



Inequality perception and preferences globally and locally - correlational evidence from a large-scale cross-country survey

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Abstract

Using a large, representative survey involving 31 countries, we establish stylized facts about the attitudes toward cross-country economic inequality and their correlates. This question has been surprisingly understudied for a topic so important to our globalized 21st century. We present a simple and intuitive theoretical framework for thinking about cross-country inequalities. Then, we show that people's perceived and desired levels of domestic inequality and their assessment of their relative socio-economic status closely correlate with how they think about cross-country economic differences. The objective socio-economic status of the individual matters less. Though the impact of country-level variables is less pronounced than individual characteristics, concern about cross-country economic inequality is stronger in more affluent countries and countries with lower income inequality. Our findings illustrate that attitudes toward international economic inequality are intrinsically linked to within-country characteristics, especially to attitudes toward domestic economic inequality.

Keywords Cross-country economic inequality · Perceived inequality · Desired inequality · Subjective socio-economic status

1 Introduction

An increasing number of problems require nations to solve them together, such as the fragility of global supply chains, pandemics, pollution, and climate change. Neither the burdens of these issues nor the capacities to carry them are distributed equally across countries.

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Therefore, overcoming these challenges will require sharing those burdens, just as people within the same country share burdens through cooperation, taxation, and redistribution.

Social sciences have studied extensively how the benefits and hardships are distributed within a society (inequality of wealth, income, talent, opportunity, and good fortune in general),¹ how people think about these differences (perceptions of inequality),² what they believe should be done about them (policy attitudes towards inequality),³ and how their perceptions and the formation of preferences over them are linked.⁴ Yet, we know surprisingly little about the same questions in a cross-country dimension. Our goal is to fill some of these gaps. In particular, we study how the perception (and the desired level of) of cross-country economic inequality is linked to the perception of (and the desired level of) domestic economic inequality.

In this paper, we develop a simple and intuitive framework that describes how people formulate their opinions on cross-country inequality. In particular, we assume that people do not have good first-hand information on the income of their (foreign and domestic) out-groups; rather, they have probabilistic beliefs that they anchor at their own actual and perceived economic status.⁵ We also assume that views on fair distribution are also carried through a similar process to the international domain. We test the proposed mechanism using a large cross-country survey database, the Social Inequality V survey of the International Social Survey Project (ISSP Research Group 2019, henceforth abbreviated as ISSP V). This database is representative on the level of the 31 participating countries, establishing stylized facts in the process. In doing so, we use a novel measure of perceived and desired domestic inequality that we base on Kuhn (2015).⁶

We are only aware of two other studies that examined similar questions (Nair 2018; Fehr et al. 2022). Though both can infer causality through their experimental design, they are single-country studies (one conducted in the US, the other in Germany). Though purely descriptive and correlational, our paper aims to widen the cross-country perspective by including representative samples from 31 countries. Another related study (Almås et al. 2022) looks at country-level correlates of one particular explanation of domestic inequality (that the rich are selfish) and how the prevalence of this explanation affects domestic policy preferences. In turn, our study focuses on the correlates of perceptions of and desire for cross-country (CC) economic inequality in general.

ISSP V is the first iteration of the ISSP surveys to feature a question specifically asking if the respondent thinks economic differences between rich and poor countries are too large. We show how the answer to this question is related to individual socioeconomic status and to coming from countries with varying levels of inequality and development. We then look at how the *subjective* assessment of these variables affects attitudes towards international inequality and how the latter is related to other individual traits, such as gender, education, and frequency of social contacts with people from one's economic out-groups (Willis et al. 2022).

¹ Lakner and Milanovic (2016), Milanovic (2011, 2015) Aiyar and Ebeke (2020)

² See, for example, Cruces et al. (2013), Engelhardt and Wagener (2014), Engelhardt and Wagener (2018), Bublitz (2017), Gimpelson and Treisman (2018), Bavetta et al. (2019), Knell and Stix (2020).

³ Norton and Ariely (2011) Niehues (2014), Page and Goldstein (2016), Karadja et al. (2017)

⁴ Iacono and Ranaldi (2021) argue that biased perceptions of inequality can decrease demand for inequality; Fehr et al. (2022) find that correcting the biased perception of domestic inequality increases demand for domestic redistribution.

⁵ See, e.g., Knell and Stix (2020); Iacono and Ranaldi (2021).

⁶ We produce a detailed description in a companion paper (Gáspár et al. 2022), but produce a short overview in Section 3.3

The main result of our paper is that subjective economic factors (i.e., perceived and desired inequality of one's own country, subjective socioeconomic status within one's own country) move much more closely together with attitudes towards cross-country economic inequality than measures of actual domestic economic status on either the national or the individual level (i.e., GNP/capita, the income Gini-coefficient, objective socioeconomic status). Concern about cross-country inequality (CCCI from now on) is significantly stronger for individuals who perceive that their domestic level of inequality is high, desire low levels of domestic inequality, and have low subjective SES.

Once we take into account subjective variables, actual economic status barely correlates with beliefs about international inequality. Hence, the finding of Gimpelson and Treisman (2018) (that perceived, rather than actual inequality determines attitudes towards domestic inequality) can be extended to the international domain: perception of domestic inequality and socioeconomic status, rather than their actual levels do a better job at explaining perceptions of and attitudes towards international inequality as well.

If we perform the same analysis country-by-country, very similar results emerge. Therefore, the correlations mentioned above should be recognized as stylized facts.

The paper proceeds as follows: We first present our argument on why and how subjective economic variables should affect CCCI. Then, having introduced the database, we show that the data are consistent with our argument: first, we show partial correlations; then show that the correlations also hold simultaneously, even after introducing a range of controls and fixed effects; then we show that they are also present at the level of the individual countries, and are robust to a range of alternative specifications and variable definitions. Then, we draw conclusions from the results.

2 Thinking about cross-country inequality

Cross-country inequality is an abstract and complex concept. To assess whether economic differences across countries are excessive, one must first consider the number of countries and their respective income levels. Then one needs to understand how national income levels translate into living standards within each country, as the notion of a fair distribution of income applies primarily to individuals rather than abstract entities like states.

The scarce available evidence (Fehr et al. 2022) suggests that people know very little about incomes in an international comparison. However, they tend to have a strong opinion on the subject matter.⁷ There is a large and interdisciplinary body of literature (e.g., Knell and Stix 2020 in economics and Willis et al. 2022 or Jachimowicz et al. 2023 in social psychology) which argues that, instead of reasoning using such complex set of facts, people use simple heuristics to form their beliefs about economic variables, such as inequality in general, or their relative standing in their society (or in their smaller social circles) in particular. We determine how rich we are and how unequal our society is using information from our immediate surroundings. Our surroundings, however, produce correlated signals on the matter (a fact that we often neglect; see Enke and Zimmermann 2019)

By the same logic, in the absence of first-hand experience with, or knowledge of, cross-country (CC) inequality, people may project their perceptions and attitudes about their nation onto the world at large. This kind of attitude spillover has been demonstrated in different areas, including the formation of attitudes towards novel technology (Akin et al. 2019), new

⁷ In the ISSP V data set (ISSP Research Group 2019), 96% of all respondents had a non-missing answer for the question on cross-country economic inequality.

agricultural products (Ho et al. 2020), and brands entering brand alliances (Simonin and Ruth 1998). Thus, it is common for people to project well-formed attitudes (here, domestic inequality) onto new objects (here, international inequality) about which they have limited familiarity.

To highlight this argument, we present a simple formal framework on how people might form attitudes towards international inequality. In particular, we assume three things: First, instead of exact information, people have probabilistic beliefs about inequality both within- and across countries. Second, people form the latter based on the former.⁸ Finally, we assume that people formulate their views on the fair cross-country division of income based on the level of desired domestic inequality. Alternatively, people who would prefer an equal world would also prefer their own country to be equal.

Consider that there are two countries, one rich ($c = 1$) and one poor ($c = 2$), each consisting of a rich ($i = 1$) and a poor ($i = 2$) group. All are of equal population size. We pick an observer from one of the four groups of citizens who have to answer whether the income difference between the rich and poor countries is too large. That is, whether

$$Y_1 - Y_2 > f, \quad (1)$$

where $Y_{1,2}$ refers to national income in the rich and the poor country, respectively, and f is the income difference that the observer would deem fair. We can decompose national income in country c as $Y_c = y_{c1} + y_{c2}$; national income being equal to the sum of the income of the rich and the poor.

According to our first assumption, the observer i from country c knows their group's level of income y_{ci} but does not know either $y_{ci'}$ (the income of the other domestic group), or $Y_{c'}$ (the national income of the other country). We also assume they are sure which group they belong to (not necessarily correctly). Besides these pieces of information, they have probabilistic beliefs about the income ratio between the domestic poor and rich ($0 < p_1 < 1$) and that of the income ratio between the poor and the rich country ($0 < p_2 < 1$). These need not have the same realizations across different observers. Crucially, they have no direct information on either the income of the other group or that of the other nation. If this is the case, the evaluation of cross-country inequality from Inequality (1) looks differently by country and group. In particular, there are four hypothetical types of observers, and each faces a different version of Inequality (1), which we present in Table 1.

This simple setting yields two important insights.

Proposition 1: subjective standing affects CC inequality assessment In this setting, subjective assessment of one's income and national income matters in assessing cross-country inequality. In particular, observers who consider themselves poorer and think they live in a poor country are likelier to think that cross-country inequalities are too large. The first part of the claim follows directly from the assumption that the observer only precisely knows their group's income. For the rich group, $(1 + p_1)$ ranges from 1 to 2, while for the poor group, $(1 + \frac{1}{p_1})$ ranges between 2 and infinity. If two observers have the same *actual* income and fairness views, the one that *believes* themselves to be poor is always more likely to think that cross-country inequalities are too large. The same reasoning applies to $(1 - p_2)$ and $(\frac{1}{p_2} - 1)$.

Proposition 2: perception of domestic inequality affects CC inequality assessment In this simple framework, p_1 fully captures one's perception of domestic inequality. In particular,

⁸ That is, perceived international (in)equality is a function $p_2 = f(p_1)$ of domestic (in)equality, in other words, that perceived international inequality is anchored at perceived domestic inequality (Tversky and Kahneman 1974).

Table 1 CC inequality condition by country and group

	Rich country (c=1)	Poor country (c=2)
Rich group (i=1)	$y_{11}(1 + p_1)(1 - p_2) > f$	$y_{21}(1 + p_1)\left(\frac{1}{p_2} - 1\right) > f$
Poor group (i=2)	$y_{12}\left(1 + \frac{1}{p_1}\right)(1 - p_2) > f$	$y_{22}\left(\frac{1}{p_1} + 1\right)\left(\frac{1}{p_2} - 1\right) > f$

Notes: The table shows the condition by which each observer determines if CC inequalities are too large. The left-hand side corresponds to the level of inequality observed; the right-hand side corresponds to the level they deem fair. y_{ic} is the actual income of an observer from country c and group i ; p_1 is the perceived domestic income ratio, p_2 is the perceived cross-country national income ratio

we can express the subjective perceived Gini coefficient as $G^p = \frac{1}{p_1+1} - \frac{1}{2}$, which is monotonically decreasing in p_1 on the latter’s domain and ranges from 0 (at $p_1 = 1$, perfect perceived equality) and 0.5 (at $p_1 = 0$, perceived perfect inequality).⁹ Up to a first-degree approximation around 0 in fact $G^p \approx \frac{1}{2} - p_1$, so p_1 really just measures G^p with the opposite sign. The result is that perception of domestic inequality enters observers’ assessment of perceived CC inequality.

The first-order effects are different for the two groups, as $1 + p_1$ is decreasing in G^p while $\left(1 + \frac{1}{p_1}\right)$ is increasing in it (the rich who think domestic inequality is low and the poor who think inequality is high are more likely to care about CC inequality). The intuition is that the rich who think inequality is low have a higher perception of *average* national income (thinking that the poor are not so poor), and so do the poor who think inequality is higher (thinking that the rich are ultra-rich).

However, from our second assumption, it follows that $\frac{\partial p_2}{\partial p_1} > 0$, that is, the perception of international (in)equality is formulated based on the perception of domestic (in)equality. Importantly, the left-hand side of the inequality is a decreasing function of p_2 for all four groups. In practice, if this link is strong enough, every group’s assessment of CC-inequalities becomes an increasing function of perceived domestic inequality G^p . See Appendix A.1 for the exact conditions.

Now, we turn to the third assumption: People formulate their cross-country fairness views based on their desired domestic inequality. In particular, we assume that the right-hand side of each inequality in Table 1 takes a form that is analogous to the left-hand side; that is, they consider p'_1 as the desired income ratio between the domestic poor and the rich and p'_2 as the desired income ratio between the poor and the rich country:

Proposition 3: Income level does not matter when evaluating CC inequality once the subjective assessment of one’s position has been taken into account This follows obviously from the fact that y_{ic} is on both sides of the inequality in Table 2, so we can divide both sides with it. The intuition is that if every belief about inequality and every desired level of inequality is anchored at one’s income, then a *ceteris paribus* change in income would entail an equal change in both perceived and desired inequalities and these would cancel each other out in thinking about CC inequality.

Proposition 4: Desired domestic inequality affects CC inequality assessment Again, we can define $G^d \approx \frac{1}{2} - p'_1$, the desired domestic Gini coefficient. This enters the inequalities in Table 2 with the opposite sign as G^p . That is, differently for the rich and the poor in the same country as a first order effect, and the second order effect depends on $\frac{\partial p'_2}{\partial p'_1}$. The overall

⁹ The Gini coefficient cannot go above 0.5 because we assumed that there are as many rich as there are poor, which means that the two countries are not too unequal.

Table 2 CC inequality condition by country and group with desired inequality

	Rich country ($c=1$)	Poor country ($c=2$)
Rich group ($i=1$)	$y_{11}(1 + p_1)(1 - p_2) >$ $> y_{11}(1 + p'_1)(1 - p'_2)$	$y_{21}(1 + p_1) \left(\frac{1}{p_2} - 1 \right) >$ $> y_{21}(1 + p'_1) \left(\frac{1}{p'_2} - 1 \right)$
Poor group ($i=2$)	$y_{12}(1 + \frac{1}{p_1})(1 - p_2) >$ $> y_{12}(1 + \frac{1}{p'_1})(1 - p'_2)$	$y_{22}(\frac{1}{p_1} + 1) \left(\frac{1}{p_2} - 1 \right) >$ $> y_{22}(\frac{1}{p'_1} + 1) \left(\frac{1}{p'_2} - 1 \right)$

Notes: The table shows the condition by which each observer determines if CC inequalities are too large. The left-hand side corresponds to the level of inequality observed; the right-hand side corresponds to the fair level. group i and country c ; p_1 is the perceived domestic income ratio, p_2 is the perceived cross-country national income ratio. p'_1 is the desired domestic income ratio, and p'_2 is the observer's desired cross-country national income ratio

effect is negative if cross-national fairness views are sufficiently closely linked to domestic fairness views. Those who desire lower domestic inequality are more likely to think that CC inequalities are high.

To sum up, this simple framework yielded four testable predictions:

- (1) subjective assessment of one's domestic status should be correlated with their assessment of CC inequality;
- (2) it is *only* one's subjective status that should predict the assessment of CC inequality (i.e., whether observers think about themselves and their country as rich or poor);
- (3) perception of excessive CC inequality should be correlated with the perception of domestic inequality;
- (4) perception of excessive CC inequality should be correlated with the desired level of domestic inequality;

We test these predictions using the ISSP V data. With these, we can infer subjective desired and perceived domestic inequality at the individual level and observe respondents' subjective socio-economic status.

3 Data and descriptive statistics

3.1 The main data source

We use the ISSP V dataset (the version available in March 2023), containing the responses of 46,993 individuals from 31 countries who filled out the questionnaire on social inequalities. Data collection occurred between November 2018 and May 2022.¹⁰

The country with the biggest sample is the Philippines ($N = 4250$), and the smallest is Finland ($N = 966$). In terms of relative sample size (i.e., relative to the population of the

¹⁰ 62.8% of respondents were interviewed before the pandemic. In 17 countries, data collection ended before February 2020; in 13 countries, it started afterward. The only country where the pandemic cross-cut data collection is Australia, where 75% of the data was collected before the onset of the pandemic. We are, therefore, neither concerned about the pandemic's effect on our results (country fixed-effects should absorb its impact) nor can we exploit it for identification (there is virtually no within-country variation in exposure in our data).

country), the United States has the smallest sample (5.6 observations per million Americans), and Iceland has the largest (329.9 observations per a hundred thousand Icelanders); the median is Hungary (104.5 observations per million Hungarians). European countries are over-represented (18 out of 31), but all continents are represented by at least one country.¹¹

The national survey samples are designed to be representative of the demographics of the participating countries.¹² The questionnaire contains various questions on attitudes, perceived and actual socio-economic status, and redistributive preferences. It has been extensively used to study the relationship between perceived and actual domestic inequality (Niehues 2014; Gimpelson and Treisman 2018). We drop respondents from the data set who have not reported their income or have not responded to the questions on perceived inequality (our essential variables of interest). Upon doing this, our sample shrinks to 32472 observations. Most of the sample loss (9067 observations) happens due to a lack of income reporting. Table 3 shows that the general demographic pattern of the sample is not affected by this sample loss. We also replicate the main tables of the analysis after imputing missing incomes based on countries and ISCO codes. The results remain statistically indistinguishable, so we are not concerned about selection (see Appendix A.2, Table 3).

3.2 The dependent variable

The most relevant novel feature of ISSP V for our research is a block of statements on perceived international economic differences to which respondents may state their agreement on a 5-point scale. In particular, our primary variable of interest is the response to the following question:

“Present economic differences between rich and poor countries are too large.” (Q11a)

Throughout the rest of the paper, we refer to this as the “concern about cross-country inequality” (CCCI) question. We recode the responses so that 0 represents neutrality, 2 corresponds to complete agreement, and -2 corresponds to complete disagreement. The bulk of the paper revolves around correlating the responses to this measure to perceived and desired measures of domestic economic inequality and own status.

3.3 Drivers of preferences for international inequality

Perceived and desired domestic inequality We use a novel method to measure desired and perceived inequality on the individual level by calculating perceived and desired Gini coefficients (see Gáspár et al. 2022). For every respondent, we first calculate the estimated earnings of the upper class and the estimated earnings of the lower class. To do this, we rely on the following ISSP question:

“We would like to know what you think people in these jobs actually earn. Please write in how much you think they usually earn each [YEAR / MONTH / FORTNIGHT / WEEK], [BEFORE /AFTER] taxes. Many people are not exactly sure about this, but your best guess will be close enough. This may be difficult, but it is very important. So please try.” (Q2.)

¹¹ The Americas are represented by Chile, Suriname, the US, and Venezuela; Africa by South Africa; West Asia by Israel; East Asia by Japan and Taiwan; Southeast Asia by Thailand and the Philippines; and Oceania by New Zealand and Australia.

¹² In most countries, the sample is representative of the adult population of any nationality who resides in private households within the country. Exceptions are Australia, Chile, Denmark, Israel, Italy, the Philippines, Sweden, Thailand, and Taiwan on the one hand, which only include adults who possess citizenship. On the other hand, Germany, Denmark, Iceland, Japan, Norway, and New Zealand are exceptions because their sample represents the population living in private and institutional households.

Table 3 Descriptive statistics (whole data set and the study sample)

	(1) Mean ISSP (s.d.)	(2) Mean study (s.d.)
CCCI	1.111 (0.856)	1.123 (0.857)
Female	0.534 (0.499)	0.519 (0.500)
Age of respondent	49.17 (17.92)	48.84 (17.15)
Years of full-time schooling	12.41 (4.872)	12.82 (4.652)
Religious service attendance: (0-7)	2.261 (2.232)	2.326 (2.252)
Ideology: -2 (Left) +2 (Right)	0.0330 (1.048)	0.00433 (1.056)
Home: -2 (most urban) +2 (most rural)	-0.367 (1.250)	-0.376 (1.248)
Frequently meets richer (0-7)	3.880 (2.214)	4.000 (2.107)
Frequently meets poorer (0-7)	4.526 (2.269)	4.762 (2.113)
SSES	5.303 (1.780)	5.350 (1.789)
Observations	46993	32258

Notes: The table shows the raw means and standard deviations of the variables of interest in the ISSP V data set. CCCI refers to “Concern about Cross-Country Inequality” and is the dependent variable of the analysis

We proxy the respondent’s estimate of upper-class income as the average of the estimated earnings of a doctor, a CEO, and a cabinet minister (Q2a, Q2b, and Q2e, respectively). The proxy for the respondent’s estimate of lower-class income is the average of the estimated earnings of a shop assistant and an unskilled factory worker (Q2c and Q2d, respectively). We proxy the subjective earnings of the middle class as the average of the previous two measures.

¹³

We then infer how the respondent thinks about class structure in their country using the “shape of society” questions. The exact question is the following:

“These five diagrams show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes [COUNTRY] . . . (Q15a)”

The respondent then has to choose a shape from a set of sample figures constructed from seven horizontal rectangles of varying size that best describes their society (see Appendix A.2 Fig. 1 for the template). We assume their response describes how they perceive the relative sizes of their country’s upper, middle, and lower classes. We calculate the size of each bar relative to the smallest and then the area of each bar relative to the area of the whole figure. We take the lowermost two bars as the respondent’s estimate of the size of the lower class,

¹³ Even though there is cross-country variation in the type of earnings asked in the survey, the relative earnings are still comparable across countries.

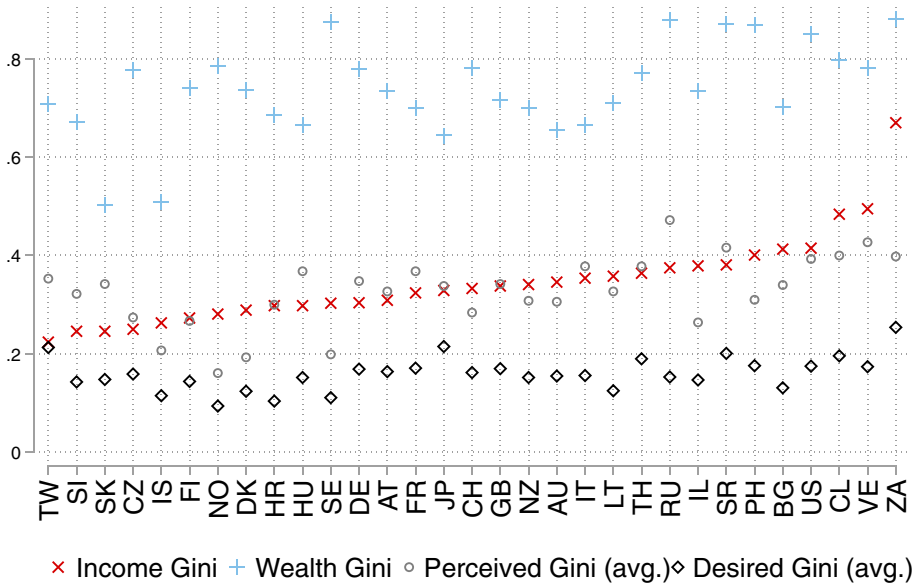


Fig. 1 Objective and subjective measures of economic inequality by country *Notes:* The figure shows the income and wealth Gini coefficients of ISSP V countries along with the estimated country averages of perceived domestic economic inequality and desired domestic economic inequality estimated for every respondent in the ISSP. The source of the country level variables is the World Bank database (from 2019 or the most recent data point, if 2019 is not available) and the Credit Suisse Global Wealth Databook (2021) for wealth inequality

the uppermost two bars as the respondent’s estimate of the size of the upper class, and the middle three bars correspond to the estimate of the size of the middle class.

We calculate the perceived national income shares for each class from the three perceived class sizes and the three perceived income levels, from which we calculate a twofold-subjective perceived Gini coefficient. This is an abstract measure consistent with the concrete views held by the respondent and captures the latter in a single number. The perceived earnings and shape of society questions have their counterparts asking what earnings and the society shape the respondent would deem desired. We repeat the procedure with these questions to arrive at a twofold-subjective desired Gini coefficient.

This method builds on Kuhn (2015) but loosens the assumptions found there. Kuhn (2015) takes the “objective” class structure of a society as given and calculates a subjective Gini coefficient using the actual share of high and low earners combined with the respondents’ assessment of how much the rich and the poor make.¹⁴ In contrast, we combine individuals’ subjective assessment of the class structure with their assessment of the pay structure (hence the name “twofold-subjective”). We gave a detailed description of the new method and the properties of this statistic in Gáspár et al. (2022). In Appendix Fig. 2, we plot how the twofold-subjective Gini coefficient is related to the measure introduced by Kuhn (2015). We show the means, the standard deviations, and the histograms of the twofold-subjective inequality variables by ISSP countries in Table 1 and Fig. 3 in Appendix A.2.

¹⁴ To be precise, Kuhn (2015) used the sample share of high and low earners, which, in the case of a representative sample, is an unbiased estimate of their population share.

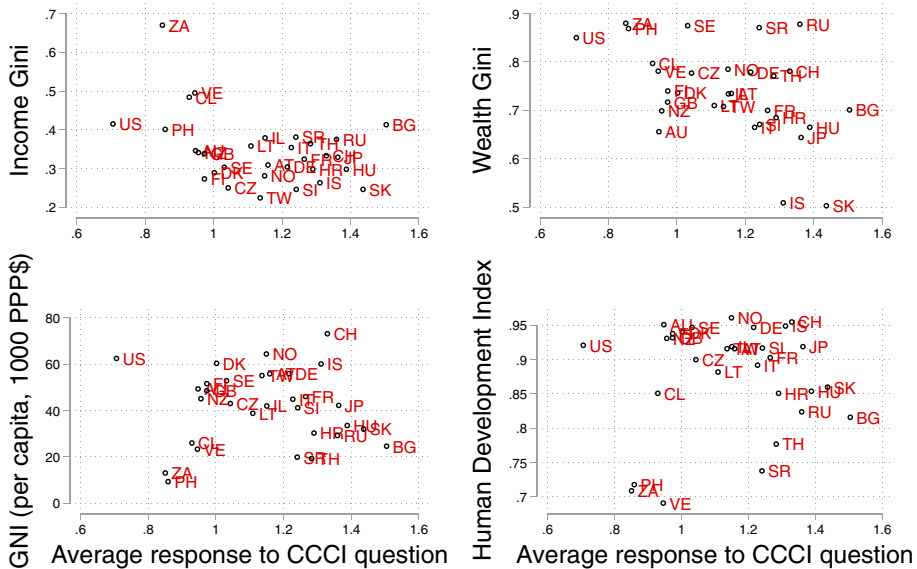


Fig. 2 Country-level correlates of concern about cross-country inequality *Notes:* The figure shows the country's average response to the CCCI question in ISSP V on the horizontal axis of each figure ("Present economic differences between rich and poor countries are too large," from -2 for "completely disagree" to 2 for "completely agree") and the country-level covariate on the vertical axes

Country-level variables We obtain the most recent country-level income Gini estimates from the World Income Inequality Database (WIID).¹⁵ From the different estimates, we always use the most reliable one (as categorized by WIID). The most unequal country in the sample is South Africa (by far), with a Gini coefficient of 0.67. The most equal is Taiwan (0.224). The median country is Switzerland (0.3327).

We proxy national incomes with per capita gross national income corrected for differences in purchasing power, which we obtain from the World Bank (Bank 2023). There were no recent data for Venezuela (either on income inequality or national income), so in their case, we impute the corresponding variables using the most recent available data and ad-hoc corrections.

Objective Socio-Economic Status (OSES) To measure objective socio-economic status, we calculate the percentile rank of every respondent in their own country in terms of per capita income in their household. Income is not measured the same way in ISSP countries; in each country, data collectors asked the question in a way that would be most recognizable for the respondents (i.e., how other local surveys usually pose the question). The questions differ in frequency (respondents in most countries report monthly incomes, except for Australia, Japan, New Zealand, Norway, and the US, which report yearly incomes) and taxation (about 60% of the countries report pre-tax income; the rest report net incomes). Importantly, as the variation is on the country level, this does not affect the comparison of percentile ranks of individuals across countries.

In the robustness checks, we also perform the analyses using two alternative income measures. First, we substitute the percentile rank of household income with the percentile

¹⁵ Using wealth Gini coefficients (from the 2021 Credit Suisse Global Wealth Databook) as an alternative measure did not affect the results.

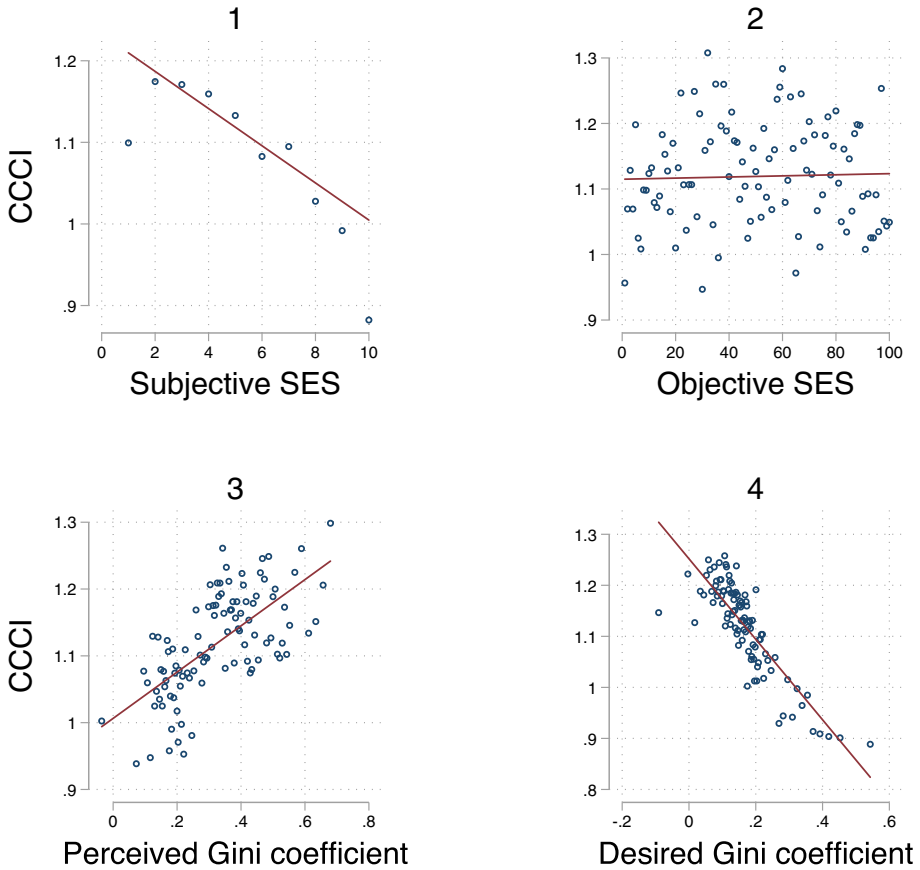


Fig. 3 Partial correlations *Notes:* The figure shows binned scatterplots where we plot the average responses to CCCI against the main explanatory variables. The estimated slopes of the lines are -0.02 (subjective SES, top left, standard error: $.002$), 0.00 (objective SES, top right, s.e.: $.000$), $.35$ (perceived Gini, bottom left, s.e.: $.029$), -0.79 (desired Gini, bottom right, s.e.: 0.045). Including country fixed effects does not change the correspondences, which in that case become -0.02 ($.002$), 0.00 ($.000$), 0.48 ($.031$), and -0.56 ($.048$), respectively

rank of the income of the individual. The two might be very different in countries, for example, where women have a much lower labor market activity rate.¹⁶ The results do not change. In a second, unreported robustness check, we convert incomes to international dollars (i.e., the domestic purchasing power equivalent of 1 US dollar) and calculate the percentile rank of income within the whole data set; we use this as a proxy (albeit an imperfect one) for the global relative income rank. While we can harmonize yearly in monthly incomes between countries, it is impossible to harmonize pre-tax and after-tax incomes between 31 countries given the available information, hence this is not part of the main analysis. The results are nevertheless similar and are available upon request.

Subjective Socio-Economic Status (SES) We contrast objective economic standing to the respondent’s answer to the subjective status question, the MacArthur scale of subjective

¹⁶ We thank an anonymous reviewer for this suggestion.

social status (Adler et al. 2000), which asks where the respondent would put themselves on a 10-level ladder within their own country.¹⁷

Other controls We also look at individual characteristics available in the ISSP that might indirectly affect how people think about cross-country inequalities. These are political orientation, gender, age, years of schooling, frequency of attendance at religious services, location of residence (urban or rural), and the frequency at which they meet people who are richer or poorer than themselves. Some of these variables affect the information set available to the respondents (schooling, frequency of meeting richer and poorer), and others are strong correlates of political orientation (women, the young, the more secular, the more urban are more likely to be left-wing). Descriptive statistics of these explanatory variables can be found in the Table 2 in Appendix A.2.

3.4 Descriptive statistics and selectivity

Table 3 shows descriptive statistics from the respondents averaged across all countries. The first row shows the average answer to concern about economic inequality (CCCI), our dependent variable. People on average tend to agree that cross-country economic differences are too large: the mean of the CCCI question is 1.1 on a -2 to 2 scale. We report demographic information in the subsequent rows: there are more women in the sample; the average age is 49 years; the average level of education is equivalent to completed high school (12 years). Respondents typically attend religious services a couple of times a year; do not lean either to the political left or to the political right; are somewhat more likely to be urban; and are more likely to meet people who are poorer rather than richer than themselves. In terms of subjective social standing the respondents on average think they are on the 5th scale of the social ladder. The whole ISSP data set (Column 1) and the study sample (Column 2) are almost identical in all regards.

We now examine how the main country-level covariates relate to CCCI, our dependent variable. First, we look at objective and subjective measures of inequality. Figure 1 plots the different Gini coefficients we use throughout the paper. In all cases, wealth inequality (blue +) is much higher than income inequality (red X), but the two are strongly correlated. The other two measures we plot are the country-wise averages of the twofold-subjective perceived Gini coefficients and the desired Gini coefficients of individual respondents.

We need to note the following things: first, in line with previous research (e.g., Norton and Ariely 2011), we find that residents of most countries “underestimate” domestic inequality according to our metric.¹⁸ However, the deviations on average are not that large, except for the ends of the income inequality range: the most equal countries tend to overestimate, while the most unequal countries tend to underestimate domestic economic inequality.

¹⁷ The exact question (Q13a) is the following: “In our society, there are groups which tend to be towards the top and groups which tend to be towards the bottom. Below is a scale which runs from top to bottom. Where would you place yourself now on this scale?”

¹⁸ By “underestimate”, we mean that their twofold-subjective income Gini coefficient is smaller than the most reliable and recent country-level estimate of the Gini coefficient using objective data. The use of quotation marks is warranted because the ISSP questions do not provide a complete description of one’s belief about inequality. Also, survey estimates of income (such as the Gini-coefficients we obtain from WIID) are troubled by underreporting of income (of capital income, in particular, see Flores 2021). Consequently, having a lower or higher twofold-subjective income Gini coefficient than the objective country-level estimate does not imply in an unbiased way that the subjective inequality of the respondent is lower or higher than the objective inequality of their society. Bearing these caveats, we still use “underestimate” and “overestimate” inequality as a helpful shorthand for having a lower or higher twofold-subjective Gini coefficient than the WIID estimate.

The second important feature of the figure is that desired levels of income inequality (black diamonds) are always lower than the perceived level (gray circle); in some countries, they are lower by far (in Russia, for example). Thus, on average, ISSP respondents in every country would prefer less inequality than they perceive according to this metric (whether this translates into actual policy preferences is somewhat debated in the literature, see Pedersen and Mutz 2019).

Third, from this small set of countries, we see that while average perception correlates with actual Gini, the desired Gini coefficient varies much less across countries: people more or less everywhere seem to want to live in a country with a Gini of 0.18-0.19 (currently, the countries with the lowest income inequality are in the 0.2-0.3 range).

We now describe how the country-level covariates of the ISSP countries relate to the concern about cross-country economic inequality. Figure 2 shows CCCI by country on the horizontal axes (identical in every subplot), while the vertical axes correspond to different covariates in each subplot. The upper row shows income and wealth inequality, and the lower shows gross national income and HDI (Human Development Index). There is a negative correlation between both measures of economic inequality and the international inequality question: people living in more unequal countries care less about cross-country inequality (the correlation coefficients are -0.40 and -0.48 , respectively, for income and wealth Gini). However, the United States and a cluster of very unequal and relatively less developed countries (Chile, the Philippines, South Africa, and Venezuela) are the ones that drive this correlation. If we omit these specific countries, the country-level covariates do not show any meaningful pattern relative to the answer to the international inequality question.

4 Results

4.1 Partial correlations

We now check if the predictions from Section 2 are reflected as partial correlations in the ISSP data. In Fig. 3, we plot four binned scatterplots showing the relationship between CCCI on the one hand and the main independent variables on the other. Panel 1 shows the correspondence between CCCI and the subjective socio-economic status of the respondents (measured by the social ladder question). As this can go from 1 to 10, each dot represents the average of people who self-reported that rank. We clearly see a strong negative correlation: those who perceive themselves as more affluent are less likely to be concerned about cross-country economic inequality (in line with our first prediction from Section 2). In Panel 2, we show that the objective SES of the respondents (as measured by the percentile rank of per capita income within a country) shows no such correspondence with CCCI (in line with our second prediction). Panel 3 plots CCCI against perceived Gini coefficients, while Panel 4 plots CCCI against desired Gini coefficients. We see a robust positive correspondence in the first case and a strong negative one in the second, which aligns with our predictions. The patterns are consistent with our hypothesis that people anchor their international economic inequality perceptions on domestic inequality perceptions; they are also consistent with our hypothesis that views on the domestic fair distribution predict views on the cross-country fair distribution of income.

Our framework also suggests that observers from rich and poor countries should behave differently in terms of CCCI. Ideally, we want to determine whether the above correlations differ across these country groups. However, ISSP does not provide a globally representative

sample of countries. The poorest countries in the sample (such as the Philippines) would be considered lower-middle-income countries by the World Bank, and most countries in the sample belong to the global North.

With this caveat in mind, in order to see if there is any heterogeneity, we group all respondents who belong to the lowest national income quartile in the sample into one group (Bulgaria, Chile, Philippines, Russia, South Africa, Suriname, Thailand, and Venezuela); and group everyone else in another. Figure 4 shows the same correspondences as Fig. 3 but across these income groups. Here, we also include country-fixed effects by default so that the difference between respondents from different countries boils down to the difference in their countries' national income, holding their other idiosyncratic national differences fixed.

The figure shows that on average richer countries are not different in two out of four partial correlation patterns: subjective SES and perceived Gini. In both richer and poorer countries, those who perceive themselves as poorer and those who perceive their societies to be more unequal are more likely to be more concerned about CCCI, and their concern changes at a similar rate as a function of the two dependent variables.

Rich and poor country respondents, however, are different regarding the correspondence between CCCI on the one hand and objective SES and desired inequality on the other. In the first case, there is a weak but statistically significant positive association between objective SES and CCCI in poorer countries and a negative one between the two concepts in richer countries (albeit both associations are quantitatively negligible). This finding might initially seem counterintuitive - why would the poorest of the poor be the least concerned about global inequality? In our framework, this has a simple explanation: for the poor in the poor country, uncertainty about domestic inequality translates into uncertainty about the national income of the poor country. Their belief about their national income can be arbitrarily large as their belief about domestic inequality goes to infinity (p_1 goes to 0 in the language of our framework). In contrast, the rich in the poor country know that their country cannot be much richer than they are, thus ending up with a clearer picture of actual cross-country inequality.

This argument also helps understand the one remaining difference between richer and poorer countries in the sample: in the poorer country case, the correspondence between desiring lower domestic inequality and being concerned about CCCI is significantly less tight than among the rich country respondents. Again, for the poor country observers, uncertainty about national income might be a mitigating factor for CCCI: those who want low domestic inequality also think that their country is richer than it actually is, so they are less likely to be concerned about CCCI.

To sum up, the partial correlations are in line with the predictions yielded by our formal framework.

4.2 The relative importance of objective and subjective economic variables in cross-country inequality

We now analyze how robust the above relationships are relative to one another. We consider the following linear model:

$$y_i = \omega \mathbf{O}_{ci} + \sigma \mathbf{S}_i + \iota \mathbf{I}_i + \gamma_c + \epsilon_i, \quad (2)$$

The left-hand side variable is again individual level CCCI. The vector \mathbf{O}_{ci} includes objective SES of the individual (i.e., percentile rank in the income distribution) and country-level covariates (i.e., income Gini coefficient, Gross National Income per capita). We interact the country-level variables with the individual-level variable to allow the effect of objective status

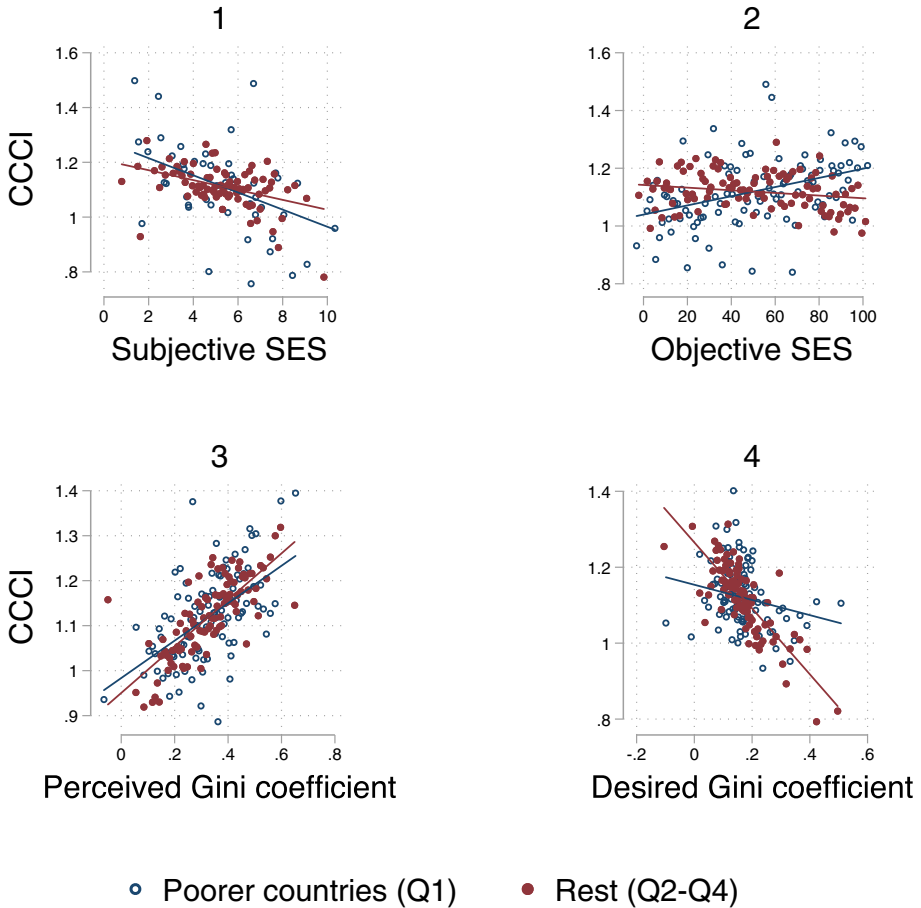


Fig. 4 Partial correlations by income group including country fixed effects *Notes:* The figure shows binned scatterplots where we plot the average responses to CCCI against the main explanatory variables by country income group. The “poorer country” group includes Bulgaria, Chile, the Philippines, Russia, South Africa, Suriname, Thailand, and Venezuela. These countries are in the bottom quartile in ISSP regarding per capita national income. The estimated coefficients are in the case of subjective SES $-.03$ (poor countries, standard error: $.004$) and $-.02$ (rich countries, standard error: 0.003); for objective SES $.002$ (poor countries, s.e.: $.000$) and -0.0005 (rich countries, s.e.: $.0002$); for perceived Gini $.42$ (poor countries, s.e.: $.054$) and $.52$ (rich countries, se.: $.040$); for desired Gini $-.20$ (poor countries, s.e.: 0.076) and $-.87$ (rich countries, s.e.: 0.062). The rich and the poor country coefficients are statistically significantly different from one another only in the case of objective SES and desired Gini

to be different across rich and poor (equal and unequal) countries. S_i is a vector of subjective economic variables, including the twofold-subjective perceived and desired Gini coefficients of the individual, and subjective SES (i.e., social ladder question); and I_i is a vector if other individual characteristics that might explain attitudes towards inequality, such as education, gender, political orientation, age, frequency of social contacts with richer and poorer, marital status and labor market attachment. The term γ_c corresponds to country fixed effects.

We estimate four (times two) versions of the linear model: a version where only one of the three groups (either O , S or I) is included and one where all the three are. For each setting, we

estimate without and with country fixed effects included. We also estimate an empty model that only includes country fixed effects to establish the baseline between-country variation in the outcome. We cluster standard errors at the country level; as the number of countries is too low (31) for these to be unbiased estimates (Angrist and Pischke 2009), we show p-values calculated by wild bootstrapping (Roodman et al. 2019).

Table 4 shows the results. The empty model (Column 1) shows that country fixed effects explain about 5.82 percent of the variation in the dependent variable (we report both Total and Within R^2 measures, but the latter is zero in the model that only has fixed effects but no additional covariates). There is almost no statistically significant correlation between objective economic variables and attitudes towards international inequality either without (Column 2) or with fixed effects (Column 3). The sizes of the coefficients are also negligible. The only pattern we see is that more unequal countries tend to be less concerned about cross-country inequality. Again, this relationship is not particularly strong and rather noisy (average responses on the dependent variable from a perfectly unequal country would be about 1 point lower on a 4-point scale relative to a perfectly equal one; the relationship is only marginally significant at 10%). Objective variables only explain one percent of the variation in the dependent variable. As the R^2 of the empty model with fixed effects (Column 1) is 0.058, we can say that objective variables do not have additional explanatory power (the Within R^2 is 0.001 in Column 3).

The case for subjective variables is markedly different. Respondents who think their country is more unequal are likelier to be concerned about cross-country economic inequality (Column 4). This correspondence, as is the association between desired inequality and CCCI, is tight and strongly significant. The difference between a person who perceives (desires) their society as (to be) completely unequal as opposed to one who perceives (desires) as (to be) completely equal is between 0.49 and 0.56 (-1.01 and -.66) in terms of CCCI agreement, which has a mean of 1.12 and a standard deviation of 0.86 in the sample. Though less pronounced (and insignificant in some specifications), the pattern is also there for subjective SES. While the explanatory power of the model in Column 4 is not massive (though almost twice as large as the model with only objective variables), these variables remain important when we allow for country fixed effects (in Column 5 the Within R^2 is an order of magnitude larger, than in Column 3).

Individual characteristics are also much better predictors of CCCI than objective SES. A few patterns emerge in Columns 6 and 7: women, the more educated, the more urban, the more left-wing, those who regularly meet poorer people, and the economically more vulnerable (those who are unemployed, who are in school or who are retired) are more concerned about international economic inequality. On the other hand, age, religious practice, meeting richer people, and marital status are not associated with higher concerns about economic inequality.¹⁹

One individual characteristic of respondents merits further discussion: political orientation. Someone more inclined toward the left sees inequality everywhere and desires lower levels of it simultaneously; a right-leaning person is potentially more likely to ignore inequality while also finding it a desirable feature of society. One important detail of our results is

¹⁹ We note that this profile is mostly consistent with the demographic traits of those with more universalistic values (Enke et al. 2020). Universalism is the degree to which one is altruistic and trustful towards socially more distant individuals and groups, holding one's total level of altruism and trust fixed. I.e., being a woman, having a higher level of education, and living in urban areas are all associated with a higher degree of universalism (see Enke et al. 2020, 2021), while other patterns of universalists are or are not found here (e.g., higher age and religiosity in particular are correlated with less universalism, while not correlated with attitudes towards international inequality).

Table 4 Explaining CCCI

Outcome: concern for cross-country inequality (-2 to 2)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Empty model b/bp	Objective b/bp	Objective b/bp	Subjective b/bp	Subjective b/bp	Other indiv. b/bp	Other indiv. b/bp	All b/bp	All b/bp	
Objective economic measures									
Objective SES (centered at 50)	-0.000 [0.634]	-0.000 [0.716]					-0.000 [0.603]	-0.000 [0.273]	
Gini (income, demeaned)	-1.054* [0.074]						-1.079* [0.087]		
GNP pc. (demeaned)	0.002 [0.751]						0.001 [0.747]		
Gini × OSES	0.004 [0.320]	0.004 [0.174]					0.004 [0.367]	0.003 [0.176]	
GNP pc. × OSES	-0.000 [0.130]	-0.000 [0.986]					-0.000 [0.318]	-0.000 [0.956]	
Subjective economic measures									
Perceived Gini			0.551*** [0.002]	0.573*** [0.001]			0.538*** [0.002]	0.489*** [0.003]	
Desired Gini			-1.013*** [0.000]	-0.794*** [0.000]			-0.678*** [0.000]	-0.657*** [0.000]	
Subjective SES (centered at 50)			-0.002 [0.174]	-0.002 [0.224]			-0.003*** [0.004]	-0.002*** [0.008]	
Other characteristics									
Female					0.079*** [0.003]	0.066*** [0.001]	0.067*** [0.004]	0.062*** [0.005]	
Age					0.001 [0.194]	0.001 [0.199]	0.001 [0.152]	0.001 [0.124]	

Table 4 continued

Outcome: concern for cross-country inequality (-2 to 2)								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Empty model b/bp	Objective b/bp	Objective b/bp	Subjective b/bp	Subjective b/bp	Other indiv. b/bp	Other indiv. b/bp	All b/bp	All b/bp
Years of full-time schooling	0.018*** [0.003]	0.014*** [0.002]	0.018*** [0.003]	0.014*** [0.002]	0.019*** [0.000]	0.014*** [0.002]	0.019*** [0.000]	0.017*** [0.000]
Religious service attendance: (0-7)	-0.017 [0.355]	0.002 [0.377]	-0.017 [0.355]	0.002 [0.377]	-0.006 [0.640]	0.002 [0.377]	-0.006 [0.640]	0.003 [0.461]
Political orientation: -2 (Left) +2 (Right)	-0.133*** [0.000]	-0.148*** [0.002]	-0.133*** [0.000]	-0.148*** [0.002]	-0.126*** [0.000]	-0.148*** [0.002]	-0.126*** [0.000]	-0.140*** [0.001]
Home: -2 (most urban) +2 (most rural)	0.000 [0.967]	-0.014 [0.976]	0.000 [0.967]	-0.014 [0.976]	-0.010 [0.264]	-0.014 [0.976]	-0.010 [0.264]	-0.018 [0.359]
Frequently meets richer (0-7)	0.006 [0.557]	-0.005 [0.553]	0.006 [0.557]	-0.005 [0.553]	0.001 [0.881]	-0.005 [0.553]	0.001 [0.881]	-0.006 [0.585]
Frequently meets poorer (0-7)	0.026*** [0.003]	0.038*** [0.001]	0.026*** [0.003]	0.038*** [0.001]	0.026*** [0.002]	0.038*** [0.001]	0.026*** [0.002]	0.034*** [0.004]
Marital status (baseline: married)								
Never married	-0.046* [0.085]	-0.010* [0.069]	-0.046* [0.085]	-0.010* [0.069]	-0.032 [0.190]	-0.010* [0.069]	-0.032 [0.190]	-0.011 [0.133]
Separated/Divorced/Widowed	-0.012 [0.640]	-0.013 [0.628]	-0.012 [0.640]	-0.013 [0.628]	-0.025 [0.241]	-0.013 [0.628]	-0.025 [0.241]	-0.023 [0.218]
Work status (baseline: in paid work)								
Unemployed	0.044 [0.130]	0.088 [0.100]	0.044 [0.130]	0.088 [0.100]	0.054 [0.173]	0.088 [0.100]	0.054 [0.173]	0.064 [0.449]
In education	0.095*** [0.006]	0.080*** [0.007]	0.095*** [0.006]	0.080*** [0.007]	0.073** [0.035]	0.080*** [0.007]	0.073** [0.035]	0.075*** [0.000]

Table 4 continued

Outcome: concern for cross-country inequality (-2 to 2)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Empty model b/bp	Objective b/bp	Objective b/bp	Subjective b/bp	Subjective b/bp	Other indiv. b/bp	Other indiv. b/bp	All b/bp	All b/bp	
Retired					0.058*	0.047*	0.033	0.036	
					[0.064]	[0.072]	[0.302]	[0.233]	
Other					-0.047	-0.007	-0.067	-0.028	
					[0.489]	[0.455]	[0.293]	[0.321]	
Mean DV	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	
$\sigma(DV)$	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	
R^2	0.058	0.011	0.059	0.017	0.038	0.091	0.060	0.102	
Within R^2	0.000	0.011	0.001	0.017	0.037	0.034	0.059	0.045	
N	32258	32258	32258	32258	32258	32258	32258	32258	
Country FE	Yes	No	Yes	No	No	Yes	No	Yes	

Notes: The table shows the coefficients from estimating different variations of Equation (2). The scale of the dependent variable (concern about cross-country economic inequality, CCCI) runs from -2 (strongly disagree with the statement that cross-country economic inequality is too high) to +2 (strongly agree). Column 1 contains only country fixed effects but no additional right-hand side variables. Columns 2 and 3 contain only individual and country-level objective economic status variables. Columns 4 and 5 contain only subjective economic measures. Columns 6 and 7 contain additional demographic controls. Columns 8 and 9 include all three groups. Odd-numbered columns have country-fixed effects. Standard errors are clustered at the country level; the brackets contain p-values calculated using wild bootstrapping (Koodman et al. 2019). (*, p < 0.05; **, p < 0.01; ***, p < 0.001)

that the inclusion of political orientation of the individual does not wash out the association between CCCI and subjective economic variables in general, and desired inequality in particular. That is, there is significant variation in perceived and desired inequality between people who live in the same country and lean the same way politically, and this variation affects their concern about cross-country inequality (compare Column 4 to Column 8 or Column 5 to Column 9).²⁰

4.3 How stable are these patterns across countries?

It is worth studying whether or not the above relationships are generally observable in all countries or whether the overall correlations are driven by influential subsamples (countries) in the data. To check this, we estimate the above equation by country (naturally omitting country fixed effects and country-level characteristics) and study the distribution of the individual coefficient estimates. We also standardize the main right-hand side variables for comparability.

We plot the resulting coefficients in Fig. 4 in the Appendix. We sort the estimated coefficients in ascending order and plot them along with 10% confidence intervals. The marker sizes are proportional to the country-level subsample sizes. The dashed vertical line shows the jointly estimated coefficient (the standardized equivalent of the one in Table 4).

We have seen that in the whole sample, there is no significant relationship between objective SES and CCCI. However, we can see one interesting pattern: the only countries where the richer significantly care less about international inequality are among the most affluent WEIRD countries in our sample;²¹ the only countries where the richer care significantly *more* concerned are Asian, Eastern European and South American (non-WEIRD) countries.

In the case of the subjective economic variables, the country-level coefficients are mostly consistent with the coefficient from the joint estimate. For subjective SES, the pattern is rather noisy. In most countries, the estimated coefficients are very close to zero. However, their signs are slightly (in 16 out of 31 cases) more likely negative, meaning that the subjectively better-off respondents care less about international economic inequality. The only country where the coefficient has the opposite sign and is also significantly different from zero is Venezuela.²²

In almost all countries, those who perceive their own countries to be more unequal are also more likely to be concerned about cross-country inequality, the only significant outlier being Venezuela. The picture is similar to the case of desired inequality: those who desire lower domestic inequality have *ceteris paribus* higher CCCI responses. Here, the only significant outlier in the opposite direction is Lithuania.

²⁰ We thank an anonymous reviewer for pointing out the importance of this detail. In unreported robustness checks, we use the Chapel Hill Expert Survey (Jolly et al. 2022) to account for the fact that the “left” and the “right” mean different things in different countries. Thus, the same degree of self-identification as either left-wing or right-wing is associated with different desired levels of redistribution. Using CHES allows us to re-scale individual self-identification using the comparative ideology of the relevant political parties of each country. Doing so does not affect the results. The calculations are available upon request.

²¹ The acronym WEIRD stands for “Western, Educated, Industrialized, Rich and Democratic” countries, a term coined by Henrich et al. (2010)

²² One might speculate that in a country that has been crippled by economic mismanagement and civil unrest for so many years, the only people who can afford to be worried about cross-country economic inequalities are the ones who are the most affluent.

4.4 Robustness

Our robustness checks aim to ensure that the patterns we have found are not artifacts of sample or model selection or variable definition.

We lose about 30% of the ISSP sample due to missing data. The most frequently missing information is income. If such people are more likely to be either richer or poorer than the average, that could seriously impact our estimates. To tackle this problem, we estimate a flexible Mincerian earnings function with fixed effects on the 2-digit ISCO code by country level, allowing the slopes of gender, age, and years of education to be different across countries. We use this equation to predict the incomes of those who do not directly answer this question. We then re-estimate (2) on this imputed income measure (see Appendix A.2 Table 3); the results are unchanged, suggesting that non-reporting of incomes does not have a systematic effect on our estimates. Note that the average subjective SES of the study sample and the whole ISSP V is virtually identical (see Table 3). Hence, those who do not report their income do not systematically feel worse or better than the rest of the sample, alleviating selection concerns.

In the Appendix, we estimate (2) using Mixed Effects to allow for the coefficient on GDP and Gini to differ across countries; the patterns remain the same (see Table 5 in the Appendix).

We also re-estimate (2) with a different income measure - the percentile rank of one's income within their country, instead of per capita household income. This objective income variable is a worse predictor of attitudes toward international economic inequality than the household income percentile, and using it does not change the main results (see Table 4).

We also check how much the results depend on the choice of the subjective Gini coefficients. We re-estimate our main tables using a version where we only use the subjective earnings of the CEO and the unskilled worker and a version where we use the logarithm of the subjective pay ratios (Tables 6 and 7 in Appendix A.2). The results are not sensitive to these specification checks.

5 Conclusion

Cross-country income inequalities determine how much countries can contribute to global public goods, such as combating climate change or pandemics. The extent to which the world can provide such public goods will at least partly be driven by public perceptions of these inequalities across countries. Understanding these perceptions is thus very important. The scarce evidence suggests that the perception of international inequality is closely linked to the perception of domestic inequality (Fehr et al. 2022 show that this is the case in Germany); in this paper, we generalized this finding by providing the first large-scale cross-country evidence on the correlation between perception of international inequality and subjective measures of economic status and domestic inequality.

We have used ISSP's V survey focusing on social inequality to measure which factors might affect attitudes towards international economic inequality. Using a simple theoretical argument based on prior findings in economics and social psychology, we have argued that people extrapolate from their probabilistic views on domestic inequality to judge whether cross-country inequalities are too high. Intuitively, we have argued that we view the world through a distorted lens, as most of our information on economic inequality comes from our country and groups within it that are close to us. Our simple framework generates four testable predictions: that subjective SES should matter in determining concern about cross-

country inequality, while objective SES should not; and that if people anchor their assessment of international inequality at their assessment of domestic inequality, then the latter should explain their former; and that in a similar vein, domestic views of fairness should carry over to the views on what constitutes a fair distribution of income across countries.

We have shown that subjective perceived and desired inequality among economic variables have the strongest and most consistent relationship with attitudes towards cross-country economic inequality; subjective SES shows a less clear but still visible pattern (the subjectively poor typically care more about cross-country inequality). Objective SES seems to have little to no effect on CCCI. Though the paper is purely correlational, it has provided important complementary results for experimental studies that looked at much more narrow, single-country samples. Our goal has been to give an insight into how those results might generalize; by doing a cross-country analysis with a diverse set of countries, we have been able to establish a set of stylized facts.

By presenting these pieces of descriptive evidence, this paper has only provided the first insights into a large and mostly uncharted territory, and there are many directions in which inquiry could proceed. First, though we have found that subjective perceptions of the domestic economy are closely correlated with subjective perceptions of the world economy, more research is needed to understand what gives rise to such vast differences in domestic perceptions in the first place. There are advances in this area (see, for example, Gimpelson and Treisman 2018 and Knell and Stix 2020), but our understanding still needs to be improved. Second, the measure of concern about international inequality that we have used in this paper is crude and one-dimensional. Further studies should quantify what people think a fair distribution of economic opportunities would look like and how the current distribution deviates from that desired. Though there seems to be a fair amount of consensus about the fact itself, it would also be interesting to see *why exactly* people think that international economic differences are too large: is it because some countries have amassed disproportionate amounts of wealth at the expense of other countries? Is it because some countries have social and political institutions that hold back their development? Is it because of sheer luck or divine will? Further – potentially interdisciplinary – studies should investigate all these questions.

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Author Contributions The first author conducted data analysis and wrote the first draft of the manuscript. All other authors contributed to formulating the research question, exploring the non-economics literature, and developing and refining the manuscript. All authors have reviewed and approved the final version of the manuscript.

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Availability of Data The data uses the ISSP V survey on social inequality, which is publicly available. The source codes will be available upon publication.

Declarations

Competing Interests The authors declare that they have no conflict of interest.

Ethical Approval The authors only used secondary, public data sources, so no ethical approval was needed.

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