

NBER WORKING PAPER SERIES

PERCEPTIONS AND PREFERENCES FOR REDISTRIBUTION

Stefanie Stantcheva

Working Paper 29370

<http://www.nber.org/papers/w29370>

NATIONAL BUREAU OF ECONOMIC RESEARCH

1050 Massachusetts Avenue

Cambridge, MA 02138

October 2021

Prepared for the IFS Deaton Review on Inequality. I thank Richard Blundell, Angus Deaton, Debra Satz, Bobby Duffy, Tim Besley, and participants at the IFS workshops for feedback and comments. The views expressed herein are those of the author and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2021 by Stefanie Stantcheva. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Perceptions and Preferences for Redistribution
Stefanie Stantcheva
NBER Working Paper No. 29370
October 2021
JEL No. H1,H2,P16

ABSTRACT

The relationship between the degree of inequality and the demand for redistribution has been a central question in political science and political economy. The famous median-voter model predicts that higher inequality, reflected in a growing gap between the income of the average and the median voter, should lead to increased demand for redistribution, as policymakers cater to the median voter's preferences (Meltzer and Richard, 1981). Yet, using data from OECD countries, Kenworthy and McCall (2008) show that, despite increases in inequality in those countries, there was no corresponding increase in demand for redistribution. Part of the explanation of this puzzle lies in the realization that it is not only (or even mainly) reality, but perceptions that shape support for policy. This article will explore recent evidence using large-scale social economics surveys and experiments that sheds lights on beliefs about inequality, social mobility, diversity and immigration, social position, and understanding of how policies work.

Stefanie Stantcheva
Department of Economics
Littauer Center 232
Harvard University
Cambridge, MA 02138
and NBER
sstantcheva@fas.harvard.edu

Perceptions and Preferences for Redistribution

Prepared for “Inequality: The IFS Deaton Review”

Stefanie Stantcheva (Harvard University)

Abstract

The relationship between the degree of inequality and the demand for redistribution has been a central question in political science and political economy. The famous median-voter model predicts that higher inequality, reflected in a growing gap between the income of the average and the median voter, should lead to increased demand for redistribution, as policymakers cater to the median voter's preferences (Meltzer and Richard, 1981). Yet, using data from OECD countries, Kenworthy and McCall (2008) show that, despite increases in inequality in those countries, there was no corresponding increase in demand for redistribution. Part of the explanation of this puzzle lies in the realization that it is not only (or even mainly) reality, but perceptions that shape support for policy. This article will explore recent evidence using large-scale social economics surveys and experiments that sheds lights on beliefs about inequality, social mobility, diversity and immigration, social position, and understanding of how policies work.

Introduction

The relationship between the degree of inequality and the demand for redistribution has been a central question in political science and political economy. The famous median-voter model predicts that higher inequality, reflected in a growing gap between the income of the average and the median voter, should lead to increased demand for redistribution, as policymakers cater to the median voter's preferences (Meltzer and Richard, 1981). Yet, using data from OECD countries, Kenworthy and McCall (2008) show that, despite increases in inequality in those countries, there was no corresponding increase in demand for redistribution.

Part of the explanation of this puzzle lies in the realisation that it is not only (or even mainly) reality, but perceptions that shape support for policy. Perceptions of inequality, among others, may or may not be aligned with facts. Beyond beliefs about inequality, there are other perceptions on key issues that can deeply influence people's views on redistribution. This article will explore beliefs about social mobility, diversity and immigration, social position, and understanding of how policies work.

One common thread in the studies presented here is the use of large-scale online social economics surveys and experiments. These can be powerful tools to elicit intangibles that would be difficult to extract from observed behaviour using revealed preference approaches, namely perceptions, knowledge, attitudes, or reasoning. Experiments are a particularly appealing tool to better understand how information interacts with misperceptions and how views on redistribution can be shaped.

Perceptions of inequality

Misperceptions about the actual level of inequalities have been widely documented, going back to Kluegel and Smith (1986). In more recent work, Norton and Ariely (2011) ask Americans to estimate the distribution of wealth in the US and find that respondents starkly underestimate the level of wealth inequality (see also Hauser and Norton (2017)). On the contrary, Chambers,

Heesacker and Lawton (2014) show that Americans overestimate the rise of income inequality over time and underestimate average incomes, but that there are important partisan differences in these perceptions. Gimpelson and Treisman (2018) point out that what really matters is perceived inequality more than actual inequality, as it correlates more with the demand for redistribution, and they highlight that there are widespread misperceptions about inequalities.

Randomised information treatments testing how information on inequality shapes policy preferences have yielded mixed results. Kuziemko et al. (2015) try to resolve the puzzle of why, despite the increase in inequality and the associated predictions from the median-voter model, many countries have not witnessed higher support for redistribution policies. To do so, they randomise respondents into different information treatments. The main treatment consists in showing respondents the US income distribution, as well as how that distribution would have been had the level of inequalities stayed the same since the 1980s (i.e. if economic growth had been evenly shared since 1980). The authors find strong effects of such information on concerns for inequality, and underline the persistence of such effects with a follow-up survey one month later. However, there is little effect on preferences for redistribution policies.

Kuziemko et al. (2015) test three explanations for why there is such a weak link between concerns for inequality and support for redistribution. The first could relate to, as suggested by Sapienza and Zingales (2013), beliefs about the government's ability to redistribute effectively. Kuziemko et al. indeed find that telling people about the level of inequality decreases their trust in government (which was low to start with), perhaps because people attribute such bad outcomes to an inability or unwillingness of politicians to tackle the problem. To test this channel, they experimentally reduce people's trust in the government by priming them to think about issues that are negatively correlated with views of the government, such as the Citizens' United campaign or the Wall Street bail-out. Accordingly, they find that reducing trust in government also reduces support for redistribution. Views of the government and perceptions of its trustworthiness are thus a potential explanation for why perceptions about inequality do not translate into demands for redistribution policy. As we will see below, this is a recurrent finding.

A second possible explanation is that impersonal and emotionless information may simply not be poignant enough to respondents. To test this, respondents are randomly presented information that evokes empathy for lower-income households by showing them the latter's budget constraints and costs of living. However, on its own, this is not sufficient to move policy views. A third explanation lies in respondents' inability to connect their concerns for inequality with specific policies meant to address it. To test it, Kuziemko et al. (2015) not only provide information about low-income households' budget constraints, but also concretely illustrate how specific policies such as the minimum wage or EITC can affect them. This type of information increases support for redistribution, but only through the specific policies mentioned. Overall, while perceptions and concerns about inequality appear malleable, policy views are much less easily changed.

Perceptions of social mobility

In addition to the level of inequality, people may also care about its persistence (Hufe, Kanbur and Peichl, 2020). Theoretical work highlights the link between perceptions of social mobility and support for redistribution (Piketty, 1995; Bénabou and Ok, 2001; Alesina and Angeletos, 2005). In a nutshell, the theory predicts that the higher social mobility is, the less people are willing to redistribute because they perceive that everyone had relatively equal chances to start with. Reciprocally, the less people believe in equality of opportunity, the less they are willing to tolerate inequality in outcomes. Again, it is perceptions of mobility that matter, and these perceptions may or may not be accurate.

Alesina, Stantcheva and Teso (2018) test this theory using social economics surveys and experiments in five countries: France, Italy, Sweden, the UK and the US. They find that Americans are not only – as typically thought – more optimistic about mobility than Europeans are, they are also overly optimistic given the reality. This optimism is especially vivid when it comes to the ‘American dream’, i.e. the chance of making it from rags to riches. On the contrary, Europeans are too pessimistic relative to reality and particularly overestimate the probability of someone born in a low-income household to stay stuck at low income levels. In addition, Americans on average believe more in the fairness of the economic system and that individual effort matters more than luck. Yet, both Americans and Europeans think that work increases the chances to reach the middle class but do not think that it can make a lot of difference to reach the top of the distribution. Within countries, there is a strong polarisation in beliefs about mobility and the role of individual merit between left- and right-wing respondents. Respondents on the left of the political spectrum are much less likely to believe in equality of opportunity.

To address the causal link between perceptions of mobility and views on redistribution, Alesina, Stantcheva and Teso (2018) show respondents pessimistic information about mobility, i.e. the fact that the chances of a poor child staying stuck in poverty are high, while children from rich families are much more likely to remain rich. Such information systematically makes respondents more pessimistic about mobility, but it only makes left-wing respondents more supportive of redistribution. The authors trace this back to a partisan gap in views of the government. On the right, respondents tend to perceive government as part of the problem, rather than the solution, and believe that the better way of improving equality of opportunity is to free the economy from government intervention. On the left, respondents tend to think that more government action is needed to reduce the gap in chances between children from poor and rich families, in terms of both equality of opportunity policies (e.g., education or health) and equality of outcome policies (e.g. progressive taxation or social insurance).

Perceptions of ethnic fragmentation, diversity and immigration

An extensive body of work suggests that generosity appears to travel less well across ethnic, national and religious groups than it does within. Soroka, Banting and Johnston (2006) document a negative relationship across OECD countries between the rate of growth of social spending and immigration flows over three decades (1970–98). Using data from the General Social Survey (GSS), Luttmer (2001) shows that people support more spending on welfare when the share of welfare recipients from their own racial group is higher. In Sweden, Dahlberg, Edmark and Lundqvist (2012) identify a negative impact of inflows of refugees on support for redistribution, especially among high-income earners. Finseraas (2008) points out that the total effect of immigration on redistribution is likely to be the balance of two opposing effects: the hostility towards immigrants leads to less support for redistribution, but the increased perception of competition and loss of one’s own job could increase support for redistribution. He finds evidence for both effects.

Regarding racial minorities, Alesina and Glaeser (2004) show that the generosity of the Aid to Families with Dependent Children (AFDC) welfare programme is negatively correlated with the share of black residents in the state. These findings echo those in Alesina, Ferroni and Stantcheva (2019), where white respondents who are less supportive of general (income-targeted) and race-targeted redistribution are those who perceive black people to be poor because of lack of effort, rather than systemic issues such as past slavery or discrimination.

Yet, perceptions of what share of redistribution benefits minorities or immigrants are strikingly misaligned with reality. Gilens (1996) shows that respondents significantly overestimate the

number of poor people who are black. Sides and Citrin (2007) find that people typically overestimate the actual number of immigrants living in their country.

To dig further into these issues, Alesina, Miano and Stantcheva (2018) study how immigration perceptions shape support for redistribution among more than 22,000 respondents across six countries: France, Germany, Italy, Sweden, the UK and the US. They first document the stark misperceptions that natives have about the share and socio-economic characteristics of immigrants in their country. In all the countries in the sample, respondents tend to overestimate the share of immigrants. For instance, in the UK, the actual share of immigrants is 13.4%, while the average perception is 31.4%. Respondents also overestimate the share of Muslim immigrants and underestimate the share of Christian immigrants (the majority religion in all countries in the sample). They think that immigrants are economically weaker, have lower education levels and higher rates of unemployment, and are more reliant on government transfers than is actually the case. These misperceptions are widespread, regardless of respondents' characteristics. But they are particularly strong among those who work in sectors with more immigrant workers, the non-college-educated, women and right-wing respondents.

Alesina, Miano and Stantcheva (2018) then show that experimentally making respondents 'think' about immigrants, by asking a randomly chosen half of the sample a series of questions on immigration before asking them about redistribution policies, makes respondents less supportive of redistribution. Thus, given the baseline misperceptions people have about the characteristics and reliance on government transfers of immigrants, just priming them to think about immigration reduces their support for redistribution.

Experimentally, showing respondents information on the actual share or origins of immigrants in their country has little effect. However, telling them an anecdote about a 'day in the life' of a very hard-working immigrant has stronger, but still limited, effects on support for redistribution policy. Thus, salience and narratives seem to shape people's views about immigration (and, subsequently, their policy preferences) more than facts.

Understanding of redistribution policies

How people understand policies may shape their support for them. Misunderstanding of how policies work, as well as divergent views between economists and non-economists, has been widely documented (Blendon et al., 1997; Sapienza and Zingales, 2013).

Tax policy is often complex. For instance, people frequently conflate marginal and average taxes, which leads to 'schmeduling' (Gideon, 2017; Ballard and Gupta, 2018; Rees-Jones and Taubinsky, 2019). On the estate tax, Kuziemko et al. (2015) highlight the stark misinformation about the share of estates that are subject to it. Correspondingly, they find increasing support for the unpopular estate tax after providing information about the low share of estates that are subject to it, echoing the findings in Sides (2011).

In Stantcheva (2020), the author runs two large-scale online surveys on income and estate taxes with the goal of eliciting not only what people know about tax policy, but also how they reason about it. Different views about the right level of taxes could stem from the perceived behavioural or efficiency effects ('Will people work less if taxes increase?'), from the perceived distributional impacts ('Who loses and who gains if taxes are cut?') and from the normative criteria people apply when aggregating the gains and losses of different people (such as 'How fair is income inequality?'). Policy views can also be affected by the perceived trustworthiness and efficiency of the government, how tax revenue is spent or misperceptions of the status quo tax system.

The surveys are designed to elucidate the main factors that could shape tax policy views. These are the perceived efficiency effects, the distributional impacts, and the fairness implications of taxes, as well as views of government, spillovers between people and how tax revenues are spent. To establish causality between different mechanisms and policy views, the author shows respondents short instructional videos that explain how tax policy works, from one of three perspectives. The 'Redistribution' perspective focuses on the distributional consequences of taxes, while the 'Efficiency' perspective considers the efficiency impacts. The 'Economist' perspective considers both and their trade-off. Rather than providing simple facts, these videos are pedagogical and focus on explaining mechanisms.

The author finds that there are very large partisan gaps not only in the policy views on taxes, but throughout the full chain of reasoning and all the way down to the level of perceptions of reality. Indeed, there is what Alesina, Miano and Stantcheva (2020) call a 'polarization of reality' whereby people on the left and right of the political spectrum do not perceive the current tax system in the same way, with left-wing respondents believing that taxes are lower and less progressive than right-wing respondents. Left-leaning respondents think that the efficiency costs of taxes are smaller and that there is no 'trickle-down' (i.e. that lowering taxes on high incomes will not be the tide that lifts all boats), and they believe less in 'Laffer effects' for top earners (i.e. that cutting the tax rate on top earners could increase economic activity so strongly that it ultimately makes up for the tax cut and increases overall tax revenues). In addition, views on what is fair when it comes to income or wealth inequality and taxation differ starkly across partisan lines, as do views of government. Ultimately, a decomposition of the partisan gap shows that it can best be explained with different normative criteria and social preferences (what is considered to be fair) and views of the government, rather than with different perceptions of the efficiency costs of taxes.

Furthermore, these factors related to social preferences – i.e. the perceived benefits of redistribution, how fair inequality is perceived to be, and whether high-income earners are entitled to keep or pass on their wealth to their children – are most predictive of support for taxes. Views of the trustworthiness and scope of government are also crucial drivers of policy views. As was shown for the partisan gap, efficiency costs matter much less in informing policy views.

Social position

How people position themselves relative to others in society has been shown to matter for their happiness and well-being (Duesenberry, 1949; Easterlin, 1974, 1995; Blanchflower and Oswald, 2004; Ferrer-i-Carbonell, 2005). Luttmer (2005) highlights that, after controlling for own income, self-reported happiness decreases as neighbours' incomes increase. Card, Mas, Moretti and Saez (2012) find that job satisfaction is directly related to pay comparisons and Cullen and Perez-Truglia (2018) even find that pay comparisons can affect work satisfaction and effort. Perez-Truglia (2020) studies a natural experiment in Norway that made tax records and incomes easily visible online. He finds that learning about others' incomes had a negative effect on the well-being of people with lower incomes, but a positive effect on those with high incomes.

Furthermore, how people rank themselves relative to others also affects their views of how fair inequality is and what should be done about it. Kuziemko et al. (2014) highlight the role of 'last-place aversion', a particular form of relative position concerns whereby individuals particularly fear and try to avoid being ranked last. Fisman, Kuziemko and Vannutelli (2020) show that people have aversion towards 'top-most' inequality (i.e. they care about the top end of the distribution) as well as towards inequality with people close to them in the distribution.

Yet, people may or may not be accurate about their social position. Cruces, Perez-Truglia and Tetaz (2013) show that most people tend to overestimate their position in the income distribution, and that showing lower-income individuals their actual place increases their support for redistribution policies. In Karadja, Mollerstrom and Seim (2017), respondents tend to rank themselves too low, a finding that also holds when considering the global, rather than national, income distribution in Fehr, Mollerstrom and Perez-Truglia (2019). Zooming in on income distributions within firms, Cullen and Perez-Truglia (2018) show that people often underestimate their boss's salary, as well as – to a lesser extent – their colleagues'.

In Hvidberg, Kreiner and Stantcheva (2021), the authors leverage a unique large-scale data set for a sample of people born in Denmark between 1969 and 1973, constructed by matching survey responses to detailed administrative data that contain respondents' full income histories, life events, and actual positions in the income distributions of different 'reference groups'. Reference groups are, for instance, people from the same cohort, and of the same gender, or living in the same municipality, having the same education level or working in the same sector. The authors also consider smaller reference groups such as one's direct neighbours, co-workers in the same firm or former schoolmates. Thanks to the match between survey and administrative data, people's own rankings in these different groups can be compared with reality. Furthermore, their views on fairness of inequality can be matched to their actual and perceived positions, as well as to changes in social positions over their lifetimes, including those due to unemployment, health shocks or promotions. Finally, the authors also exploit the fact that they know people's true positions in all their reference groups to inform a randomly selected subsample of their actual positions and see how this shapes their views.

Hvidberg, Kreiner and Stantcheva (2021) find that, first, respondents are relatively well informed about the income distribution overall (its median and 95th percentile) and of their own position. Yet, there are systematic misperceptions. Lower-ranked respondents tend to think they are ranked higher than they truly are, while higher-ranked respondents believe they are ranked lower. As a result, people tend to underestimate the degree of inequality and believe that the incomes of others are closer to their own than is the case. Second, people's views on the fairness of inequality within a given group (e.g. inequality in incomes among those with the same level of education) are strongly correlated with their position in that group. When people experience negative shocks that shift their social position, such as unemployment, hospitalisation or disability, they believe inequality to be less fair; the opposite occurs when they experience positive shocks to their position, such as a promotion at work. However, telling people their actual position has asymmetric effects: those who were overestimating their position become more likely to think inequality is unfair; those who are told they are, in fact, ranked higher than they thought do not change their views. Thus, bad news appears to be more salient than good news. Finally, the inequalities that people consider most unfair are those between people who have the same education level or who work in the same sector or firm as them, rather than between people in the same municipality or cohort, neighbours or people of the same gender. Yet, it is within sector and education reference groups that people tend to starkly underestimate the degree of inequality and that lower-income people overestimate their position the most.

Conclusions

The degree of redistribution people support depends on their perceptions and misperceptions of a wide range of issues. Misperceptions interact with people's considerations of what is fair, as well as views of the government, which were two factors that stood out across the different settings and samples in the papers described. For instance, someone who believes it is fairer to help non-immigrants rather than immigrants will support less redistribution if they perceive the share of immigrants to be higher. Two people who think that too much income inequality is unfair

will support different levels of redistribution if they perceive income inequality to be different. There are two important lessons here. First, although it was shown to sometimes be difficult to convey facts or explain how economic policies work in a convincing manner, there is a lot of scope to help improve citizens' understanding and correct some stark misperceptions. This could help people make better decisions on policies that affect their daily lives. Second, because of the interaction between views on fairness and misperception, providing better information can shape people's support for policies, even if it does not shift their fundamental, deep-seated fairness views.

References

- Alesina, A., & Angeletos, G-M. (2005), 'Fairness and Redistribution', *American Economic Review*, 95, 960–80.
- Alesina, A., Ferroni, M., & Stantcheva, S. (2019), 'Race and Redistribution in the US: Evidence from a Large-Scale Survey and Experiments', *Harvard University Working Paper*.
- Alesina, A., & Glaeser, E. (2004), *Fighting Poverty in the US and Europe: A World of Difference*, Oxford University Press.
- Alesina, A., Miano, A., & Stantcheva, S. (2018), 'Immigration and Redistribution', National Bureau of Economic Research (NBER), Working Paper 24733 [Revise and Resubmit at Review of Economic Studies].
- Alesina, A., Miano, A., & Stantcheva, S. (2020), 'The Polarization of Reality', *AEA Papers and Proceedings*, 110, 324–8.
- Alesina, A., Stantcheva, S., & Teso, E. (2018), 'Intergenerational Mobility and Support for Redistribution', *American Economic Review*, 108, 521–54.
- Ballard, C. L., & Gupta, S. (2018), 'Perceptions and Realities of Average Tax Rates in the Federal Income Tax: Evidence from Michigan', *National Tax Journal*, 71, 263–94.
- Bénabou, R., & Ok, A. E. (2001), 'Mobility as Progressivity: Ranking Income Processes According to Equality of Opportunity', National Bureau of Economic Research (NBER), Working Paper 8431.
- Blanchflower, D. G., & Oswald, A. J. (2004), 'Well-Being over Time in Britain and the USA', *Journal of Public Economics*, 88, 1359–86.
- Blendon, R. J., Benson, J. M., Brodie, M., Morin, R., Altman, D. E., Gitterman, D., Brossard, M., & James, M. (1997), 'Bridging the Gap between the Public's and Economists' Views of the Economy', *Journal of Economic Perspectives*, 11(3), 105–18.
- Card, D., Mas, A., Moretti, E., & Saez, E. (2012), 'Inequality at Work: The Effect of Peer Salaries on Job Satisfaction', *American Economic Review*, 102, 2981–3003.
- Chambers, J. R., Heesacker, M., & Lawton K. S. (2014), 'Better Off than We Know: Distorted Perceptions of Incomes and Income Inequality in America', *Psychological Science*, 25, 613–18.
- Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013), 'Biased Perceptions of Income Distribution and Preferences for Redistribution: Evidence from a Survey Experiment', *Journal of Public Economics*, 98, 100–12.
- Cullen, Z., & Perez-Truglia, R. (2018), 'How Much Does Your Boss Make? The Effects of Salary Comparisons', National Bureau of Economic Research (NBER), Working Paper 24841.
- Dahlberg, M., Edmark, K., & Lundqvist, H. (2012), 'Ethnic Diversity and Preferences for Redistribution', *Journal of Political Economy*, 120, 41–76.
- Duesenberry, J. (1949), *Income, Saving, and the Theory of Consumer Behavior*, *Economic Studies* 87, Harvard University Press.
- Easterlin, R. A. (1974), 'Does Economic Growth Improve the Human Lot? Some Empirical Evidence', in P. A. David & M. W. Reder (eds), *Nations and Households in Economic Growth*, Academic Press.

-
- Easterlin, R. A. (1995), 'Will Raising the Incomes of All Increase the Happiness of All?', *Journal of Economic Behavior and Organization*, 27, 35–47.
- Fehr, D., Mollerstrom, J., & Perez-Truglia, R. (2019), 'Your Place in the World: The Demand for National and Global Redistribution', *National Bureau of Economic Research (NBER), Working Paper 26555*.
- Ferrer-i-Carbonell, A. (2005), 'Income and Well-Being: An Empirical Analysis of the Comparison Income Effect', *Journal of Public Economics*, 89, 997–1019.
- Finseraas, H. (2008), 'Immigration and Preferences for Redistribution: An Empirical Analysis of European Survey Data', *Comparative European Politics*, 6, 407–31.
- Fisman, R., Kuziemko, I., & Vannutelli, S. (2020), 'Distributional Preferences in Larger Groups: Keeping Up with the Joneses and Keeping Track of the Tails', *Journal of the European Economic Association*, 19, 1407–38.
- Gideon, M. (2017), 'Do Individuals Perceive Income Tax Rates Correctly?', *Public Finance Review*, 45, 97–117.
- Gilens, M. (1996), "'Race Coding" and White Opposition to Welfare', *American Political Science Review*, 90, 593–604.
- Gimpelson, V., & Treisman, D. (2018), 'Misperceiving Inequality', *Economics & Politics*, 30, 27–54.
- Hauser, O. P., & Norton, M. I. (2017), '(Mis)perceptions of Inequality', *Current Opinion in Psychology*, 18, 21–5.
- Hufe, P., Kanbur, R., & Peichl, A. (2020), 'Measuring Unfair Inequality: Reconciling Equality of Opportunity and Freedom from Poverty', *ifo Institute, Working Paper 323*.
- Hvidberg, K. B., Kreiner, C., & Stantcheva, S. (2021), 'Social Position and Fairness Views', *National Bureau of Economic Research (NBER), Working Paper 28099*.
- Karadja, M., Mollerstrom, J., & Seim, D. (2017), 'Richer (and Holier) than Thou? The Effect of Relative Income Improvements on Demand for Redistribution', *Review of Economics and Statistics*, 99, 201–12.
- Kenworthy, L., & McCall, L. (2008), 'Inequality, Public Opinion and Redistribution', *Socio-Economic Review*, 6, 35–68.
- Kluegel, J. R., & Smith, E. R. (1986), *Social Institutions and Social Change. Beliefs about Inequality: Americans' Views of What Is and What Ought to Be*, Aldine de Gruyter.
- Kuziemko, I., Buell, R. W., Reich, T., & Norton, M. I. (2014), "'Last-Place Aversion": Evidence and Redistributive Implications', *Quarterly Journal of Economics*, 129, 105–49.
- Kuziemko, I., Norton, M., Saez, E., & Stantcheva, S. (2015), 'How Elastic Are Preferences for Redistribution: Evidence from Randomized Survey Experiments', *American Economic Review*, 105, 1478–508.
- Luttmer, E. F. (2001), 'Group Loyalty and the Taste for Redistribution', *Journal of Political Economy*, 109, 500–28.
- Luttmer, E. F. (2005), 'Neighbors as Negatives: Relative Earnings and Well-Being', *Quarterly Journal of Economics*, 120, 963–1002.

- Meltzer, A. and Scott Richard. (1981) 'A Rational Theory of the Size of Government' *Journal of Political Economy*, 89, 914-927
- Norton, M. I., & Ariely, D. (2011), 'Building a Better America: One Wealth Quintile at a Time', *Perspectives on Psychological Science*, 6, 9-12.
- Perez-Truglia, R. (2020), 'The Effects of Income Transparency on Well-Being: Evidence from a Natural Experiment', *American Economic Review*, 110, 1019-54.
- Piketty, T. (1995), 'Social Mobility and Redistributive Politics', *Quarterly Journal of Economics*, 110, 551-84.
- Rees-Jones, A., & Taubinsky, D. (2019), 'Measuring "Schmeduling"', *Review of Economic Studies*, 87, 2399-438.
- Sapienza, P., & Zingales, L. (2013), 'Economic Experts versus Average Americans', *American Economic Review*, 103, 636-42.
- Sides, J. (2011), 'Stories, Science, and Public Opinion about the Estate Tax', *George Washington University Department of Political Science*.
- Sides, J., & Citrin, J. (2007), 'European Opinion about Immigration: The Role of Identities, Interests and Information', *British Journal of Political Science*, 37, 477-504.
- Soroka, S., Banting, K., & Johnston, R. (2006), 'Immigration and Redistribution in a Global Era', in P. Bardhan, S. Bowles & M. Wallerstein (eds), *Globalization and Egalitarian Redistribution*, Princeton University Press.
- Stantcheva, S. (2020), 'Understanding Tax Policy: How Do People Reason?', *National Bureau of Economic Research (NBER), Working Paper 27699*.