

Policy Brief

Perceptions of Inequality Survey 2015 / 2016

How much do we really know about income inequality?

Dr. Elisabeth Bublitz, Hamburg Institute of International Economics | Quentin Dumont, Bertelsmann Stiftung

Of all the objectives assigned to the welfare state, economic redistribution is a crucial, and sensitive, one. It is no surprise, then, that a significant share of debates during election times often revolves around the shape and extent of domestic taxes. Citizens' redistribution preferences – notoriously divergent across cultures – thus shape the form and depth of welfare states around the globe.

Still, if our redistribution preferences as voters are crucial for policy formulation, whence do they arise? Are we really well-informed voters, grounding decisions on truth, or do perception biases also play a role in our political choices? More importantly perhaps, would telling us more about inequality alter our policy preferences?

To find out, we teamed up with the Hamburg Institute of International Economics (HWWI) and designed a

unique cross-country study. Carried out online as a randomized survey experiment in Brazil, France, Germany, Russia, Spain, Sweden, the United Kingdom, and the United States, it explored citizens' perception of economic disparities, policy preferences, and responsiveness to new information on the matter.

What are our main findings?

Our study has given us some interesting results. Here is what we found in short:

- Across all sample countries, a majority of the population experiences difficulties in correctly estimating its position within the income distribution.
- Except for Brazilians, respondents on average perceive themselves as relatively poorer than they truly are.
- On top of this, individuals in all countries tend to overestimate (sometimes tremendously) the domestic unemployment rate.

- Participants reporting a lower income see themselves as relatively richer than they actually are, while those reporting a higher income believe they are lower on the income scale than in reality.
- Our findings suggest that providing people with additional information on income inequality creates a convergence in redistribution preferences across most sample countries.

Measuring perception biases

Subjective vs objective ranking

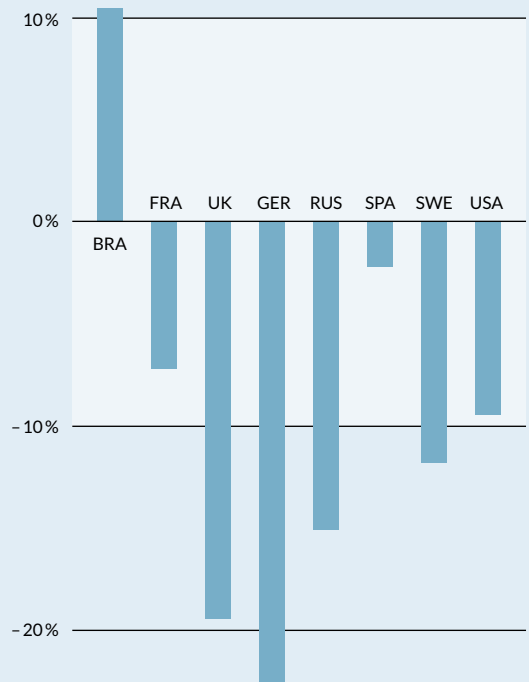
To test people's (mis)understanding of income inequality, we decided to monitor how well they could rank themselves within their country's income distribution. In essence, after reporting their household's yearly income, each participant was asked to give an estimate of what percentage of the population had an income lower than their own. By comparing the estimated figure with the actual income positions, we were able to establish whether participants exhibited a perception bias, understood as a false estimation or misjudgment.

We identified three possible outcomes.

- Respondents overestimate their position, showing a positive bias. That is, the participant thinks of herself as richer than she truly is, estimating for instance that 60 percent of her compatriots are poorer than her, while in fact the correct figure is 40 percent.
- On the contrary, an underestimation (negative bias) implies that she believes herself to be poorer than she is in reality.
- The respondent is considered as unbiased when she correctly guesses her position within the income distribution (allowing a measuring mistake of no more than 10 percentage points).

Figure 1 sums up our findings for the average income position bias by country sample. According to our definition, the average person in the samples of Spain, France, the US, and, to a lesser extent, Brazil can be considered as unbiased with values below or close to 10 percentage points. Nonetheless, only Brazil shows on average an overestimation while all other country samples display an underestimation of the income position. The largest negative bias is found for the samples of Germany, followed by the UK, Russia and Sweden. In other words, respondents

Figure 1: Average income position bias by countries (average difference between the estimated and the actual position in the income distribution)



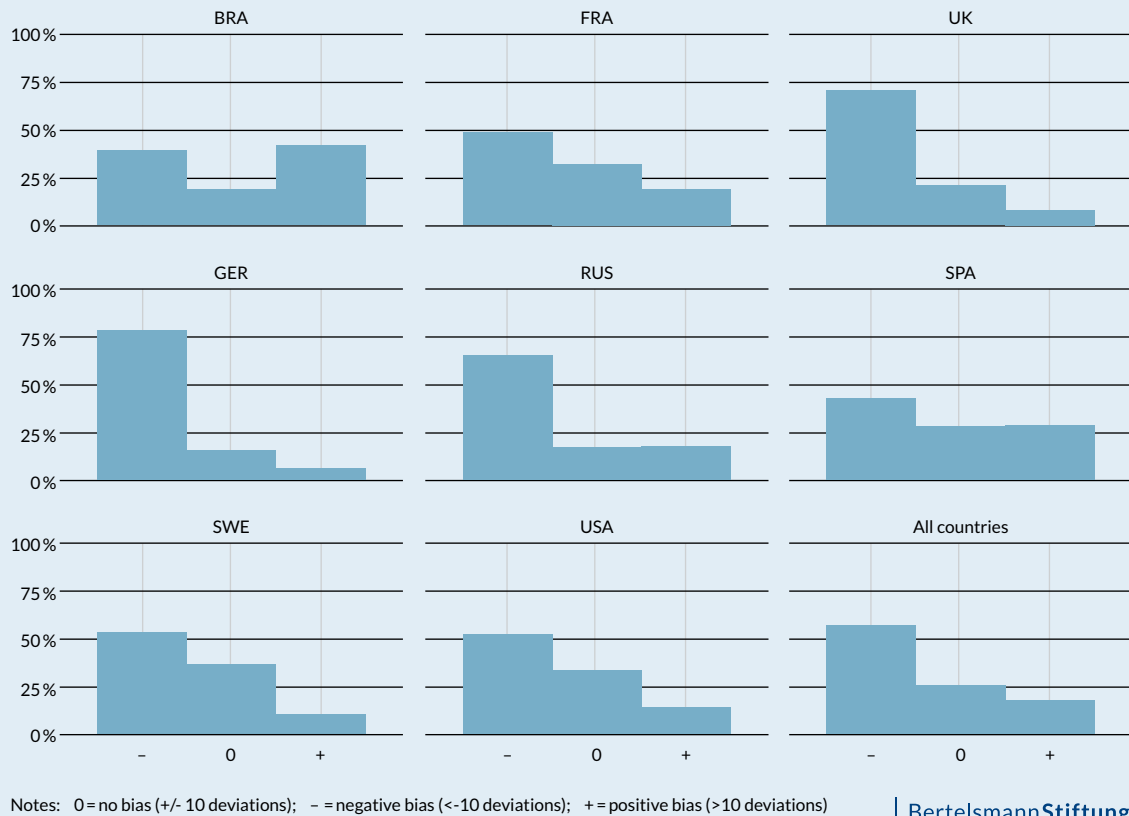
| BertelsmannStiftung

in all these countries think of themselves as poorer than they truly are.

Yet, this is not the whole story. A mild bias could actually be the result of taking the average across similar numbers of people with a positive and a negative bias. Therefore, Figure 2 shows for each country the distribution of respondents who are either negatively or positively biased, or unbiased.

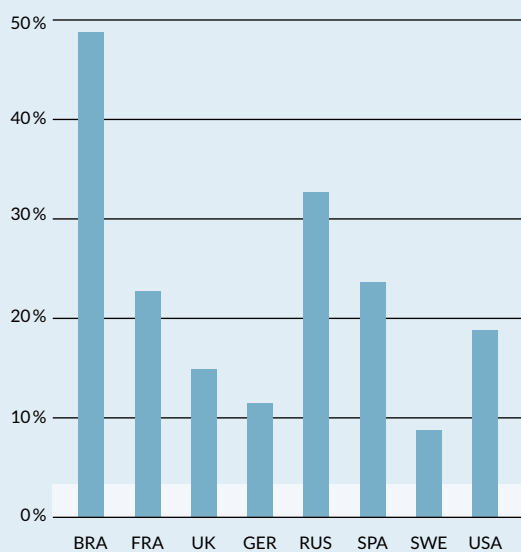
The German sample has the largest share of individuals who underestimate their income position (79%), suggesting that more so than in any other country sample, German respondents tend to place themselves at the lower end of the income distribution. The country samples with high shares without any bias are Sweden, the US, and France (more than 30%). By far the largest share with a positive bias is found for the Brazilian sample (42%). All countries with biases below 10 percentage points in Figure I, now turn out to have important shares of respondents who misperceive their income distribution. Note that respondents were sampled

Figure 2: Overview of individual income position bias (by type of bias)
(share of individuals with no, a negative, or a positive bias by country)



BertelsmannStiftung

Figure 3: Average unemployment bias by country
(average difference between the estimated and the actual unemployment rate)



BertelsmannStiftung

on socio-demographic characteristics but not on income; hence, the distribution of biases may differ from other data. What continues to hold is that, across all country samples, a majority of respondents had difficulties in determining their position in the income distribution.

Misperceptions of labor market access

Considering the individual misperceptions of the income position, the question arises whether individuals also struggle when determining the ease with which income from labor, a major income source for most, is generated. To gain some insight in this matter, respondents were asked to tell us how many individuals, out of 100, are currently unemployed and looking for work in their country.

Figure 3 shows that, on average, respondents in all countries tremendously overestimate the unemployment rate, hence, displaying an overly pessimistic view of labor market access. As true unemployment rates are fairly low and we also allow for a compar-

atively high measuring mistake, the share of individuals with a negative bias becomes negligible.

When combining these results with our findings on ranking misperceptions, it appears that people have a harder time assessing the unemployment rate than their own income position. Noteworthy exceptions are the samples of Sweden, which shows a pattern of being the country with the highest share of unbiased individuals, and of Brazil, which is the only country where respondents overestimate both the own position in the income distribution the unemployment rate.

Accounting for ranking mistakes

These results beg the question of what might be the origin of such misperceptions. Do we all suffer from the same form of biases? To investigate this point, our survey gathered additional information on respondents' background, for instance, the education levels or self-categorized social classes.

In line with previous findings, the nature and extent of people's biases varies depending on their actual position within the income distribution (see Table 1). Participants reporting a lower income tend to see themselves as richer than they actually are (positive bias) while those reporting a higher income see themselves as poorer than in reality (negative bias). Individuals in the middle of the income distribution are, in most cases, fairly unbiased.

The results from multivariate analyses further suggest that both differences between and within countries relate to how individuals arrive at their estimated position in the income distribution.

For instance, the average estimated rank in the US sample is significantly larger, while in the Swedish sample it is significantly lower than in the German sample.

Understanding how respondents estimate their income position is key to explaining ranking misperceptions. Our analysis reveals that higher social classes are associated with higher estimated income ranks in the German and Swedish sample. Highly educated respondents in the UK and Sweden also report higher estimated income positions. However, in the samples of France, Spain, or Brazil, neither education levels nor social classes significantly contribute to explaining the estimated income position.

Other phenomena could account for the way people estimate their position within the income distribution. It is for instance possible that, in some countries, many respondents overestimate incomes at the very top of the distribution, incorrectly believing for instance that the top 10 percent earn fabulous amounts of money, while the actual incomes are lower and similar to the own income. Conversely, if most believe that a vast share of the population lives on very low wages, they will tend to rank themselves higher than they really are. Should Brazilians believe low pay to be much more widespread than it really is, they will tend to rank themselves too high.

Social sampling might also account for such errors, especially at the top and bottom ends of the distribution. Since assessing one's position within the income distribution is cognitively demanding, some may simply sample their social circle, roughly rank themselves among their peers, and then extend their conclusion to the entire income distribution. This would notably explain why the poorest citizens tend to make themselves richer than their true position

Table 1: Average income positions and bias by income quintile (by income quintiles the average actual and estimated income position, and the average difference between the estimated and the actual income position)

Quintiles of actual income position	Average actual income position	Average estimated income position	Average income position bias
First	15.19	45.25	30.06
Second	33.26	33.35	0.09
Third	50.31	38.77	- 11.54
Fourth	70.00	48.84	- 21.16
Highest	89.81	58.86	- 30.95
Total	57.97	44.93	- 13.04

would mandate, while a citizen belonging to the 1 percent but living next to an even richer individual may think herself relatively poorer.

The effect of knowing the truth about inequality

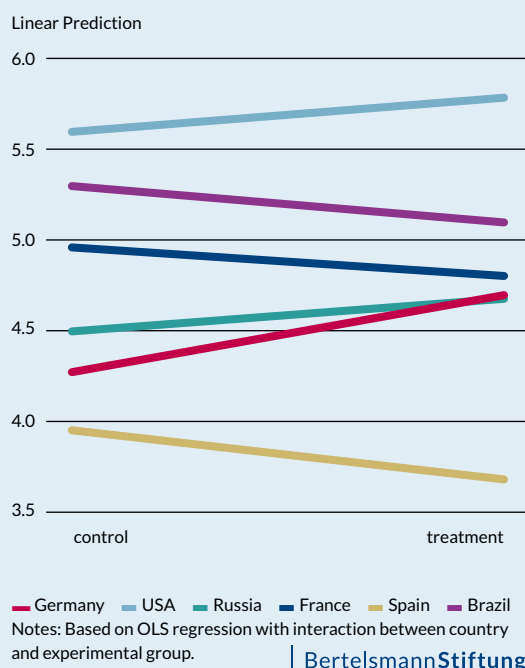
Would telling people about the true state of inequality in their country change their judgments on redistribution and the issue of inequality?

Our survey design allowed investigating this question for a reduced country sample (excluding Sweden and the UK). After reporting their income and giving an estimate of their position in the income distribution, half of the participants (treatment group) in each country received information on the state of income inequality in their country. Among other information, respondents in the treatment group were given their true position in the income distribution. Our informational treatment was designed to be neutral, allowing participants to form their own normative judgments. All participants in the control and treatment group were then asked about their preferences for redistribution. By comparing the responses for these questions between the control and treatment group we can identify the causal effect of correcting misperceptions on income inequality.

Preferences for redistribution were measured via a question on tolerance for income differentials and a question on the distribution of responsibility between government and individuals. We start by looking at each country individually. In the German sample, the treatment significantly alters responses of the treatment group, when compared to the control group. This means that after learning about the true degree of inequality German respondents favor larger income differentials and less government or more personal responsibility (see as an example Figure 4). No significant changes are observed between treatment and control group within the other country samples.

Moving to differences between countries, the treatment leads to a convergence or different clustering of views; that is, in most cases differences between country samples regarding the demand for redistribution become smaller or even insignificant. For instance, as some respondents in some countries decrease and in other countries increase their demand for government intervention after the treatment,

Figure 4: Predictive margins for effect on personal responsibility (preferences for personal responsibility by country and experimental group)



their views cluster, with the exception of the samples of the US and Spain (see Figure 4). Specifically, the treatment moved the German sample towards the other countries but it remains far away from the demand for personal responsibility that is preferred in the US. As regards the demand for larger income differentials, all countries converge with the exception of the US.

What drives the different country reactions? The results seem to suggest that respondents who learn that they hold higher income positions than originally assumed tend to favor larger income differences and more personal responsibility. Contrary to that, respondents who are informed about a lower ranking demand smaller income differences and more government interventions. While we can identify these trends, they are only statistically significant for the demand of personal responsibility of respondents with a negative bias.

Considering the large negative bias in the German sample, this finding may therefore explain the overall country reaction to the treatment in Germany. In sum, we can thus conclude that ranking biases shape the demand for redistribution.

Conclusions and policy implications

First and foremost, information helps. When voters' perceptions of existing inequality are flawed, providing a corrective update on the topic can improve their judgment on redistributive policies. While Germany was the only country where we could notice a significant change across the complete sample in people's opinions, we find across all country samples that the reaction to the treatment differs by the type of position bias. Thus, reactions to the provision of information depend on the individual context.

A lack of significant reactions may be attributed to the mild phrasing of our "policy preferences" questions and the neutral treatment. The formulation remained very neutral and answering very broad questions may have been cognitively demanding, making it difficult for respondents to connect the given information to policy choices. It is possible that offering people a more detailed account of domestic income repartition and on how specific taxation schemes affect inequality can yield larger changes in preferences, that is, a larger and significant treatment effect.

Systematic differences in the position bias across income groups show that low income citizens, on average, overestimate their position within the income distribution while better off respondents believe themselves to be poorer than they truly are. Combining this with the results on different treatment reactions would suggest that, without an informational treatment, respondents at the lower end of the income distribution tend to demand less redistribution because of the overestimation. Vice versa, respondents at the upper end demand more redistribution due to the underestimation. Depending on the shares in each group, the treatment-induced changes could result in a zero-sum game with no significant shifts in the final demand for redistribution. Nonetheless, for all to understand their economic needs and abilities, it is crucial that both top

and bottom percentiles are adequately informed. This would ensure that the redistribution outcome best matches voters' preferences.

Finally, the convergence of policy preferences across part of our sample suggests that a more coordinated response to inequality may be possible. Indeed, telling participants the truth about income inequality moved preferences across several countries toward a seeming "consensus", showing that regionally shared policy targets with regard to inequality may be possible. Although usually held as cultural in essence, it may then be that part of the country differences we observe on the demand for redistribution has to do with plain misperceptions.

Imprint

© 2016 Bertelsmann Stiftung
 Bertelsmann Stiftung
 Carl-Bertelsmann-Str. 256
 33311 Gütersloh | Germany
www.bertelsmann-stiftung.de

GED-Team
 Programm Nachhaltig Wirtschaften
 Phone +49 5241 81-81353
ged@bertelsmann-stiftung.de
www.ged-project.de

Responsible:
 Dr. Ulrich Schoof

Authors:
 Dr. Elisabeth Bublitz
 Quentin Dumant

Layout: Dietlind Ehlers
 Photo: Jonathan Stutz / Fotolia