for PSU clustering.

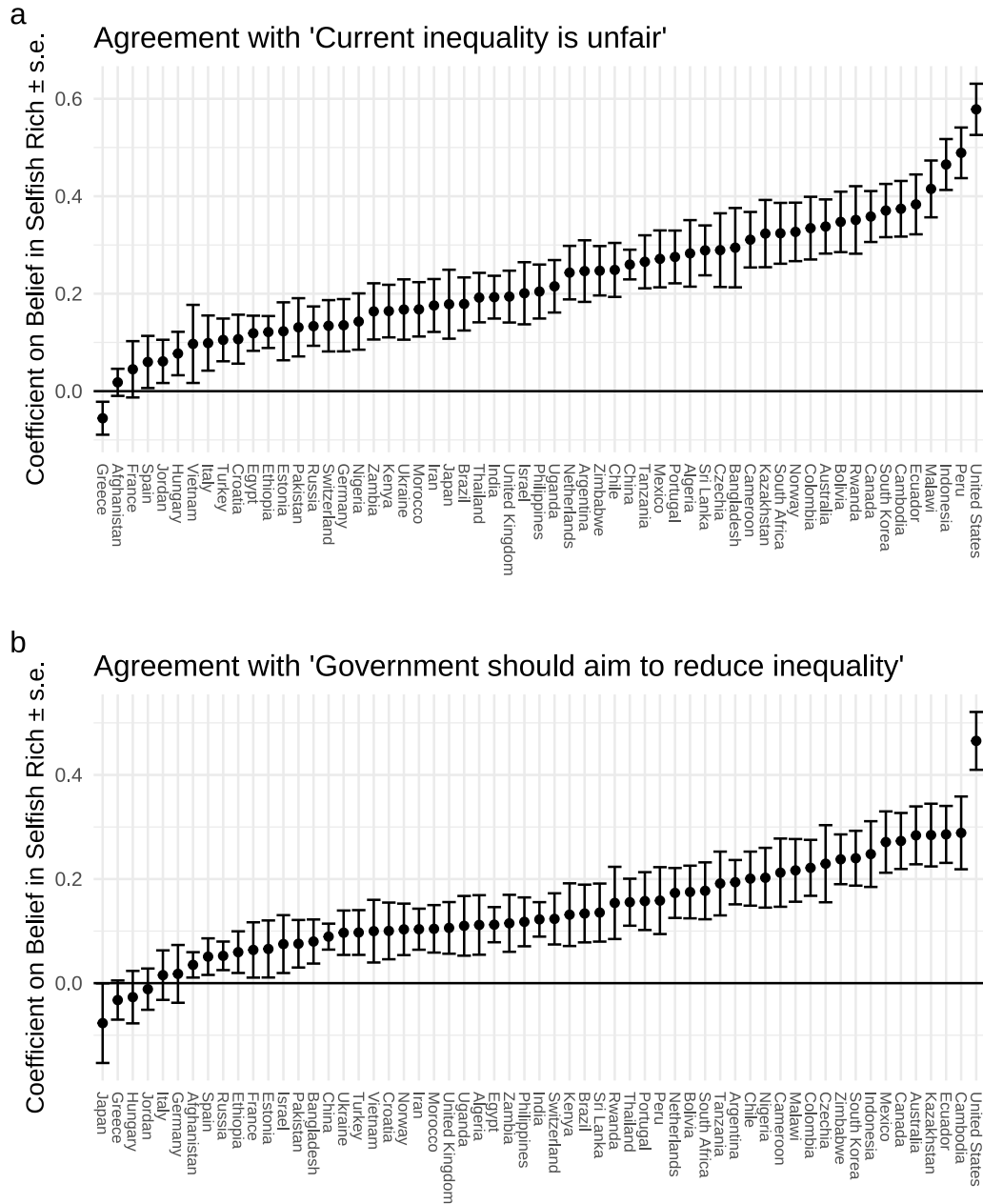


Fig. S7. The relationship between attitudes and “Belief in Selfish Rich Inequality” in each country

Note: The figure shows the coefficients on “Belief in Selfish Rich Inequality” in regressions of Agreement of “Current inequality is unfair” on “Belief in Selfish Rich Inequality” and background variables (panel a) and of Agreement with “Government should aim to reduce inequality” on “Belief in Selfish Rich Inequality” and background variables (panel b) (see Table S7b, columns 2 and 4, for the full set of background variables). The regressions are estimated separately for each country. Sandwich standard errors account for PSU clustering.



Fig. S8. Are the rich less charitable?

Note: The figure shows the relationship between average “Belief in Selfish Rich Inequality” in each country (first axis) and the correlation coefficient between the response to the question of whether the respondent last month donated money to charity and household income rank (second axis), calculated within country (with bars indicating standard error).

Table S1. Sample in the Fairness-Across-the-World countries

Country	Languages	Mode	N (WP)	N (Belief in Selfish Rich Inequality)	Exceptions
Afghanistan	Dari, Pashto	f2f	1000	400	Gender-matched sampling was used during the final stage of selection
Algeria	Arabic	f2f	1000	344	Sparsely populated areas in the far South were excluded, representing approximately 10% of the population.
Argentina	Spanish	f2f	1000	404	Those living in dispersed rural population areas were excluded. This represents about 5.7% of the population.
Australia	English	phone	1001	393	None.
Bangladesh	Bengali	f2f	1000	358	Three hill districts in Chittagong (Rangamati, Khagrachori & Bandarban) and one district in Rangpur (Gaibandha) were excluded for security reasons. The excluded area represents approximately 3% of the population.
Bolivia	Spanish	f2f	1000	377	Very remote areas that lack regular public transport were excluded due to difficulty of access. The exclusions represent approximately 11% of the population.
Brazil	Portuguese	f2f	1000	384	People living in indigenous lands and dangerous areas where the safety of interviewers was threatened were excluded. The excluded areas represent approximately 1% of the adult population.
Cambodia	Khmer	f2f	1000	361	None.
Cameroon	French, English, Fulfulde	f2f	1000	382	The following Arrondissements were excluded due to security concerns from Boko Haram attacks: Goulfey, Blangoua, Fotokol, Zina, Darak, Hile-Alifa, Waza, Bourrha, Mogode, Koza, Mayo Moskota, Mora, Kolofata, and Tokombere. Departement of Manyu, and some localities in the Northwest and Southwest were also excluded due to insecurity. Neighborhoods with less than 50 household were also excluded from the sampling. In total, the geographic exclusions represent approximately 16% of the population.
Canada	English, French	phone	1009	413	None.
Chile	Spanish	f2f	1000	410	A few remote and sparsely populated municipalities were excluded due to difficulties of access. The excluded areas represent less than 1% of the population.
China	Chinese	f2f	3649	1279	Xinjiang and Tibet were excluded from the sample. The excluded areas represent less than 5% of the population of China
Colombia	Spanish	f2f	1000	369	None.
Croatia	Croatian	f2f	1000	381	None.
Czechia	Czech	f2f	1000	370	None.
Ecuador	Spanish	f2f	1000	378	None.
Egypt	Arabic	f2f	1000	329	Frontier governorates (Matruh, Red Sea, New Valley, North Sinai, and South Sinai) were excluded, as they are remote and represent a small proportion of the population of the country. The excluded areas represent less than 2% of the total population.
Estonia	Estonian, Russian	f2f	1000	367	None.

Table S1. Sample in the Fairness-Across-the-World countries (cont.)

Country	Languages	Mode	<i>N</i> (WP)	<i>N</i> (Belief in Selfish Rich Inequality)	Exclusions
Ethiopia	Amharic, English, Oromo, Tigrinya	f2f	1000	411	Six of the nine zones of the Somali region (Degehabur, Warder, Korahe, Fik, Gode, Afder) were excluded due to accessibility, security issues, and nomadism. Additionally, in the Somali region, Liben Zone, Moyale and Dolo Ado Woreda were excluded because of security concerns. All the wordera in Benshangul region, Kamashi Zone were also excluded for security reasons. The exclusions represents 4% of the population of Ethiopia.
France	French	phone	1000	396	None.
Germany	German	phone	1000	374	None.
Greece	Greek	f2f	1000	359	None.
Hungary	Hungarian	f2f	1000	377	None.
India	Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Odia, Punjabi, Tamil, Telugu	f2f	3000	1139	Excluded population living in Northeast states and remote islands. The excluded areas represent less than 10% of the population.
Indonesia	Bahasa Indonesia	f2f	1000	338	None.
Iran	Farsi	phone	1002	387	None.
Israel	Hebrew, Russian, Arabic	f2f	1010	395	The sample does not include the area of East Jerusalem. This area included in the sample of Palestinian Territories.
Italy	Italian	phone	1000	394	None.
Japan	Japanese	phone	1003	394	Landline RDD, excluded 12 municipalities near the nuclear power plant in Fukushima. These areas were designated as not-to-call districts due to the devastation from the 2011 disasters. The exclusion represents less than 1% of the population of Japan.
Jordan	Arabic	f2f	1002	394	None.
Kazakhstan	Russian, Kazakh	f2f	1000	372	None.
Kenya	English, Swahili	f2f	1000	367	Mandera County, Wajir County, Marsanit County, Baringo County, and Garissa County (except some areas in Garissa and Lagdera districts) were excluded due to accessibility and/or security issues. The exclusions represent 8% of the population.
Malawi	Chichewa, English, Tumbuka	f2f	1000	407	None.
Mexico	Spanish	f2f	1034	383	None.
Morocco	Moroccan Arabic	f2f	1001	324	Excludes the Southern provinces. The excluded area represents approximately 3% of the population.
Netherlands	Dutch	phone	1002	392	None.
Nigeria	English, Hausa, Igbo, Pidgen English, Yoruba	f2f	1000	394	The states of Adamawa, Borno and Yobe were under a state of emergency due to Boko Haram activity and were excluded for safety and security reasons. These states represent 7% of the population.
Norway	Norwegian	phone	1000	399	None.
Pakistan	Urdu	f2f	1000	356	Did not include AJK, Gilgit-Baltistan. The excluded area represents approximately 5% of the population. Gender-matched sampling was used during the final stage of selection.
Peru	Spanish	f2f	1000	364	None.

Table S1. Sample in the Fairness-Across-the-World countries (cont.)

Country	Languages	Mode	<i>N</i> (WP)	<i>N</i> (Belief in Selfish Rich Inequality)	Exclusions
Philippines	Filipino, Iluko, Hiligaynon, Cebuano, Maranao, Waray, Sorsoganon	f2f	1000	410	Some areas were excluded from the sampling frame, due to security concerns (such as barangays considered as war zones in Marawi) and areas that are remote or inaccessible. The excluded population from these areas represent less than 1% of the population.
Portugal	Portuguese	phone	1003	381	None.
Russia	Russian	f2f	2000	745	People living in very remote or difficult to access areas were excluded. The excluded areas represent approximately 5% of the population.
Rwanda	English, Kinyarwanda	f2f	1000	368	None.
South Africa	Afrikaans, English, Sotho, Xhosa, Zulu	f2f	1000	390	None.
South Korea	Korean	phone	1015	378	None.
Spain	Spanish	phone	1000	378	None.
Sri Lanka	Sinhala, Tamil	f2f	1109	422	None.
Switzerland	German, French, Italian	phone	1000	387	None.
Tanzania	English, Swahili	f2f	1000	371	None.
Thailand	Thai	f2f	1000	365	Three provinces in the South region (Pattani, Narathiwat, and Yala) were excluded for security reasons; in addition, a few districts in other provinces were excluded. The excluded areas in total represent less than 4% of the population.
Turkey	Turkish	f2f	1000	369	None.
United Kingdom	English	phone	1000	384	None.
Uganda	Ateso, English, Luganda, Runyankole	f2f	1000	381	Three districts in the North region were excluded for security reasons: Kotido, Moroto Nakapiripirit. The excluded areas represent approximately 4% of the population.
Ukraine	Russian, Ukrainian	f2f	1000	346	Due to situation in the East of Ukraine, occupied and conflict areas in Donetsk and Lugansk oblasts were excluded. The excluded areas represent approximately 9% of the population.
United States	English, Spanish	phone	1004	384	None.
Venezuela	Spanish	f2f	1000	387	The Federal Dependencies were excluded due to remoteness and difficulty of access. Exclusions represent less than 1% of the population.
Vietnam	Vietnamese	f2f	1012	305	Eleven provinces were excluded: An Giang, Dac Lak, Dien Bien, Gia Lai, Ha Giang, Ha Tinh, Kien Giang, Kon Tum, Nghe An, Quang Binh, Thanh Hoa. The excluded areas represent approximately 19% of the population.
Zambia	Bemba, English, Lozi, Nyanja, Tonga	f2f	1000	366	None.
Zimbabwe	English, Shona, Ndebele	f2f	1000	385	None.

Note: For each of the 60 countries in the Fairness-Across-the-World module, the interview languages used are given, the mode of the interview—either phone, both mobile and landline, or face-to-face (reported as “f2f”), the total number of respondents, the total number of respondents who provided responses on “Belief in Selfish Rich Inequality,” (reported in the “*N* (Belief in Selfish Rich Inequality)” column) and exclusions (if any) that were made from random sampling the whole population of the respective country.

Table S2. Between-country analysis: Relationship between “Belief in Selfish Rich Inequality” and country level characteristics

	Belief in Selfish Rich Inequality					
	(1)	(2)	(3)	(4)	(5)	(6)
Corruption	0.238*** (0.039)					0.158** (0.068)
GNI		-0.205*** (0.042)				-0.035 (0.114)
Inequality			0.075 (0.049)			-0.003 (0.044)
Age				-0.209*** (0.042)		-0.060 (0.097)
Education					-0.211*** (0.043)	-0.022 (0.081)
Num.Obs.	60	60	59	60	58	57
R^2	0.387	0.287	0.039	0.298	0.301	0.426

Note: The coefficients are reported in Figure 2 of the main paper. “Corruption” is the negative of the “control over corruption index” of the Worldwide Governance Indicators (2), “GNI” is the log of per capita Gross National Income from the World Development Indicators (3), “Inequality” is the Gini index from the World Income Data (15), “Age” is country mean age from Gallup World Poll 2018, and “Education” is years of schooling from (6). All these explanatory variables have been standardized to unit variance. Standard errors in parentheses (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S3. Between-country analysis: Variant explanatory variables

	Belief in Selfish Rich Inequality					
	Including HDI		Including GPI		Business corruption	Government corruption
	(1)	(2)	(3)	(4)	(5)	(6)
Corruption		0.210*** (0.060)		0.221*** (0.054)	0.220*** (0.045)	0.204*** (0.048)
Human Development Index	-0.195*** (0.043)	-0.037 (0.060)				
Global Peace Index			-0.175*** (0.045)	-0.026 (0.054)		
Constant	3.343*** (0.043)	3.343*** (0.039)	3.343*** (0.044)	3.343*** (0.039)	3.344*** (0.044)	3.337*** (0.048)
Num.Obs.	60	60	60	60	56	53
R^2	0.260	0.391	0.208	0.389	0.309	0.257

Note: The table reports the results from regressions of Belief in Selfish Rich Inequality on the Human Development index (HDI) and the Global Peace index on corruption. HDI is the Human Development Index 2017 (16) and standardized; GPI is the Global Peace Index 2018 (9) also standardized and scaled such that larger values means more peace. Columns 6 and 7 report regression results for variant definitions of corruption. In column 5, corruption is defined as “Business corruption,” the average of an indicator variable coding the response to the Gallup World Poll question “Is corruption widespread within businesses located in (country), or not?” In column 6, corruption is defined as “Government corruption,” the average of an indicator variable coding the response to the Gallup World Poll question “Is corruption widespread throughout the government in (country), or not?” In some countries these questions were not asked. All corruption measures are standardized to unit variance. Standard errors in parentheses (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S4. Between-country analysis: The relationship between “Belief in Selfish Rich Inequality” and the WDI governance indicators

	Belief in Selfish Rich Inequality							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Corruption	0.238*** (0.039)						0.418** (0.158)	
Government		0.229*** (0.040)					0.001 (0.170)	
Stability			0.200*** (0.043)				0.077 (0.062)	
Regulation				0.223*** (0.041)			0.213 (0.141)	
Law					0.217*** (0.041)		-0.324* (0.180)	
Voice and accountability						0.167*** (0.045)	-0.147* (0.077)	
Governance index								0.228*** (0.040)
Constant	3.343*** (0.039)	3.343*** (0.040)	3.343*** (0.043)	3.343*** (0.041)	3.343*** (0.041)	3.343*** (0.045)	3.343*** (0.038)	3.343*** (0.040)
Num.Obs.	60	60	60	60	60	60	60	60
R ²	0.387	0.357	0.272	0.339	0.322	0.191	0.460	0.353

Note: The regression estimates of the relationship between “Belief in Selfish Rich Inequality” and the six governance indicators of the World Bank are discussed (but not explicitly reported) in the main paper. “Corruption” is the negative of the indicator “Control of corruption,” “Government” is the negative of “Government Effectiveness,” “Stability” is the negative of “Political Stability and Absence of Violence/Terrorism,” “Regulation” is the negative of “Regulatory Quality,” “Law” is the negative of “Rule of Law,” and “Voice and accountability”—all from the Worldwide Governance Indicators. “Governance index” is the first principal component of all indicators taken together, that is the linear combination of the six governance indicators that accounts for as much variation in the indicators as possible. All these explanatory variables have been standardized to unit variance. Standard errors in parentheses (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S5. Different measures of crime and corruption

	Belief in Selfish Rich Inequality				
	(1)	(2)	(3)	(4)	(5)
Corruption	0.238*** (0.039)			0.264*** (0.075)	
Shadow economy		0.197*** (0.043)		0.036 (0.063)	
Organized crime			0.104** (0.049)	-0.086 (0.053)	
Crime for gain index					0.207*** (0.042)
Constant	3.343*** (0.039)	3.335*** (0.043)	3.335*** (0.048)	3.342*** (0.039)	3.335*** (0.042)
Num.Obs.	60	59	59	59	59
R^2	0.387	0.268	0.075	0.405	0.295

Note: The regression estimates of the relationship between “Belief in Selfish Rich Inequality” and the two variant measures of crime are discussed (but not explicitly reported) in the main paper. The size of the shadow economy as percentage of GDP, 2015 (7), the measure of organized crime in 2018 is taken from an executive opinion survey (8). Both measures are standardized to unit variance. The crime for gain index is the first principal component of the Corruption measure, the shadow economy measure, and the organized crime measure (and standardized). Standard errors in parentheses (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S6. Within-country analysis: The relationships between “Belief in Selfish Rich Inequality” and background variables

	Belief in Selfish Rich Inequality									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Income rank (within country, 0–1)	–0.319*** (0.042)									–0.236*** (0.045)
High education (relative, d)		–0.234*** (0.026)								–0.166*** (0.028)
Male (d)			0.063*** (0.023)							0.080*** (0.024)
Age (Z-score)				0.079*** (0.013)						0.054*** (0.014)
Married (d)					0.065*** (0.025)					0.014 (0.026)
n of children (Z-score)						0.023 (0.017)				0.011 (0.018)
Immigrant (d)							–0.051 (0.059)			–0.056 (0.059)
Employed (d)								–0.029 (0.024)		0.005 (0.026)
Urban (d)									–0.066** (0.032)	–0.007 (0.032)
Num.Obs.	24 301	24 301	24 301	24 301	24 301	24 301	24 301	24 301	24 301	24 301
R ²	0.068	0.069	0.065	0.067	0.065	0.064	0.064	0.064	0.065	0.073

Note: The coefficients on income rank, high education, gender (male) and age are reported in Figure 3 in the main paper (specifications 1, 2, 3, 4, and 10). All data from the Gallup World Poll 2018. Income rank of the household within country (using the square-root equivalence scale), ranging from lowest: 0 to highest: 1; indicators for high education relative to the national distribution of reported education; respondent being female; being married; age; being an immigrant; being employed; and living in an urban environment. High education, gender (male), marriage, immigration status, employment, and urban environment are coded binary 0/1 while age and the number of children are standardized to unit variance. All specifications with country fixed effects. Estimates are population weighted, with weights scaled such that each country has equal weight. Sandwich standard errors in parentheses account for PSU clustering and weighting (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S7a. Between-country analysis: The relationships between attitudes and “Belief in Selfish Rich Inequality”

	Agreement with “Current inequality is unfair”		Agreement with “Government should aim to reduce inequality”	
	(1)	(2)	(3)	(4)
Belief in Selfish Rich Inequality(1–5)	0.620*** (0.124)	0.919*** (0.152)	0.482*** (0.096)	0.707*** (0.121)
Corruption		-0.011 (0.077)		-0.007 (0.061)
GNI		0.089 (0.124)		0.106 (0.099)
Inequality		-0.015 (0.048)		-0.012 (0.038)
Age		0.065 (0.105)		0.066 (0.084)
Education		0.027 (0.088)		-0.053 (0.070)
Constant	1.834*** (0.416)	0.794 (0.511)	2.581*** (0.324)	1.801*** (0.406)
Num.Obs.	60	57	60	57
R ²	0.302	0.448	0.302	0.442

Note: The coefficients on “Belief in Selfish Rich Inequality” from these specifications are reported in Table 1 in the main paper (columns 1 and 2). “Corruption” is the negative of the “control over corruption index” of the Worldwide Governance Indicators (2), “GNI” is the log of per capita Gross National Income from the World Development Indicators (3), “Inequality” is the Gini index from the World Income Data (15), “Age” is country mean age from Gallup World Poll 2018, and “Education” is years of schooling from (6). All these explanatory variables have been standardized to unit variance. Standard errors in parentheses (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S7b. Within-country analysis: The relationships between attitudes and “Belief in Selfish Rich Inequality”

	Agreement with “Current inequality is unfair”		Agreement with “Government should aim to reduce inequality”	
	(1)	(2)	(3)	(4)
Belief in Selfish Rich Inequality	0.228*** (0.008)	0.231*** (0.008)	0.148*** (0.007)	0.150*** (0.007)
Income rank (within country, 0–1)		–0.058 (0.040)		–0.090** (0.037)
High education (relative, d)		0.121*** (0.024)		0.107*** (0.023)
Male (d)		–0.038* (0.021)		–0.020 (0.019)
Age (Z-score)		0.003 (0.012)		0.001 (0.012)
Married (d)		–0.002 (0.022)		–0.031 (0.022)
n of children (Z-score)		–0.004 (0.016)		–0.010 (0.015)
Immigrant (d)		–0.110** (0.051)		–0.052 (0.049)
Employed (d)		0.011 (0.022)		0.018 (0.021)
Urban (d)		0.069** (0.028)		–0.003 (0.027)
Num.Obs.	23 103	23 103	23 103	23 103
R ²	0.164	0.167	0.106	0.108

Note: The coefficients on “Belief in Selfish Rich Inequality” from these specifications are reported in Table 1 in the main paper. All data from the Gallup World Poll 2018. Income rank of the household within country (using the square-root equivalence scale), ranging from lowest: 0 to highest: 1; indicators for high education relative to the national distribution of reported education; respondent being female; being married; age; being an immigrant; being employed; and living in an urban environment. High education, gender (male), marriage, immigration status, employment, and urban environment are coded binary 0/1 while age and the number of children are standardized to unit variance. All specifications with country fixed effects. Estimates are population weighted, with weights scaled such that each country has equal weight. Sandwich standard errors in parentheses account for PSU clustering and weighting (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table S8. Within-country analysis: Restricting to the subsample for which we have the “Importance of religion in daily life” variable

	Belief in Selfish Rich		Agreement with “Current inequality is unfair”		Agreement with “Government should aim to reduce inequality”	
	(1)	(2)	(3)	(4)	(5)	(6)
Belief in Selfish Rich Inequality(1–5)			0.241*** (0.008)	0.241*** (0.008)	0.155*** (0.008)	0.155*** (0.008)
Religion important in daily life (d)		0.014 (0.032)		-0.039 (0.028)		0.033 (0.026)
Income rank (within country, 0–1)	-0.236*** (0.047)	-0.235*** (0.047)	-0.065 (0.041)	-0.068 (0.041)	-0.107*** (0.039)	-0.104*** (0.039)
High education (relative, d)	-0.148*** (0.029)	-0.148*** (0.029)	0.132*** (0.025)	0.132*** (0.025)	0.121*** (0.024)	0.121*** (0.024)
Male (d)	0.080*** (0.025)	0.080*** (0.025)	-0.037* (0.022)	-0.039* (0.022)	-0.013 (0.020)	-0.011 (0.020)
Age (Z-score)	0.057*** (0.014)	0.057*** (0.015)	0.004 (0.013)	0.006 (0.013)	0.000 (0.012)	-0.002 (0.012)
Married (d)	0.010 (0.027)	0.010 (0.027)	-0.001 (0.023)	0.001 (0.023)	-0.036 (0.022)	-0.037* (0.023)
Immigrant (d)	-0.064 (0.061)	-0.065 (0.061)	-0.104* (0.054)	-0.102* (0.054)	-0.047 (0.052)	-0.048 (0.052)
Employed (d)	0.008 (0.027)	0.009 (0.027)	0.004 (0.023)	0.003 (0.023)	0.018 (0.021)	0.019 (0.021)
Urban (d)	-0.005 (0.034)	-0.005 (0.034)	0.059** (0.029)	0.059** (0.029)	-0.014 (0.028)	-0.013 (0.028)
	0.012 (0.019)	0.012 (0.019)	-0.004 (0.017)	-0.003 (0.017)	-0.015 (0.016)	-0.015 (0.016)
Num.Obs.	22 605	22 605	21 965	21 965	21 978	21 978
R ²	0.076	0.076	0.161	0.161	0.108	0.108

Note: The joint specifications corresponding to Figure 3 and Specification a5 and b6 in Table 1 in the main paper. All data from the Gallup World Poll 2018. Religion important in daily life is coded binary (0: no, 1: yes). Income rank of the household within country (using the square-root equivalence scale), ranging from lowest: 0 to highest: 1; indicators for high education relative to the national distribution of reported education; respondent being female; being married; age; being an immigrant; being employed; and living in an urban environment. High education, gender (male), marriage, immigration status, employment, and urban environment are coded binary 0/1 while age and the number of children are standardized to unit variance. All specifications with country fixed effects. Estimates are population weighted, with weights scaled such that each country has equal weight. Sandwich standard errors in parentheses account for PSU clustering and weighting (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

SI Dataset S1 (WP_selfishness_public)

Openly available subset of Gallup World Poll 2018 used in the analysis: Main outcome measures and a subset of controls. Available at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/ZEGFIT>

SI Dataset S2 (BSRI_external_data)

External data at the country level. Available at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/ZEGFIT>

SI Dataset S3 (Durante2017)

Visual coding of warmth/wealth from Durante et al paper (11). Available at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/ZEGFIT>

Code is available at <https://doi.org/10.5281/zenodo.5656922>, using R 4.1.2 and Stata 16.1.

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