

# Focus on Economics

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## Which factors influence redistribution? Perception and evaluation of inequality

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When it comes to inequality, there is often a significant difference between perception and reality. This is much the same when it comes to assessing our own personal income position. The gap between perception and reality may help to solve one of the problems associated with the classical theory of redistribution. The theory states that higher levels of actual (measured) income inequality lead to a greater demand for redistribution. However, it is very difficult to find empirical evidence for this correlation. If, on the other hand, we bring the perception of inequality into the equation, we see a clear correlation with redistribution. There are, however, other factors involved, such as a society's value system or the perceived fairness of income distribution.

Social expenditure in Germany accounts for 25% of GDP. The corresponding figure in the United States is lower at around 19%, although income inequality – before corrections made by the state in the form of taxes and transfers are taken into account – is significantly higher. So this higher level of inequality persists even after income redistribution has been carried out by the state. For redistribution to work – at least in a democracy – society has to want it to happen, as it involves taking income from some and transferring it to others.

Although inequality is generally not accepted, higher levels of inequality do not necessarily lead to higher levels of redistribution. This is partly due to the fact that the perceived extent and assessment of inequality plays a decisive role when it comes to a society's desire for redistribution.

### Classical economic theory does not provide a satisfactory explanation

Classical economic theory assumes a clear positive correlation between inequality and income redistribution in a democracy. Both the basic demand for redistribution and the extent to which it should be carried out depend on the individual benefits voters derive from redistribution. Voters whose income is high enough for them to fund transfers to others are opposed to redistribution as it takes income away from them. Voters whose income falls below the redistribution threshold are on the receiving end and therefore vote in favour of redistribution.

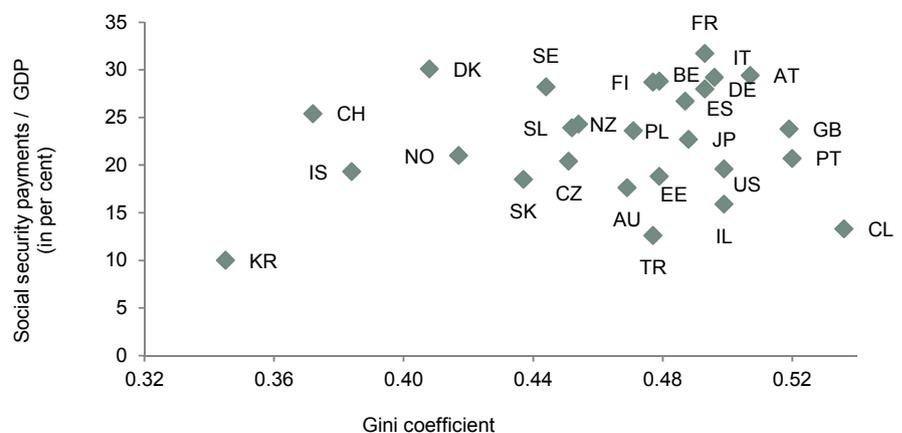
However, income redistribution reduces the desire to work amongst net payers. This reduces productivity of the economy, as well as income of beneficiaries. This loss of efficiency plays a part in individual cost-benefit considerations.

In the political arena it is the redistribution preferences of voters in the middle that count. This is the only proposal that can command majority support, given that all high earners are opposed to such a level of redistribution and would prefer to see less or even no redistribution. Although all low-income voters would prefer to see more redistribution, they know that it is no longer possible to gain majority support for higher levels of redistribution. This type of collective, democratic decision making is called the median voter model.

In countries with high levels of inequality, the individual benefits that the decisive voter stands to gain from redistribution are relatively high compared to the individual losses of efficiency. They therefore demand higher levels of redistribution and prevail politically. Higher levels of inequality ought, therefore, to lead to higher levels of redistribution.<sup>1</sup>

However, this unambiguous theoretical result cannot be observed in reality. There is relatively little evidence of a direct correlation between measured inequality and redistribution (Figure 1). One

Figure 1: Inequality and redistribution by country



Notes: For 2009/10. The Gini coefficient is a measure of income inequality. A value of 0 represents an entirely even distribution of incomes, while a value of 1 represents maximum inequality. The Gini coefficient is used here to demonstrate income distribution before taxes and deductions (market inequality).

Source: OECD, own calculations.

possible explanation is that voters find it difficult to assess whether they are above or below the redistribution threshold. They would also have to know how much loss of efficiency relative to personal benefit any redistribution of income would cause which, in turn, means that they would have to be able to assess how prevalent inequality is in their country. In addition, the demand for redistribution is also determined by people's individual assessment of inequality.

**Tendency towards the centre when assessing personal income positions**

People do not have an intuitive feel for statistics. They therefore find it difficult to correctly guess where they belong in terms of income distribution. This has been demonstrated in surveys where people are asked to place themselves in a particular social class. A disproportionately high number of people place themselves in the middle (Figure 2). Relatively few people place themselves at either end of the income distribution scale. High earners tend to underestimate their position while low earners tend to overestimate theirs. These inaccurate assessments can be seen in almost every country surveyed.

Psychology can explain this tendency

towards the centre. When people judge where they fit on the income scale, the first thing they do is select a group of people with whom they can compare their own income. However, this reference group is not representative of society as a whole but is strongly influenced by the social environment. Respondents' incomes will therefore tend to be fairly close to the reference group's mean income. As a result, the number of people who feel they belong in the middle is larger than in reality.<sup>2</sup>

People's distorted perception, of where they belong on the income distribution scale has an effect on the demand for redistribution. People who overestimate their income position would actually benefit more from redistribution than their subjective assessment might lead them to believe. It follows, therefore, that they would vote in favour of more redistribution if they were able to correctly assess their income position. By contrast, people in higher income classes would be unlikely to adjust their preference to any significant extent, as their subjective assessment suggests that they end up funding transfers to others anyway, making it more likely that they would reject redistribution on cost-benefit grounds. A study into inequality in Argentina sup-

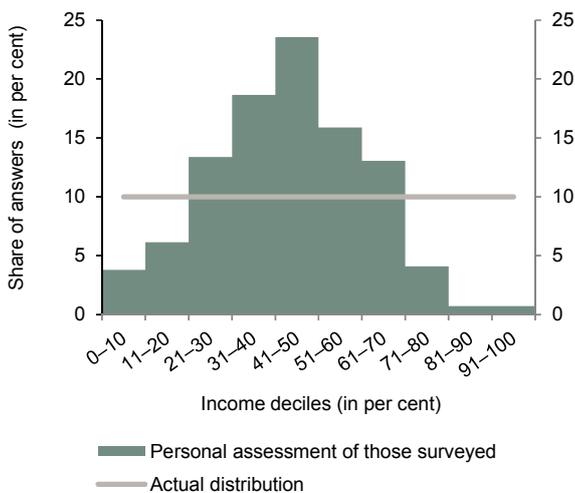
ports this analysis.<sup>3</sup> As part of the survey, respondents who incorrectly assessed their personal income position had the correct position explained to them by researchers. High earners who had underestimated their position did not change their preference with regard to redistribution, whereas those who had overestimated their position were now in favour of more redistribution.

**Inaccurate assessment of extremely high and low incomes**

Another indication as to how unequal a society is viewed can be found in people's assessments of income distribution at the extremities of the scale: top earners' incomes and the number of people affected by poverty.

Where people are asked to estimate the income of top earners and low-skilled workers, the median of subjective responses indicate that they believe top earners in Sweden are paid four times as much as low-skilled workers and that the corresponding figures in Germany and the United States are 17 and 30 times, respectively. These estimates are extremely wide of the mark. In reality, Swedish top earners are paid, on average, 89 times more than unskilled workers. The factor amounts to 147 in

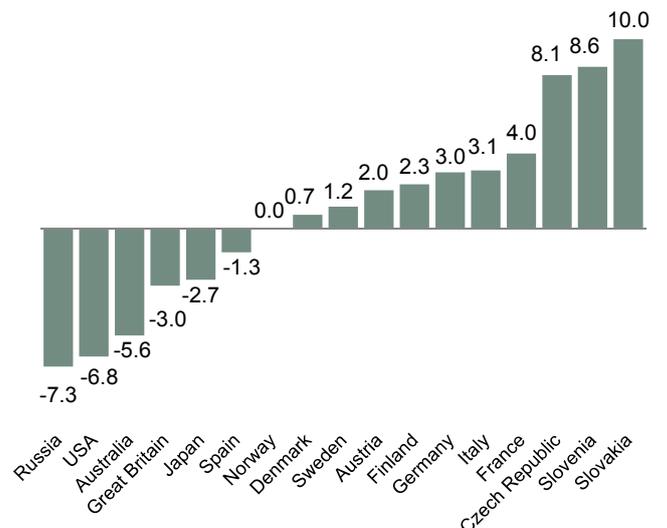
**Figure 2: People's assessment of their personal position on the income distribution scale in Germany**



Notes: The question asked was: On a scale of 1–10, where 10 represents the highest income group and 1 the lowest, into which income group would you place your household?  
Assuming that respondents assess their position in a realistic manner and that a properly representative sample of the population has been selected, we would expect to see an even distribution of results with, for example, 10% of households placing themselves in the lowest income category.

Source: World Values Survey 2010–2015.

**Figure 3: Difference between perceived and actual inequality by country**



Notes: The figure shows the difference between perceived and actual Gini coefficients (after tax) as a percentage. Values greater than zero indicate an overestimate of inequality; values below zero indicate an underestimate.

Source: ISSP 2009, own calculations.

Germany and 354 in the United States.<sup>4</sup> Inequality at the upper end of the income scale is, therefore, strongly underestimated.

By contrast, inequality in terms of poverty tends to be overestimated. A Eurobarometer survey asked people to estimate poverty levels in their own country – specifically, the proportion of people living below the poverty line (60 % of median net income). In Germany, 42% of respondents overestimated or underestimated the actual poverty level by more than 10 percentage points. In the majority of European countries the resulting picture is similar, with poverty levels generally being overestimated. Furthermore, approx. 90% of respondents in Germany estimated that poverty had increased over the last three years (starting in 2010), despite the fact that there was virtually no change to actual poverty levels during this period.<sup>5</sup>

**Inequality: Americans are too optimistic, Germans too pessimistic**

The perception of inequality across the income distribution as a whole also differs from reality. In some countries inequality is significantly overestimated, in other countries it is underestimated (see Figure 3).<sup>6</sup> Germans tend to be more pessimistic in this regard, overestimating inequality levels in their own country, whereas Britons and Americans are too

optimistic, underestimating the extent of inequality.

The difference between reality and perception of inequality could be one reason why there is more redistribution in Germany than in the United States, despite the fact that inequality levels in Germany are actually lower than those in the United States. Although there is very little connection between actual levels of inequality and people's redistribution preferences, there is a relatively strong correlation between perceived inequality and the demand for redistribution (see Figure 4). Contrary to theory, this would mean that perceived inequality and not objective inequality determines redistribution levels in a particular country. This result is also reflected in a number of empirical studies that examine this issue in greater depth.<sup>7</sup>

**Assessment of inequality: redistribution influenced by fairness**

People's demand for redistribution is influenced both by their assessment as well as by their perception of inequality. Even if people know about the actual income distribution, they can have different attitudes towards inequality and thus different views on the extent to which redistribution should be used to reduce inequality.

There can be perfectly legitimate reasons for differences in income. There are

differences in the length of time people work, in their professions, or in their skills and qualifications. But there are also factors that are beyond the influence of the individual: family background, gender or skin colour. How inequality comes about has a significant effect on redistribution preferences.<sup>8</sup>

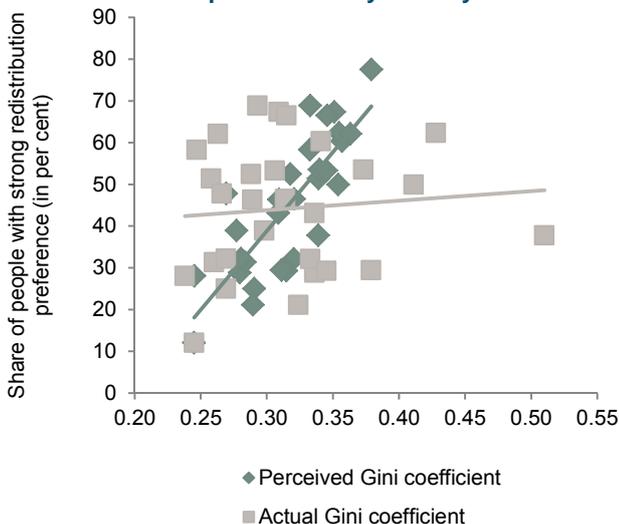
Whether people regard the reason for inequality as fair plays an important role. In economic literature, the term "fairness" is defined as performance fairness – an acceptance that people who put in greater effort and perform better should receive more – and equality of opportunity – that someone's income should be independent of factors beyond the influence of the individual.<sup>9</sup>

In general, people in societies in which income distribution is regarded as fair ought to be less in favour of redistribution. This hypothesis is supported by surveys demonstrating a negative correlation between perceived fairness and redistribution preferences.<sup>10</sup> The ratio of social expenditure to GDP is also significantly lower in societies with greater perceived fairness (Figure 5).<sup>11</sup>

**Social mobility – which is more likely: promotion or relegation?**

Uneven income distribution harbours opportunities and risks and these are also important when it comes to assessing inequality and demand for redistribution.

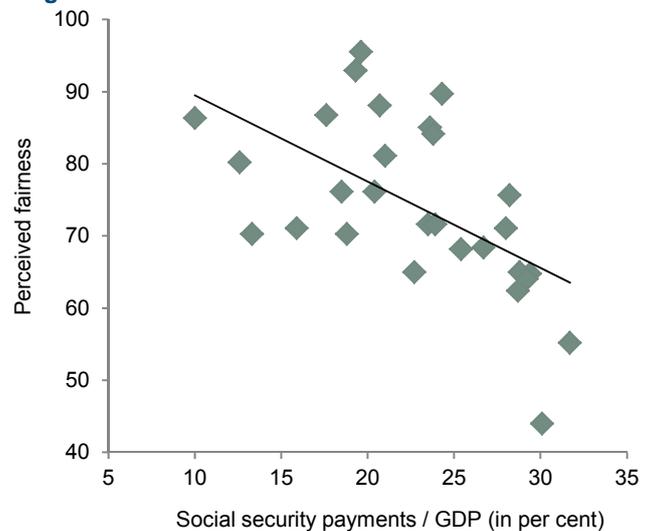
**Figure 4: Perceived and actual inequality, and redistribution preferences by country**



Note: Redistribution preferences expressed as a proportion of respondents strongly agreeing with the statement "Inequality in my country is too high". Gini coefficient expressed on the basis of income distribution after tax.

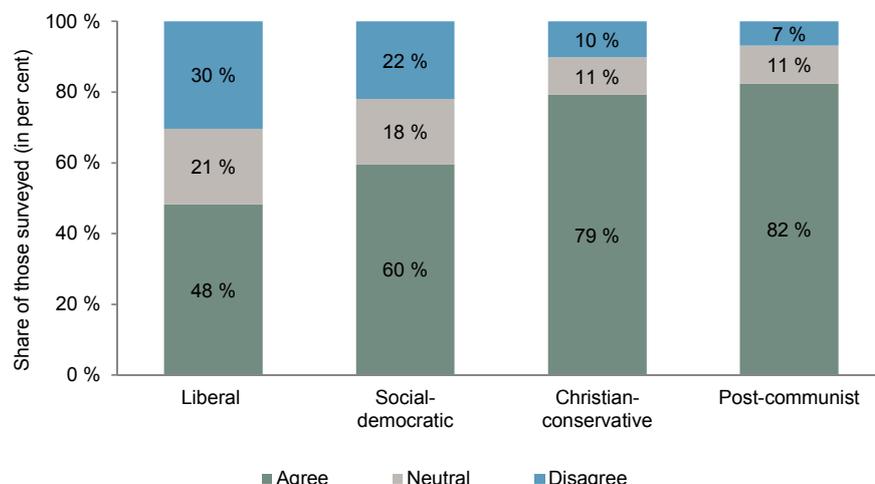
Source: ISSP 2009, own calculations.

**Figure 5: Perceived fairness and actual redistribution**



Note: Perceived fairness expressed as a proportion of respondents regarding "hard work" as extremely important or very important in order to get on in life.

Source: ISSP (2009), OECD (2009/10), own calculations.

**Figure 6: Redistribution as a function of the state**

Note: Based on the question: Is it a function of the state to reduce inequality?  
 Classification of value systems according to Dallinger (2011):  
 Liberal countries: GBR, USA, NZL, AUS, JAP;  
 Social-democratic: SWE, NOR, DNK, FIN;  
 Christian-conservative: FRA, AUT, ESP, ITA, PRT, DEU;  
 Post-communist: BGR, HRV, CZE, EST, HUN, LTU, POL, RUS, SVK, SVN, UKR  
 Source: ISSP 2009, own calculations.

Uneven distribution can be tolerated if an individual expects to be able to climb up to a higher income class. By contrast, people who fear social relegation have a more critical view of inequality and seek to protect themselves from the risks.

For the United states, a study shows that people who expect their income to rise above the median, have significantly lower redistribution preferences. By con-

trast, women, African Americans and the recently unemployed favour greater redistribution, as they are more likely than other groups to benefit from transfer payments in the future.<sup>12</sup>

#### Community of values, political system, culture and history

Fairness and social mobility are not the only factors that influence the assessment of inequality. Views on fair distribu-

tion on a macroeconomic level are influenced by a country's culture, its political system, its values as a community and its history. In liberal-minded countries, such as the United States and the United Kingdom for example, only 48% of respondents agree that it is up to the state to reduce inequality. In post-communist countries, on the other hand, the equivalent figure is 82%.<sup>13</sup>

#### Conclusion

The simple correlation between actual (measured) inequality and redistribution by the state derived from the classical median voter model is hardly empirically supported. This is because people do not always have an objective view of reality and sometimes make decisions based on criteria other than personal gain. Their redistribution preferences are, therefore, also influenced by the perception and assessment of inequality and not exclusively by an objective measure of inequality. It is, therefore, necessary to expand the classical median voter model by including factors such as the subjective estimate of income positions and inequality. The assessment of inequality should also be included when seeking to explain redistribution, as this can also explain differences in redistribution levels between countries. ■

<sup>1</sup> This median voter model goes back to Meltzer, A. H. and S. F. Richard (1981). A rational theory of the size of government. *The Journal of Political Economy*, 914–927.

<sup>2</sup> Cruces, G., Perez-Truglia, R. and M. Tetaz (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, 98, 100–112.

<sup>3</sup> Cruces, G., Perez-Truglia, R. and M. Tetaz (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, 98, 100–112.

<sup>4</sup> Source: for actual relationships: AFL-CIO (2011), for estimates: International Social Survey Project 2009 "Social Inequality IV" Questions V23 and V25.

<sup>5</sup> Gimpelson, V. and D. Treisman (2015). *Misperceiving Inequality* (No. w21174). National Bureau of Economic Research. Data sources: Eurobarometer 2010, Eurostat 2010.

<sup>6</sup> Source: International Survey Project 2009, In Germany the question regarding the perception of inequality was as follows (V54): What type of society exists in Germany today? Which diagram best represents this type of society? Response options: (1) a small elite at the top, only a small number of people in the middle, and the bulk of the population at the bottom. (2) like a pyramid: a small elite at the top, more people in the middle, and the majority of people at the bottom (3) like a pyramid but with only a small number of people at the very bottom. (4) a society with most people in the middle. (5) lots of people at the upper end and just a small number of people at the lower end.; diagrams were shown representing each of the response options. An estimated Gini value was allocated to each of the response options to Question V54. Allocation of Gini coefficients was carried out in accordance with Gimpelson, V. and D. Treisman (2015). *Misperceiving Inequality* (No. w21174). National Bureau of Economic Research. Estimated Gini coefficients can be calculated for each country by working out averages.

<sup>7</sup> cf. Niehues, J. (2014). Subjective perceptions of inequality and redistributive preferences: An international comparison. IW-TRENDS Discussion Papers, (2).; Engelhardt, C. and A. Wagener (2014). Biased Perceptions of Income Inequality and Redistribution.; Gimpelson, V. and D. Treisman (2015). *Misperceiving Inequality* (No. w21174). National Bureau of Economic Research.

<sup>8</sup> Alesina, A. F. and P. Giuliano (2009). *Preferences for redistribution* (No. w14825). National Bureau of Economic Research.

<sup>9</sup> cf. Alesina, A. and G. M. Angeletos (2005). Fairness and redistribution: US vs. Europe. *American Economic Review*, 95; Alesina, A. F. and P. Giuliano (2009). *Preferences for redistribution* (No. w14825). National Bureau of Economic Research.

<sup>10</sup> Alesina, A. F. and P. Giuliano (2009). *Preferences for redistribution* (No. w14825). National Bureau of Economic Research.

<sup>11</sup> Alesina, A. and G. M. Angeletos (2005). Fairness and redistribution: US vs. Europe. *American Economic Review*, 95.

<sup>12</sup> Alesina, A. and E. La Ferrara (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics*, 89(5), 897–931.

<sup>13</sup> Dallingier, U. (2010). Public support for redistribution: what explains cross-national differences?. *Journal of European Social Policy*, 20(4), 333–349.; International Social Survey Project (2009), own calculations.