Inequality Externality Beliefs and Redistributive Preferences[*]

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Abstract

This paper explores beliefs about how economic inequality changes society, and establishes a causal link between such *inequality externality beliefs* and redistributive preferences. Using a representative survey of 4,371 U.S. citizens, we show that essentially every individual believes that inequality affects society in one way or another. A large and consistent majority believes that inequality leads to negative societal outcomes through channels such as increased crime or worsening economic factors. These beliefs are widespread across incomes and party lines. We establish a causal link from externality views to individuals' redistributive preferences by using exogenously provided video information treatments, and estimate the importance of externality beliefs for redistributive preferences to be roughly two-thirds that of classical fairness views. Our results also indicate that inequality externality-based arguments are less polarized and polarizing than classical fairness-based arguments, showing that these two motives behind preferences for redistribution are structurally distinct.

1 Introduction

Why do we care about economic inequalities? Some believe inequalities are unfair; others say the value of a dollar differs across incomes. Yet others think inequalities are implicit to meritocracy or an unfortunate side effect of a tax system that aims at incentivizing economic growth. These motivations and their effect on redistributive preferences have been extensively studied in the academic literature (reviews in Alesina and Giuliano, 2011; Cappelen et al., 2020). Nonetheless, a key determinant is missing in the existing literature. People might care about economic inequality because they think *economic inequality itself* changes society; say more inequality leads to increasing crime rates, for example, or lower levels of generalized societal trust; or a better or worse society generally speaking. Individuals' beliefs about such societal effects of inequality – or *inequality externalities*, as we call them, following Støstad and Cowell (2020) – are largely unstudied, yet they are both intriguing in themselves and potentially strong determinants for redistributive preferences. Following these observations, this paper asks two main questions. First, do U.S. citizens expect economic inequality to change society, and if so, how? And second, do such beliefs impact individual redistributive preferences?

To answer these questions we analyze novel survey responses from a sample of 4,371 U.S. citizens that is representative along age, gender, region, and political affiliation. In doing so we create the first comprehensive database of beliefs about inequality externalities. We find that 97% of respondents believe that economic inequality changes society in some way. 15% believe the net effect to be positive, 60% believe the net effect to be negative, and 21% believe the positive and negative effects to roughly cancel each other out. We also find strong beliefs in specific inequality externalities; 76% think inequality increases crime, for example, 68% think inequality decreases generalized trust, and a majority thinks inequality decreases both economic growth and innovation. Respondents believe such inequality externalities could have considerable consequences; 61% of our respondents answer either "Yes, maybe" (46%) or "Yes, definitely" (25%) when asked whether extremely high inequality levels would "significantly increase the chances of a societal collapse." We present further descriptive results on respondents' beliefs about inequality's effects on corruption, social unrest, the quality of democratic institutions, and more. Generally speaking, our results indicate that individuals believe economic inequality to be a strong negative externality.

Our study also examines whether inequality externality beliefs constitute an important *determinant* for redistributive preferences. We show that such beliefs *do* affect redistributive preferences and compare the relative importance of this externality effect to the importance of economic fairness beliefs. Our main method to explore whether inequality externality beliefs are a determinant of redistributive preferences is a set of four exogenous information treatments. We use easily digestible videos to inform respondents about four different empirical relationships; (i) income inequality's correlation with crime (crime externality treatment), (ii) income inequality's correlation with trust (trust externality treatment), (iii) comprehensive information about income inequality's correlations with trust and crime, non-correlations with innovation and growth, and general arguments about how inequality could affect society (full externality treatment), and (iv) the decoupling of wages and productivity since roughly 1980 and rising top incomes in the period after (fairness treatment). The first three treatments are designed to

exogenously shift various externality beliefs, whereas the last is designed to exogenously shift fairness beliefs as a strong benchmark, due to them being well-known determinants of redistributive preferences in the literature (Alesina and Giuliano, 2011). We make several novel survey design choices to avoid survey demand and priming effects, including what we call a *secondary survey* (a structural gap between treatment and outcome of interest) and *dual control groups* (using both an active and a passive control group).

We find that the full externality treatment and the fairness treatment are both significant predictors of higher redistributive preferences when compared to our control group ($p < 0.01$). These results are robust to different specifications. The effects of the crime and trust externality treatment are not statistically significant, but are in the expected direction of increased redistributive preferences. The magnitude of the full externality treatment effect is roughly half that of the fairness treatment. First-stage effects are consistently strong and as expected; externality treatments increase beliefs that inequality affects society, and the fairness treatment increases beliefs that the economic system is unfair. In general the opposite is not true; the externality treatment has small or non-existent effects on fairness beliefs, and the fairness treatment has small or non-existent effects on externality beliefs (indicating limited spillovers). In summary, the full externality information treatment has an effect on redistributive preferences through the intended channel (externality beliefs) that is smaller than the fairness treatment but still on the scale of other determinants of preferences for redistribution—the externality treatment effect is similar to the well-known gender difference in redistributive preferences, for example. Given the exogenous nature of the treatment, this shows that inequality externality beliefs are determinants of redistributive preferences. The non-significance of the two other externality treatments indicate that externality information is more convincing when it is of a comprehensive nature rather than focusing on one specific inequality externality (for example inequality's effect on crime).

We use two other methods to explore the relative importance of inequality externality beliefs and fairness concerns on redistributive preferences. First, in a classical horse-race, we compare the predictive power of externality beliefs, fairness views, political preferences, and efficiency concerns in estimating redistributive preferences. The second is simply asking respondents what they take into account when thinking about their preferred level of redistribution. These approaches find that externality beliefs are roughly two-thirds as important as fairness views in determining redistributive preferences.

Our results also indicate a significant structural difference in how inequality externality and fairness arguments operate. Fairness arguments require, to some extent, a victim or villain – someone who deserves more, or someone who deserves less – and are thus prone to polarize. Externality arguments are potentially less polarizing, instead focusing on the shared burden of the unintended societal effects of inequality. Strengthening the polarization theory, individuals who saw the fairness video are significantly more likely to report their reaction to the video as *anger*. Their reaction is also split across incomes; bottom income individuals are significantly more swayed by the fairness treatment than top income individuals. The externality treatment, on the other hand, is less likely to cause anger and is equally convincing across the distribution. We thus hypothesize that there is a trade-off between fairness arguments and externality

arguments when pushing for more redistribution; fairness arguments are more effective near the bottom of the distribution, but cause more polarization across income levels. The efficacy of externality arguments is more evenly distributed, thus being less effective near the bottom, but also being less polarizing.

Beyond their effects on redistributive preferences, inequality externality beliefs are intriguing to study due to their influence on economic theory. As discussed in Thurow (1971) and Støstad and Cowell (2020), inequality's externality effects have large ramifications for individualist economic theory. This paper, in summarizing the widespread public beliefs in such effects, shows that a social planner which aggregates individual preferences might wish to include such effects in its optimization problem. Standard individualist frameworks should thus consider more seriously their robustness—or fragility—to such externality effects.

The theoretical ramifications go beyond utilitarianism. When economic inequality has externalities, the core problem of economics becomes not just to maximize income efficiently but also to find the correct trade-off between more income and less inequality – to chart a steady path forward while preserving and improving society as we know it. What amount of resource inequality is safe and sustainable? Should we limit top incomes entirely? These questions are relevant questions when inequality has externalities and go beyond simple egalitarianism.

Contribution to the existing literature   This paper primarily adds to two streams of literature. The first is the literature on the motives behind redistributive preferences and the origins of the heterogeneity in these preferences. Past work asks whether fairness ideals and efficiency costs of redistribution motivate inequality acceptance (Cappelen et al., 2007; Almås et al., 2020), whether beliefs about one's relevant position affects redistributive preferences (Cruces et al., 2013; Karadja et al., 2017), whether redistributive preferences are elastic to information about inequality (Kuziemko et al., 2015), and whether beliefs about social mobility affect redistributive preferences (Alesina et al., 2018; Gärtner et al., 2019). Surprisingly, given its intuitive nature and important implications, citizens' concerns about inequality's damaging effects has not been studied by this literature, even though it has been proposed as a possible motive behind redistributive preferences in the prior literature (Alesina and Giuliano, 2011). One exception is work by Rueda and Stegmueller (2016) who present correlational evidence of an association between fear of crime and preferences for redistribution and link the two through an externality-based argument in their theoretical framework. Thus, by studying inequality externality concerns as a possible motive behind preferences for redistribution, we allow for a more complete characterization of preferences over redistribution.

The second stream of the literature is the work on inequality's externality effects. The theoretical strand of this literature began with Thurow (1971), who argues that the first welfare theorem fails if the income distribution is a pure public good. Alesina and Giuliano (2011) notes that economic inequality can affect individual consumption and thus redistributive preferences, while Rueda and Stegmueller (2016) consider crime as an inequality externality and finds that this has an effect on the preferred redistribution of the rich. A certain section of the inequality aversion literature specifically discusses how such inequality externalities could influence individual preferences (Carlsson et al., 2005) and thus optimal income taxation in the first-best and discrete-agent settings (Aronsson and Johansson-Stenman, 2018, 2020). Støstad

and Cowell (2020) formalize the framework around inequality as an externality, discusses and creates micro-foundations for non-consumption based inequality externalities, and solves the second-best continuous-agent optimal taxation problem to show the large extent to which an inequality externality influences most aspects of well-known optimal income taxation theory.

There is also a large empirical literature on inequality externality effects which, in terms of establishing causal connections, is troubled by intrinsic empirical concerns and insufficient data (see Støstad, 2019, for a discussion). Despite these concerns, there is a large literature attempting to empirically estimate externality effects, particularly on crime and individual health (where data is more easily available). A full examination of this literature is beyond the scope of this paper; summaries for crime and individual health can be found in Rufrancos et al. (2013) and Bergh et al. (2016), respectively. In short, there is strong correlational evidence indicating that inequality creates externalities in various dimensions, but convincing large-scale causal evidence is unlikely to be forthcoming due to intrinsic empirical issues. In smaller settings, causal evidence can exist; economic inequality has been convincingly shown to affect subjective well-being (Card et al., 2012) and productivity (Breza et al., 2018) in the workplace (through relative income concerns), and trust in laboratory experiments (Fehr et al., 2020).

2 Theoretical framework

2.1 Inequality externalities

Exploring every potential causal channel through which economic inequality could affect society is beyond the scope of this paper. Still, it is useful to note two points briefly. First, each of the channels we focus on could be caused by several different mechanisms. Second, inequality externalities are relatively simple to micro-found and can be *mechanical* in nature.

To establish the first point we will use the existing literature on economic inequality's impact on crime. Following Kelly (2000), three main theories of how economic inequality increases crime can be sketched:

1. *The economic theory of crime* poses that individuals rationally optimize their resources, allocating time between market labor and criminal activity. Higher economic inequality leads to a higher relative return to crime for the majority of the population, as the return from successful criminal activity depends on the economic status of the victim. Thus individuals substitute into criminal activity when inequality increases, and the amount of crime increases.

2. *The strain theory of crime* poses that individuals who struggle in more unequal economic systems are increasingly frustrated by what they see as their relative (and potentially unjust) failure compared to those around them. This causes stress, alienation, and finally leads at least some individuals to criminal activity.

3. *The social disorganization theory of crime* considers that inequality could decrease family and institutional stability, increase relative poverty, and weaken social networks. If so, or if economic inequality reduces societal stability in other ways, there could be both more opportunities for and less risk from criminal activity – thus increasing the amount of crime.

One could also find causal channels for why economic inequality *decreases* crime; suppose that higher economic inequality leads to more segregation or stricter policing, for instance, which leads to less criminal opportunity.

This presents a brief overview of the nuanced and varied hypotheses that underpin one potential inequality externality, that of crime. However, the existence of inequality externalities does not generally have to rely on complex causal channels. To establish that inequality externalities can be relatively simple to micro-found and can be mechanical in nature we refer to Støstad and Cowell (2020). Several of the inequality externalities we explore in this work – including crime, trust, political polarization, innovation, and economic growth – are microfounded there. It is also argued that certain externalities are *mechanical* in nature, in other words that a population of purely self-interested rational agents could experience them. The economic theory of crime is one such example, where self-interested agents rationally react to higher economic inequality, but there are many more; a more unequal society would have a more difficult time funding public goods if public good preferences are diverging in income, for example. In other words, individuals do not have to have other-regarding preferences of any kind for inequality externalities to exist.

It is also possible for the relation between economic inequality and any inequality externalities to be non-monotonous in nature, to depend on the *source* or *type* of inequality (e.g. meritocratic or non-meritocratic inequality, wealth or income inequality), to depend on *perceived* rather than *actual* economic inequality, and so on. These factors will not be explored further in this paper to retain simplicity in the survey design.

In sum, inequality externalities are theoretically complex to fully model, and there exists an academic literature pursuing this goal. However, their existence does not rely on individual irrationality, and specific causal channels can be easily microfounded. The large underlying complexity gives way to a simplicity that non-experts can both understand and opine on.

2.2 Inequality externalities and redistribution

A simple model of individual preferences for redistribution takes into account the individual's expected post-tax income x_i and broad fairness concerns. We introduce such fairness concerns through generalized social welfare weights $g_{i,j}(z)$ – indicating the value individual i would put on another individual j at pre-tax income z receiving one extra unit of income if individual i was the social planner (normalized to one), absent any effect on economic inequality. For example, if individual i only cares about maximizing their own income even if they were the social planner, then $g_{i,i} = 1$ and $g_{i,j} = 0 \ \forall \ j \neq i$ even if the respondent might selfishly want to reduce inequality due to the presence of inequality externalities. $\bar{G}_i(z)$ indicates the average weight respondent i sets above income z. In the theoretical framework we consider fairness concerns to be perfectly captured by the social weights and thus assume no strict other-regarding preferences (altruism, jealousy, relative income concerns, and so on).[1]

We posit that individuals might also have preferences over their *preferred state of the world*

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[1]Such other-regarding preferences would be introduced through an economic inequality term directly inserted into the utility function such that $U_i(x_i, \theta, ...)$. Other-regarding preferences impact the optimal taxation problem similarly to inequality externality issues. In practice broad fairness concerns are most likely a composite of social weights and other-regarding preferences.

$\overrightarrow{\Gamma}$, where $\overrightarrow{\Gamma}$ represents a vector of various utility-pertinent variables – the crime rate, the level of generalized trust, and so on. The questions we pose in this paper is whether individuals believe that economic inequality affects this $\overrightarrow{\Gamma}$ such that this vector – and potentially individual income x_i – is a function of economic inequality θ. If so, these *inequality externality beliefs* should affect total redistributive preferences. In this case individual utility can be written and simplified as,

$$U_i(x_i(\theta),\ \overrightarrow{\Gamma}(\theta))\ \rightarrow\ \tilde{U}_i(x'_i,\ \theta), \tag{1}$$

where we simplify the utility function to $\tilde{U}_i$ by removing the parts of the $\overrightarrow{\Gamma}$ function not related to the economic variables x_i or θ, and defining x'_i as the part of post-tax income that is independent of economic inequality.

The remaining θ indicates how inequality indirectly affects individuals through any inequality externalities. The effect of this θ on utility depends on the marginal rate of substitution between income and income inequality $\eta_i = MRS_{x\theta} = -\frac{dU_i/d\theta}{dU_i/dx}$. For theoretical simplicity, this η is assumed homogenous across the distribution.[2] If η is large and positive, inequality is a significant negative externality (a public bad). If it is negative, inequality is a positive externality (a public good).

In the descriptive part of the paper we will explore individuals' current functions $E(\overrightarrow{\Gamma}(\theta))$, which determines η; to what extent they believe economic inequality affects pertinent societal variables. In the externality arm of the information experiment we will aim to inform individuals about inequality externalities to change their perceived $E(\overrightarrow{\Gamma}(\theta))$. A successful intervention would thus change redistributive preferences through the respondent's maximization problem. Similarly, the fairness treatment of the information experiment will aim to inform individuals about income distribution dynamics to change their social weights $g_{i,j}$, thus also changing the maximization problem.

2.2.1 Respondents' preferred redistribution

Respondent i solves the maximization problem outlined above and sets the following marginal income tax rate $\tau_i(z)$ at income z,[3]

$$\tau_i(z) = \frac{1 + \eta_i\Omega_i(z) - \bar{G}_i(z)}{1 + \eta_i\Omega_i(z) + \alpha_i(z)\epsilon_i(z) - \bar{G}_i(z)}, \tag{2}$$

where $\Omega_i(z) = \alpha_i(z)\epsilon_i(z)\kappa(z) + \bar{\kappa}(z)$. Here $\alpha_i(z)$ is the individual's estimated local Pareto parameter (a variable denoting the thickness of the income distribution) and $\epsilon_i(z)$ is the individual's estimated earnings elasticity with respect to $1 - \tau(z)$ for the population. The parameter $\kappa(z)$ denotes the weight of the individual at the tax bracket z in the inequality metric, and $\bar{\kappa}(z)$ denotes the average of this weight above z.

More *negative* inequality externality beliefs indicate a higher η_i, and thus a higher $\tau_i(z)$ near the top. More *positive* inequality externality beliefs indicate a lower η_i and thus lower $\tau_i(z)$ near the top. Fairness concerns are introduced through $\bar{G}_i(z)$; a lower $\bar{G}_i(z)$ for high z indicates higher top tax rates and vice versa.

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[2]This theoretical assumption is made for expositional simplicity and does not affect the empirical analysis.

[3]See Støstad and Cowell (2020) for derivation and details.

To sum up, η_i thus captures the respondent's inequality externality concerns. Higher beliefs in negative externalities imply more demand for redistribution and higher beliefs in positive externalities imply less demand for redistribution. $\bar{G}_i$ captures fairness concerns; depending on whether the individual views pre-tax inequality as unfairly too high or unfairly too low, more fairness concerns imply more or less demand for redistribution and vice versa. The remainder of the paper will expand on these theoretical topics; first exploring individuals' externality beliefs, then examining how they relate to preferences for redistribution.

3 Survey-design

The survey is organized into three parts, which are illustrated in Figure 1. Part 1 elicits baseline attitudes towards the government and collects most demographic information. Part 2 consists of a randomized information treatment. Part 3 elicits our main outcomes on redistributive preferences, views regarding inequality externalities, and fairness beliefs, as well as collecting the remaining demographic information.

3.1 Part 1: Demographic information and attitudes towards the government

After a set of attention checks to ensure the respondent can answer simple questions correctly, the first part elicits sociodemographic information that is needed to check for representativeness and, importantly, for selective attrition across the treatment groups. We do not find significant attrition differences across treatment groups. In this stage we elicit gender, age, income, wealth, marital status, race, type of college degree, employment status, and political identity. We also elicit respondents' trust in the federal government and beliefs about whether people work less when taxed more. These latter attitudes have shown to be important drivers of redistributive policy preferences that are independent of fairness concerns or externality beliefs. For that reason, we elicit these views *before* the information intervention.

3.2 Part 2: Information intervention

The information intervention in Part 2 is our main treatment variation. Our sample is split into four treatment groups and two control groups. The two control groups (one passive, one active) are together as large as each of the four treatment groups given that they are poole as we explain in more detail in Section 4.3.

All subjects are first asked to answer two questions about economic inequality:

- *How much do you agree with the following statement? Working-class Americans are generally paid less than their productivity.*

- *How much do you agree with the following statement? Countries with more economic equality usually function worse.*

where one term in the squared bracket is randomly chosen on the individual level.

These questions are used as a lead-in for the information videos. Videos are shown to the subjects in all four treatment groups, as well as one of the two control groups. Subjects in

Figure 1: Survey Flow
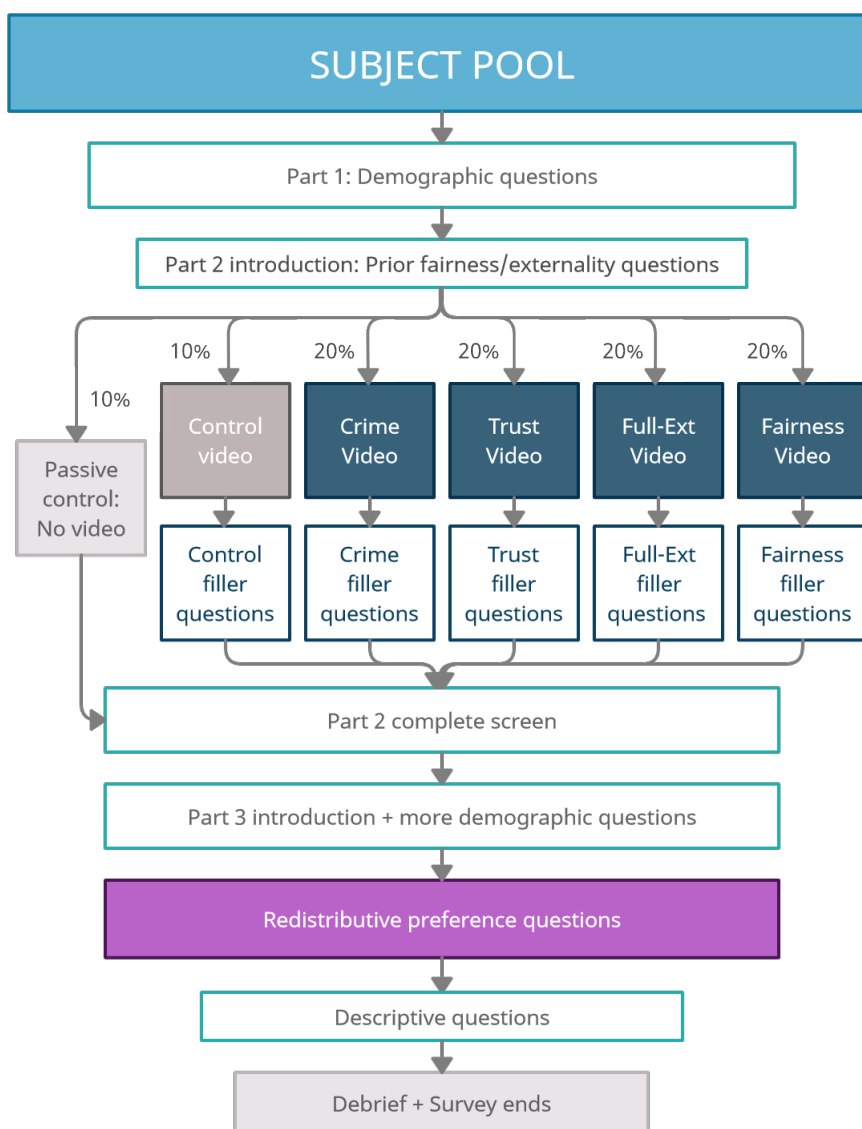
video-treatments are introduced to the video with the following prompt: *"We will now show you some information regarding the last question you answered. Please watch the video below."* This gives the video a purpose and makes it seem less out-of-context. All videos are animated motion graphics videos that present information in an easily digestible way. This prevents survey fatigue and keeps attention high compared to for example reading a text about the same topic. While the style of the videos is similar across treatment groups, the content differs as explained in greater detail below. Screenshots are shown in Figure 2. After watching the video, respondents answer three simple control questions to ensure that they actually understood the information provided in the video. We require respondents to answer these questions correctly to proceed with the survey.

Secondary survey Upon answering the control questions, we ask subjects a battery of "filler questions" that are directly related to the video the subjects previously watched. All these

Figure 2: Examples from treatment videos
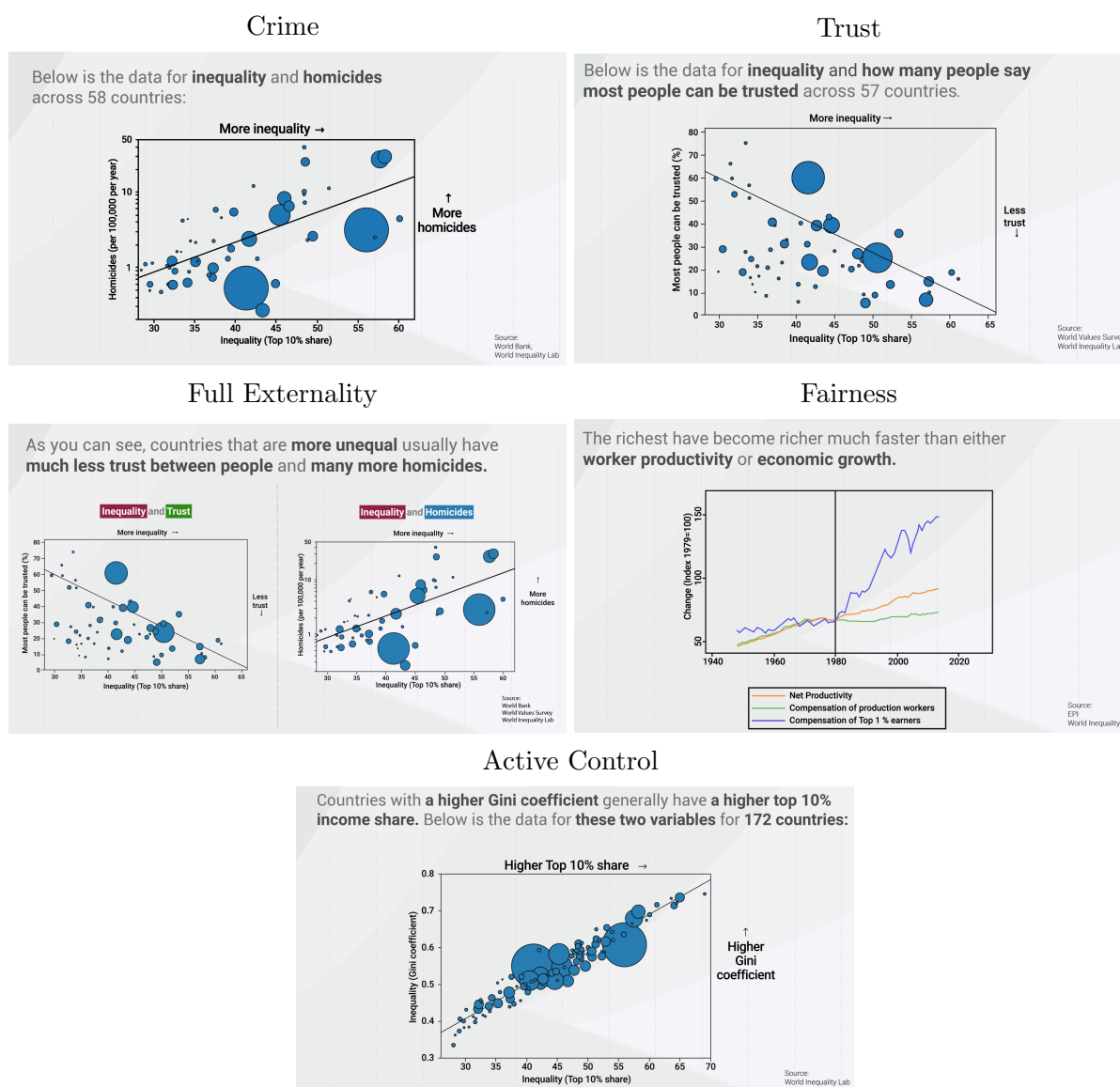
Note. These are screenshots from the five videos used in the survey experiment. One video was shown to each respondent, except for the 10% of respondents in the passive control group. Click the following links for the full videos: Crime – Trust – Full externality – Fairness – Active control

questions focus on personal experiences related to the video topic. In the crime treatment, an example of one such question is the following: *"Have you lived in more than one place in your life? If so, think back – do you think the places with more economic inequality had more crime, generally speaking?"* These questions are designed to hide the purpose of the study by being directly related to the videos – thus explaining why the respondents had to watch them – while being unrelated to the true intent of the survey. They thus create the impression that the videos are shown to lead into these filler questions and have no direct link with the rest of the survey. To emphasize this connection we immediately end Part 2 of the survey after the filler questions, notifying respondents of this and the start of Part 3, upon which we continue with several unrelated demographic questions to create the appearance of each survey part being functionally independent. Our true treatment effects are all based on questions in Part 3 (see Figure 1). The respondents have thus seen what we call a *secondary survey* – a logical flow of

questions that disguise the true purpose of the survey. This should avoid strong experimenter demand effects.

Treatment group 1: Crime as an inequality externality   This treatment group receives information on the relationship between crime and inequality using data from the World Bank and the World Inequality Database.As shown in the screenshot in Figure 2, the video first presents subjects with a scatter plot and a fitted line that characterizes the relationship between inequality and homicides. The next graphic characterizes the magnitude of the correlation. It shows that very equal countries have, on average, between one and two homicides per year per 100,000 people, while very unequal countries have, on average, between ten and twenty homicides per year per 100,000 people. The video ends with a statement that states that researchers still argue about whether this means that inequality causes more crime, but most research on this topic confirmed this relationship and finds that this relationship holds for other types of crime such as property crime and robberies. The latter question should signal to the respondents that we present a comprehensive picture of the debate, thereby reducing the impression that our survey has a left-wing bias.

The filler question asks the respondents about whether they experienced or perceived more crime in places they lived or travelled to with higher levels of inequality. It, thus, creates a direct link to the video by asking the subjects whether they themselves experienced this relationship but is not related to preferences for redistribution.

Treatment group 2: Trust as an inequality externality   This treatment group receives information on the relationship between trust and inequality. As shown in the screenshot in Figure 2, the video first presents subjects with a scatter plot and a fitted line that characterizes the relationship between inequality and generalized trust (the number of individuals that say that most people can be trusted in their country) using data from the World Inequality Database and the World Value Survey. The next graphic characterizes the magnitude of the correlation. It shows that very equal countries have on average 55 people out of 100 stating that they trust others while is only 15 out of 100 that do so in very unequal countries. The video ends with a statement that states that researchers still argue about whether this means that inequality causes lower trust, but most research on this topic confirmed this relationship and find that this relationship holds for other measures of trust, cooperation or how many people return lost wallets. As in the crime treatment, the latter question should signal to the respondents that we present a comprehensive picture of the debate, thereby reducing the impression that our survey has a left-wing bias.

The filler question asks the respondents about whether they experienced this relationship between trust and inequality in their own life. The questions are identically structured as in the crime and inequality treatment, but with the difference that they ask the subjects how they perceive the relationship between trust and inequality.

Treatment group 3: Full externality treatment   While treatment groups 1 and 2 tackle different types of externality, treatment group 3 is designed as an all-encompassing and comprehensive externality treatment. It, thus, aims at fully answering the question on whether

societies with high economic inequality usually function better or worse. By presenting broad evidence that highlights the *negative* effects of inequality and by, furthermore, showing that the evidence for possible externalities is rather limited, the treatment makes the strongest case for the negative consequences of inequality and should be seen as an upper-bound of a possible treatment effect. As shown in the screenshot in Figure 2, the first part of the video shows the same information that we present in treatments 1 and 2. It then shows that there is no relationship between inequality and economic growth nor between inequality and innovation (measured by the number of patents). Upon stating that researchers have found negative effects of inequality on social unrest, corruption, and political polarization, the video ends with a quote from Amartya Sen that "virtually all the problems in the world come from inequality of one kind or another."

The full externality treatment is designed to create something of an upper bound for externality treatments. The trust and crime treatments are more precise (and less likely to be seen as biased); however, we are concerned that only informing about one type of externality would put a low upper bound on our results. Realistically, redistributive preferences are composed of fairness concerns, externality beliefs, and other factors. Crime or trust are only one part of each of these externality concerns. If our respondents are rational, even a large shift in the belief in a crime externality might be an overall small shift in their redistributive preferences. The full externality solves this issue by informing subjects about externalities on a broader scale. We intend to compare the single-externality treatments to the full-externality treatment to explore to what extent our results are driven by simply mentioning the concept of externalities; ideally we find treatment effects in each case, with a larger effect for the full externality.[4]

Opposed to the filler questions for treatments 1 and 2, in treatment 3 we ask the respondents whether they generally experienced that more unequal places function better or worse than more equal places. It, thus, asks the subjects about their *general* experiences of inequality externalities, which were also targeted by the treatment video.

Treatment group 4: Fairness treatment   The fourth treatment group receives information on how the wage-productivity gap has evolved since 1975, as shown in the screenshot in Figure 2. The stimulus includes information that blue-collars' wages stagnated while their productivity increased since the 1980s. Wages of the top 1% earners, on the other hand, increased sharply, indicating that the economic gains from the increase in productivity went for the most part to the richest Americans.

The treatment intends to give respondents information about the *fairness* of the economy. We will compare the magnitude of this to the externality treatments. We hypothesize that fairness beliefs are potentially less malleable than externality concerns; if so, we should be able to detect this in the respective magnitudes of treatment effects.[5]

The filler questions on fairness ask subjects to recall whether they observed in their own

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[4]Only using a full externality treatment would leave us open to (justified) criticism that our main result is driven by a biased information treatment that could induce significant demand effects. While we overall believe such demand effects are unlikely to drive results, we want to keep the specific externality treatments to have more robust results.

[5]This could be the case even if the absolute importance of fairness and externalities are equal, which we will explore later (100 points question).

surrounding that people were paid closer to what they produced in the 1950s compared to today.

Control group 1: Active control The active control group receives a video that is structured in a very similar way as the one on trust and crime. The information communicated through the video, however, informs the subjects about how to measure inequality by informing the subjects about the difference between measuring inequality through the Gini index or the top 10% income share, as shown in the screenshot in Figure 2. It, thus, does not contain any information that is relevant for their preferences for redistribution but gives individuals a stimulus about inequality itself. This implies that subjects are primed to think about inequality without revealing any information about inequality externalities or the fairness of the prevailing income distribution. The comparison across the two groups, thus, seeks to isolate the role of information. Filler questions to this treatment ask subjects to reflect whether they (a) have already thought about the measurement of inequality and (b) whether they have encountered the measures we previously explained in their everyday life.

Control group 2: Passive control Our study also has a passive control group that receives no stimuli at all.

Dual control groups There are benefits and drawbacks to both a passive control group, where respondents see nothing, and an active control group, where respondents see information on a similar but unrelated topic. Compared to the active control condition, a passive control condition is less comparable to the other treatments, given that it does not require as much attention from respondents which could bias subsequent results, it changes the survey flow, and could create attrition problems if some respondents drop out from the video treatment. However, it saves significant survey time which we use to ask additional questions at the end of the survey and avoids the problem that it does not convey any information that could affect our outcomes of interested in any (unintended) way.

We will compare the main outcomes across these two variables and in case that there is no significant difference across those groups, we will pool them and subsequently treat them as one large control group. Both control groups receive a larger set of questions about inequality externalities in the final part of the survey (after all other relevant questions).

Summary of the variation induced through the treatments Treatment groups 1 to 3 shape respondents' beliefs about externalities without referring to anything related to fairness. Comparing redistributive preferences of these groups to the baseline, thus gives us insights into the effect of (different) information on the consequences of inequality on preferences for redistribution. Treatment group 4, on the other side, informs subjects about the fairness of existing inequality but makes no reference to the consequences of inequality. Comparing the redistributive preferences of this group to the baseline allows identifying how information on the distributive fairness shapes preferences for redistribution. Comparing the magnitude of the treatment effects allows inferring what type of information has a larger effect in affecting preferences for redistribution.

It should be noted that all our treatments are designed in a way that it has a weakly positive effect on beliefs, in the sense that the induced variation in beliefs should always lead to a weakly larger demand for redistribution. This feature is implemented by design for two main reasons. First, because it enables us to form clear hypotheses for a potential treatment effect. Second, because the existing evidence on positive inequality externalities (economic growth, innovation, and so on) is much more mixed than that of negative externalities. There is no strong cross-country correlation between inequality and economic growth, for example, which prevents us from designing a positive externality-based growth-treatment similar to the crime or trust treatments. Furthermore, such externalities are easily confused with labor supply effects (i.e. lower taxes lead to a high labor supply) which would complicate our design significantly.

Laboratory experiments are often employed to explore fairness issues, and it is worth noting the reasoning behind our choice of a representative survey in exploring these issues. In short this is because the effect of inequality externalities on redistributive preferences is challenging, if not impossible, to measure in the laboratory. These externalities depend on societal and macroeconomic phenomena that do not naturally occur in controlled settings. Introducing inequality externalities in these settings would have to be artificially done by the experimenter, which would lose key aspects of the analysis.

3.3 Part 3: Outcome variables

Preferences for redistribution

Our main outcome variables are various measures of preferences for redistribution. We elicit redistributive preferences on a general level, as well as more specifically and policy oriented, with a special focus on preferences for taxing the rich. More specifically, we have one question that asks respondents using a Likert scale to choose the level of redistribution that they prefer, from no redistribution to full redistribution. This very general question is complemented by a question that asks whether the respondent believes that inequality is a very serious issue in the US. To assess whether our results do not only apply to attitudes towards economic inequality generally speaking but also to a preferences for redistribution, we ask subjects whether they prefer the government to take measures to reduce inequality (the same as used by the European Social Survey) and their preferred average tax rate for the so called "Top 10%". The former, thus, elicits a preference for government intervention generally speaking, while the latter captures demand for an effective policy tools to reduce income inequality.

We pre-specified these four outcomes (general redistributive preferences, inequality is a serious issue, government should reduce inequalities, top tax rates) as well as a main outcome index. This main outcome index was pre-specified as the standardized sum of dummy versions of all the four outcomes. The index was pre-specified as our main outcome variable.

To have a more quantitative assessment of the motives behind the preferred level of redistribution, we also ask respondents to rank their subjective importance of several motives behind inequality by allocating 100 points across several motives (fairness, externality concerns, selfishness, etc.).

Externality beliefs

The next battery of questions elicit respondents' externality beliefs. The first question elicits externality beliefs in a very general way by asking whether inequality changes society for the better, for the worse, or does not change inequality at all. This question provides our main *first stage* that allows us to assess whether the treatment was successful in actually shaping externality beliefs generally speaking.

To get a better understanding of what type of externalities individuals view as being affected by inequality, we introduce a survey module that asks subjects whether they view certain specific societal outcomes to be affected by inequality. We selected those that have previously appeared in public and academic discussion about inequality's societal effects. These include the ones that were specifically targeted in some information treatments (trust, crime, growth, innovation), as well as other factors such as institutions, quality of local public goods such as infrastructure, overall quality of life, political polarization, as well as corruption. We see this module as a valuable descriptive assessment that characterizes American's externality beliefs on a more detailed level compared to the more general question outlined above.

Fairness views

The final module of the survey elicits respondents' fairness views using two questions. The first asks whether the current distribution of income and wealth in the US is fair because everybody gets what they are entitled to or whether some get much more than what they are entitled to, while others get too little. Note that this question is deliberately asked in a way that relates directly to our fairness treatment. It, thus, serves as a first-stage outcome for our fairness treatment. We supplement this question with a more classical question that elicits subjects' perception of whether one gets rich through hard work or luck.

4 Data Collection and Methodology

Representativity   Data were collected between December 6 and December 24. Respondents were recruited through the survey provider Lucid, which is commonly used by economic researchers (see e.g. Haaland and Roth, 2021).

4.1 Data quality checks

5007 subjects completed the survey. We targeted this sample size to ensure roughly 1000 respondents per treatment group within our final sample, which gives us sufficient power to identify even small effects (see Haaland et al., 2020, for a discussion). To ensure sufficient data quality, we took the following measures: First, we drop 5% of the fastest respondents as a rule of thumb, as is often done in the literature and by survey companies (see e.g. Bellani et al., 2021).[6] Second, we pre-specified the exclusion of subjects that spend less time on the screen with the video than the duration of the video, as well as those that indicate to not have watched the video. Third,

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[6]Since different treatment groups watch different videos, we drop the 5% fastest subjects within each treatment group.

Table 1: Observable characteristics

	Total	Share	SD	Min	Max
Republican	1,385	0.32	0.47	0	1
Democrat	1,293	0.30	0.46	0	1
Independent	1,685	0.39	0.49	0	1
Male	2,164	0.50	0.50	0	1
Female	2,183	0.50	0.50	0	1
White	3,350	0.77	0.42	0	1
Black	411	0.09	0.29	0	1
Neither black or white	610	0.14	0.35	0	1
Income: 0-25k	970	0.22	0.42	0	1
Income: 25-50k	1,260	0.29	0.45	0	1
Income: 50-100k	1,331	0.30	0.46	0	1
Income: 100k and more	810	0.19	0.39	0	1
Age 18-29	611	0.14	0.35	0	1
Age 30-39	726	0.17	0.37	0	1
Age 40-49	748	0.17	0.38	0	1
Age 50-59	621	0.14	0.35	0	1
Age 60-69	761	0.17	0.38	0	1
Age 70 and above	904	0.21	0.41	0	1
4-year college degree or more	2,179	0.50	0.50	0	1
Employed	2,064	0.47	0.50	0	1
Unemployed	413	0.09	0.29	0	1
Outside the labor force	1,894	0.43	0.50	0	1
South	1,679	0.38	0.49	0	1
West	1,067	0.24	0.43	0	1
North-East	698	0.16	0.37	0	1
Midwest	927	0.21	0.41	0	1

we deleted respondents that dropped out of the survey in the middle and then retook the survey, who we identify due to identical IP-addresses. Fourth, we drop subjects that were flagged due to providing "nonsense" answers to text-based questions (e.g. spam, vulgar phrases or the same non-topical copy-pasted text to all answers) and other signals that indicate that the respondent tried to click through the survey as fast as possible.[7] Fifth, our survey contains several attention checks and subjects can only start the survey after passing the first attention check and passing two of the next three attention check. These attention checks are relatively easy and designed to sieve out individuals that do not read the question at all. Overall, this leaves a final sample of 4,371 respondents.

4.2 Respondent characteristics

We used quotas to aim for representativity along the dimensions of age, gender, geographical region and political affiliation (Democrat and Republican).

Table 1 displays the observable characteristics of our sample. To elicit political preferences,

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[7]While the last two measures were not pre-specified, we do believe that they are crucial to guarantee for decent data quality. Note, that our main results hold after including these subjects.

we used the same question that is used by Gallup to monitor political preferences in America.[8] The final distribution mirrors the one of the November Gallup quite closely (31% Republican, 27% Democrat, 41% Independent) even though we slightly oversample Democrats and under-sample independents.[9] Our sample is completely balanced on gender and our sample matches the age-group distribution of the overall population (17%, 16%, 15%, 16%, 16%, 16%) reasonably well and all age-groups are significantly represented. Furthermore, we match the population distribution of census region (38%, 24%, 17%, 21%) indicating that we have broad regional representation within our sample.

Though we did not explicitly target these dimensions, we are also interested in having diverse socio-economic representation. While we have significant variation in household income, we have a somewhat smaller share of high-income ($100k+) households – 33% for the overall population versus 19% in our sample – and a higher share of low- (0-$25k) and lower middle-income house-holds ($25k-$50k) – 18% and 20% in the overall population versus 22% and 29% in our sample.[10] Our sample is less representative on racial dimensions by oversampling white Americans, which constitute 60% of the overall population. Hispanics and Latinos are underrepresented in our study (18.5% in the overall population versus 5.6% in our sample), and to a lesser degree so are Black Americans (13.4% in the overall population versus 9.4% in our sample). We have a somewhat larger share of individuals that are outside the labor force or unemployed rather than employed or self-employed compared to the overall population.[11] Similar to other studies using similar access-panels, our sample is slightly more educated than the average American, as half of the respondents have at least a college degree versus 36% in the overall population.

Despite not being perfectly representative along all observable characteristics, we believe our sample to be a reasonable approximation of U.S. society as a whole. This is particularly true as we have a fully representative range of political views, which are the most statistically significant determinant for inequality externality beliefs among our observables (see Section 5). This is further supported by the strong correlation between state-level election results in 2020 and state-level political leaning within our survey data as shown in Figure B6 in the appendix.

4.3 Comparison of characteristics across treatment groups

In this section, we compare the respondents' characteristics across treatment groups. First, we compare active and passive control groups with each other. We pre-specified to merge these to groups conditional on being similar enough. To that end, we pre-specified the following decision rule:

"If the active and passive control group are sufficiently similar, we will merge them for the main analysis. This decision will be made upon not reaching all the three following criteria.

- There is no 1% statistical difference in the index outcome variable between the active and passive control.

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[8] "In politics, as of today, do you consider yourself a Republican, a Democrat or an independent?"

[9] Note that there is quite a lot of fluctuation in this distribution on a month-to-month basis (c.f. https://news.gallup.com/poll/15370/party-affiliation.aspx).

[10] Note that this disparities is typical for access-panels as the one used by us (e.g. Stantcheva, 2021).

[11] The labor force participation rate was 61.8% in November 2021 (https://www.bls.gov/news.release/empsit.nr0.htm); in our sample this number is 46%.

- There is not a 5% statistical difference in at least three of the four redistribution dummy variables listed above.

- There is not a 5% statistical difference in at least three of the four externality dummy variables listed above.

If one of these criteria are reached, we will present regressions with both control groups as separate categories."

Table 2: Balance table for redistributive preferences

Variable	(1) Passive Control	(2) Active Control	(3) Difference
RP Index	-0.111	-0.045	0.067
	(0.965)	(0.984)	(0.065)
Wants redistribution	0.370	0.360	-0.009
	(0.483)	(0.481)	(0.032)
Increase top taxes	0.537	0.622	0.085***
	(0.499)	(0.486)	(0.033)
Gov. reduce ineq.	0.480	0.508	0.028
	(0.500)	(0.501)	(0.033)
Ineq. is serious issue	0.515	0.508	-0.007
	(0.500)	(0.501)	(0.033)
Observations	538	394	932

Note. This table represents mean (standard deviations) for redistributive preference measures of respondents in the active (column 1) and passive (column 2) control groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

As shown in Table 2 the index is not significantly different across the two groups. From the redistributive preference variables, only the variable on top tax-rates is significantly different across the two groups.[12] The other variables are not significantly different between control groups; the differences are also relatively small and in opposing directions. As pre-specified, we will thus merge the two groups.

We also compare first-stage post-treatment outcomes (inequality externality beliefs and fairness views) across the two groups and find no significant difference between the two groups on any of these outcomes (see Table A1). Thus, the difference for the top tax rate is likely to be spurious, as other strong predictors of redistributive preferences such as fairness views are balanced across the two groups. As shown in Table A2, there are also no significant differences between the two groups on any pre-treatment dimension.

Table A3 compares the two groups along various socio-demographic characteristics. We find that the two groups are mostly balanced apart from a few exceptions. Subjects in the active control group are less likely to be neither black nor white, and are somewhat differently allocated into the three income groups. Note that these differences are not large and including them as control variables does not affect the differences in redistributive preferences or first-stage outcomes. Beyond that, passive control group subjects are not more or less likely to pass all

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[12]This could be simple statistical noise; it is also possible that mentioning the top 10% income share shifted individuals' top tax rate preferences. We note that unexpected discrepancies like these are a strong motivation for the dual control group method.

three attention checks build into the survey than active control groups. Neither are they more nor less likely to pass an attention check that was administered *after* the treatment.

Overall, the results show that the two groups are sufficiently similar to be merged and can be treated as one control group. While there are few idiosyncratic differences across the two groups, they are non-systematic and likely to be spurious, reflecting the fact that we are testing many hypotheses at once. Following our pre-analysis plan, we thus merge the two groups.

Next, we compare the treatment groups with the control groups across observable characteristics. As shown in Table A4, the two groups are balanced on nearly every dimension. There is, however, one important exception. Subjects in the crime treatment group have significantly higher perceptions that unequal countries usually function worse. Note that including this perception as a control variable in the regression does not affect the results of the analysis.

Table A5 compares observable characteristics across the Trust and Control groups. The two groups are completely balanced on observables.

Table A6 compares observable characteristics across Full externality and Control group. The full externality group has somewhat fewer individuals in high income households but more individuals from middle-income households. They are also slightly more likely to believe that working-class Americans are paid less than their productivity.

Table A7 compares observables across Fairness and Control group. The two groups are balanced on all covariates with the exception of gender (slightly more in the Fairness group) and the number of individuals from middle-income households (slightly more in the Fairness group).

Overall, the groups are, as expected from our research design, well-balanced. Though there are small differences in observables, these seem fairly spurious and do not reveal any systematic changes across treatment groups. Note that our regressions control for observable characteristics. Including or excluding these regressors does not change the results, underlining the that they do not mirror relevant variation across treatment groups.

5 Results

5.1 Descriptive analyses of externality beliefs

We first characterize externality beliefs within our sample.

The first externality-based question in the sample asks whether subjects generally agree that inequality has societal effects. This is also our most general externality question. The question reads "Generally speaking, do you think **more economic inequality** changes society **for the better** or **for the worse**?" Subjects could then choose between 5 options ranging from "A lot to the better" over "Neither / no change" to "A lot for the worse." If subjects chose "Neither / no change", we ask them a follow-up question whether they chose this option because they believe that inequality has no effect on society or because they think the good and bad effects cancel each other out.

Table A14 illustrates the distribution of answers to this question. The first thing to remark is that only a small minority of roughly 15 percent states that inequality has positive societal

Table 3: General externality beliefs at the baseline: How does inequality change society?

	Freq.	Percent
A lot for the better	38	4.08
Somewhat for the better	102	10.94
Neither / No change	237	25.43
Somewhat for the worse	324	34.76
A lot for the worse	231	24.79
Total	932	100

Note. Only data from control group shown. Question text: *"Generally speaking, do you think **more economic inequality** changes society **for the better** or **for the worse**?"*

effects, i.e. constitutes a positive externality. This stands in stark contrast with the 60 percent of subjects that state that inequality changes society somewhat or a lot for the worse. In other words, a majority of subjects believe that inequality has negative societal effects.

The neutral option, that inequality does not change society, was chosen by 25% of our sample. There are two possible rationales for this answer; (1) the respondent does not believe that inequality affects society in any particular way at all, or (2) the respondent believes that inequality has positive as well as negative societal effects and that the two cancel each other out.[13] Of the 237 respondents in the control group who chose the neutral option, 194 (82%) responded that good and bad effects cancel each other out, while only 30 (13%) responded that inequality has absolutely no effects. Of the overall sample, then, only 3.3% (30/920) answer that inequality has no societal effects at all.[14] The belief that inequality affects society in one way or the other is shared nearly unanimously, with 97% of respondents choosing an answer option indicating this.

Our main battery of inequality externality questions asks how respondents think inequality affects different aspects of society. Not all respondents were asked every question (to prevent question exhaustion). In total, respondents were asked whether inequality affects crime, corruption, political polarization, unemployment, innovation, economic growth, the quality of local public goods such as schools or libraries, people's overall quality of life (comparing people with the same income in more or less unequal societies), the quality of democratic institutions, and generalized trust. The standard question asks: *"How does more economic inequality change the [amount of crime / overall level of trust / ...] in a country?"*. Note that the question is symmetric; we give respondents no indication of which variables should be affected in which direction.[15] In certain cases, when the variable in question was difficult to accurately define in a few words, we also added a short definition before the question. See Table A8 for these

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[13]There is also a third possibility in that the subjects misunderstood the question. We accounted for that by adding this as an option to the follow-up question. This was, however, only chosen by 5% of those that clicked "Neither / No change" in the original question.

[14]Discarding the 12 who answered that they did not understand the question in the follow-up.

[15]To ensure that respondents understood the direction of their answer each answer option re-iterated the causal channel, as for example "More inequality → a lot more crime". To ensure symmetry the answer order was also randomly flipped.

definitions and the full wording of each variable.

To ensure that the phrasing of the question did not significantly impact answers, we presented one-third of respondents per question with the prasing "*How do larger differences in income and wealth within the population...*" instead of "*How does more economic inequality...*". This has a small but non-negligible effect on results. In most questions it shifts the frequency of answers by roughly 2-4 percentage points.[16] We merge the two phrasings for the main descriptive analysis.

Figure 3 characterizes respondents' answers to these questions. The bars on the right side of "0" indicates the share of respondents that believe that inequality increases this variable, while the bars on the left-hand-side indicate the opposite. The bars centered around zero indicate the share of subjects that answered that inequality does not affect this variable.

Figure 3: Distribution of Externality Beliefs in Control Group
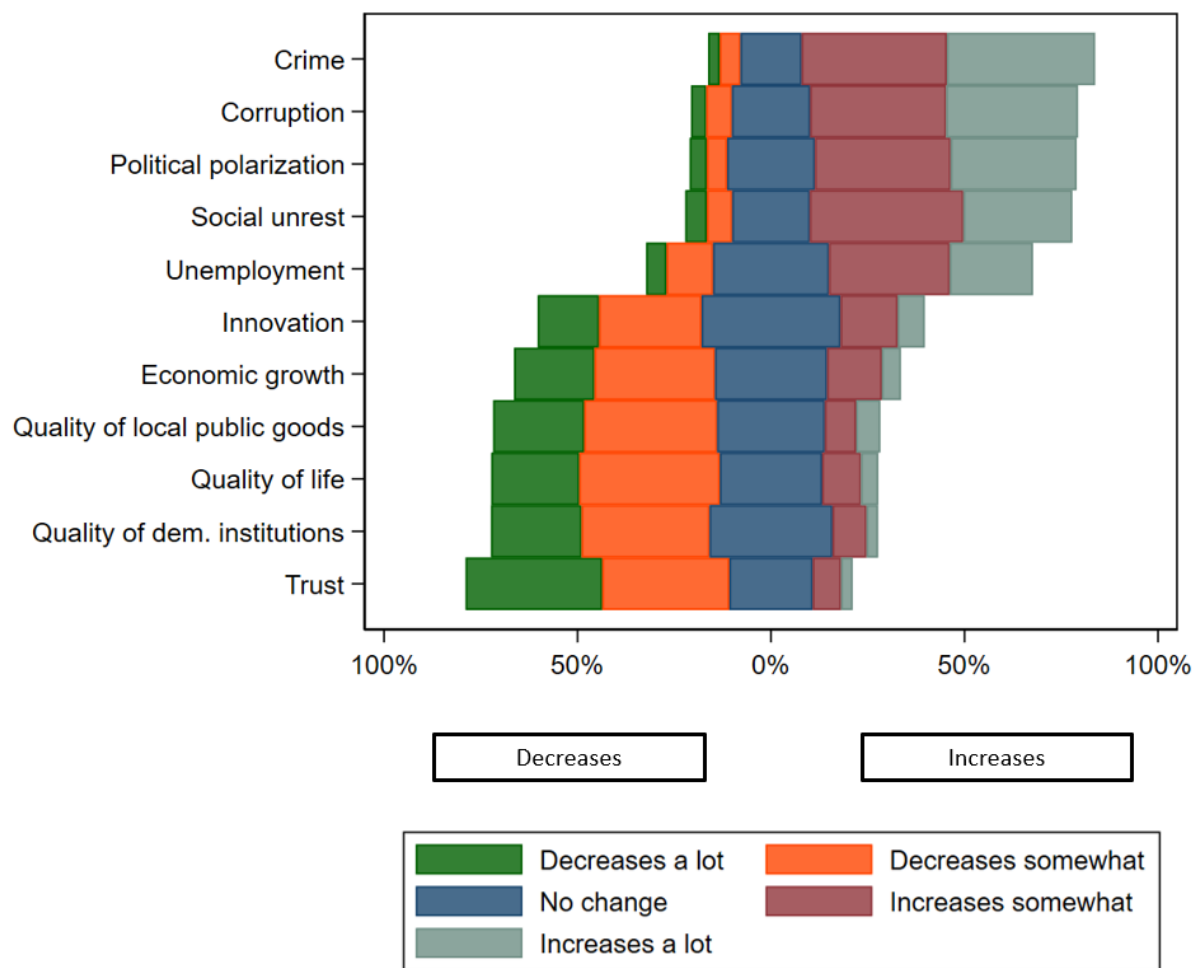
Note. Questions are ordered according to which portion of respondents believe that inequality increases the variable. Full question example: "How does more economic inequality change the amount of crime in a country?" Answer option example: "More inequality → a lot more crime". n ∈ {628, 932}.

Before we discuss any one specific inequality externality, we note that the answers imply that respondents overall believe that inequality has a negative societal impact through every single variable we included in the survey. This finding is more convincing given the fact that

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[16]The largest phrasing effect is for economic growth, where about 8% of individuals shift their response away from inequality decreasing growth under the "larger differences" phrasing (55% to 47%).

Table 4: Distribution of Externality Beliefs in Control Group

	Crime	Corr-uption	Pol. polar.	Social unrest	Unemp-loyment	Inno-vation	Econ. growth	Public goods	Quality of life	Dem. inst.	Trust
Increases	76%	69%	68%	68%	53%	22%	19%	14%	14%	12%	10%
No change	16%	20%	23%	20%	30%	36%	29%	28%	26%	32%	22%
Decreases	8%	11%	10%	12%	17%	42%	52%	58%	59%	56%	68%

Note. The corresponding table to Figure 3. Shows the distribution of specific externality beliefs. "Increase" is the share of respondents that state that inequality "increases a lot" or "increases somewhat" the societal factor of interest. "No change" is the share of respondents that state that inequality does not induce a change on the factor of interest. "Decrease" is the share of respondents that state that inequality "decreases a lot" or "decreases somewhat" the societal factor of interest.

the "positive direction" of the variables change. More trust is a positive outcome, for example, whereas more crime is a negative outcome. Accordingly, a clear majority of respondents reply that inequality decreases trust and increases crime. All questions are perfectly symmetric, yet the data in Figure 3 neatly splits on this axis.

We will now discuss the specific inequality externalities. First, there is a strong belief that economic inequality increases crime, which is a canonical inequality externality studied in previous research (Fajnzylber et al., 2002). Only 8% of baseline respondents believe inequality decreases crime; 16% believe inequality does not affect crime, whereas a large 77% believe inequality increases crime. This is the most agreement we find in inequality's effect on a specific variable across all variables. Similar but somewhat smaller figures are found for the percentage of respondents believing inequality increases the negative outcomes of corruption (69%) and social unrest (68%). These variables are both conceptually related to crime; a majority of respondents seem to believe that more unequal societies are less stable and law-abiding in general. Political polarization (68%) is also largely believed to increase with inequality. This latter result may be influenced by the recent rise in both economic inequality and political polarization in the U.S. (see Bonica et al. (2013), among others).

We also ask how individuals believe that inequality affects positive outcomes such as generalized trust or the quality of democratic institutions. Generalized trust presents the most agreement; 68% believe inequality decreases the overall level of trust in a country. Then follows quality of life, where we specifically ask respondents to compare between people with the same income in more equal or unequal societies. Under this definition, 59% believe inequality worsens quality of life generally speaking – more strong evidence that individuals believe inequality itself is an economic externality. A clear majority believes inequality deteriorates the functioning of the collective parts of society, as observed through the number of respondents who believe inequality decreases the quality of local public goods (58%) and the quality of democratic institutions (56%).

The three last outcomes we present in this battery are on inequality's effect on economic growth, innovation, and unemployment. Inequality's effects on economic performance is more ambiguous than the other variables we survey.[17] On one hand, one could argue that inequal-

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[17]While one could conceivably argue that inequality has a positive effect through outcomes such as crime or trust – say that inequality decreases crime through gated communities, for instance – the academic literature has typically highlighted inequality's negative effects (see e.g. Wilkinson and Pickett, 2011).

ity promotes growth by strengthening incentives. This has been a traditional argument for maintaining high inequality levels, as this Boris Johnson quote from 2013 exemplifies:

> "I stress – I don't believe that economic equality is possible; indeed some measure of inequality is essential for the spirit of envy and keeping up with the Joneses that is, like greed, a valuable spur to economic activity."

On the other hand, one could argue that inequality reduces economic performance through aggregate demand, poverty traps, or the many potential negative effects we already discussed – on trust, criminal activity, democratic institutions, and so on. Martin Wolf, the chief economics commentator of the *Financial Times*, wrote such an argument in 2019:

> "[Inequality] makes politics far more fractious, undermines social mobility; weakens aggregate demand and slows economic growth."

Between these two arguments, Americans' beliefs clearly point towards the latter. A majority of respondents believe that inequality generally increases unemployment (53%) and reduces growth (52%). Somewhat less than a majority also believe that inequality decreases innovation (42%). The converse for these three figures – that inequality decreases unemployment and increases growth and innovation – is only believed by 17%, 19% and 22% respectively. As far as we know this represents the first systematic exploration of these beliefs in the American public.

Almost all respondents believe inequality affects society in *some* way. Only 4.2% of respondents consistently chose "No change" to all questions they were posed, indicating that at least 95.8% of respondents believe in at least one inequality externality. This is consistent with the general externality question, where only 3.3% of individuals responded that economic inequality does not affect society in any way. These respondents do not perfectly overlap, however. In the most conservative case, where all of the individuals who fall into one of these two groups in fact do not believe in any inequality externalities, the total share of the population who believes economic inequality affects society falls from 96.7% to 93.3% – still a near-unanimous share.[18]

We next explore which type of individuals believe in these inequality externalities. Tables A9-A11 regresses different externality beliefs on sociodemographic variables, trust in government, and general fairness views for our full sample.[19]

The results show that individuals who identify as or lean Republican are significantly less likely to believe in negative externalities (that inequality reduces trust, increases crime, etc.) than individuals who identify as or lean Democrat. We show the results for these two groups in Figure 4.

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[18]30/920 respondents in the control group answered that inequality does not affect society. 39/920 answered "No change" to all the descriptive questions they were posed (seven questions each). The overlap is relatively small, as only seven respondents are in both these groups, which represents 23% or 18% of the two groups respectively. There could be rational reasons for part of this discrepancy; individuals who believe inequality affects society might believe in some other causal mechanism than the ones we proposed, for instance, or individuals might have changed their minds when faced with specific causal channels. It is also possible that some respondents mistakenly answered at least one question; for reference, 4.2% of our control failed an attention check in the same part of the survey. The total number of respondents who fall into one of these two groups is 62/920=6.7%.

[19]Note that the set of controls we use was specified in our pre-analysis plan. Here we have also included dummies for each treatment group (not shown) to allow the use of the full sample. The demographic correlations do not change notably if excluding the fairness and government trust variables.

Figure 4: Distribution of Externality Beliefs in Democrat- and Republican-leaning respondents
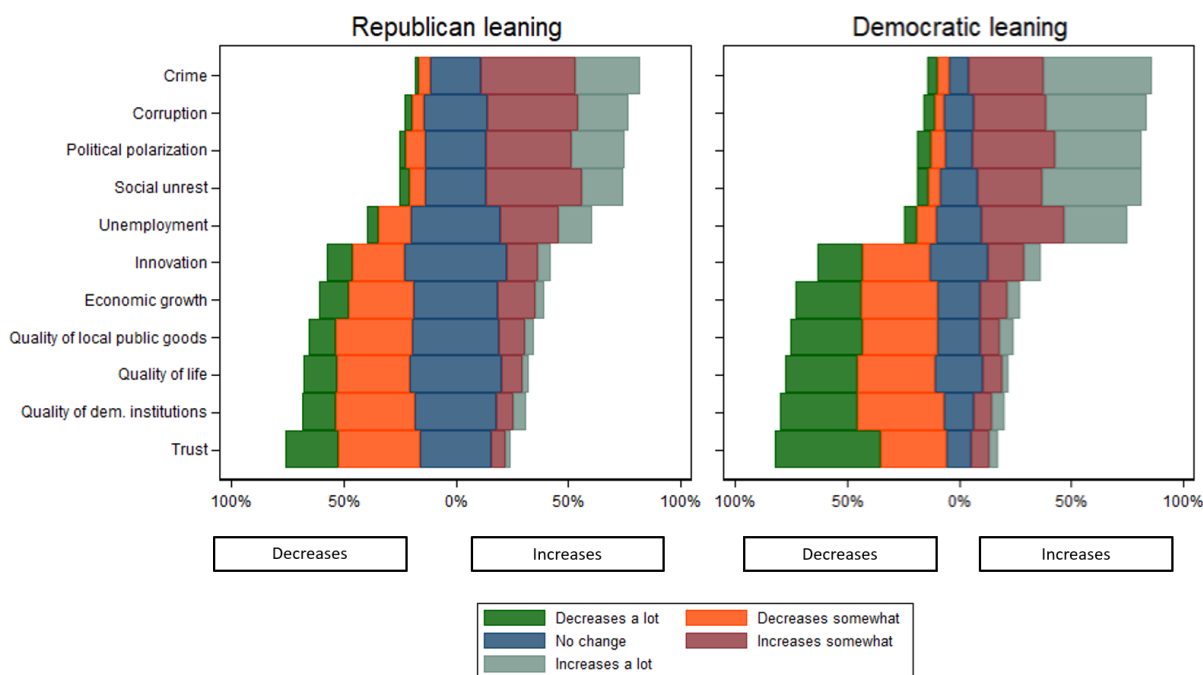
Note. Questions are ordered according to which portion of respondents believe that inequality increases the variable. Full question example: "How does more economic inequality change the amount of crime in a country?" Answer option example: "More inequality → a lot more crime". To determine whether a respondent is Democrat- or Republican-leaning, respondents are asked whether they identify more strongly as Democrat, Republican or Independent. Those who identify as Independent are then asked a follow-up question to clarify whether they feel closer to the Democrat or Republican party. $n \in \{628, 932\}$.

Furthermore, we find that individuals who believe that the current economic system is unfair (because people do not have the same opportunities to succeed) are much more likely to believe in negative externalities. Respondents who trust the government are also somewhat more likely to believe in negative externalities.

Gender does not have a large correlation with externality beliefs, although it is at times significant; men are significantly less likely to think inequality reduces economic growth and significantly more likely to think inequality can lead to social unrest. Respondents who self-identify as black, however, are significantly less likely to believe most inequality externalities. It is difficult to say why this is so; we hypothesize that racial inequalities and their associated externalities may partly supplant the economic dimension for these individuals.

Although only sometimes significant, higher-income respondents generally believe somewhat less in inequality externalities. This is particularly noticeable for innovation, where the magnitude of the shift is clearly largest – moving from the lowest ($0-$25k) to the highest ($100,000+) income-bracket decreases the likelihood of thinking inequality reduces innovation by 12 percentage points. This can be explained at least partly by appealing to self-serving beliefs. How respondents believe inequality changes innovation is likely determined partly by whom the respondent thinks is responsible for more innovation. If the drivers of innovation are the rich, more inequality is unlikely to reduce – and might even increase – innovation. If every citizen is equally likely to innovate, however, high inequality would instead lead to fewer entrepreneurial chances among the poor and thus less innovation overall. If the rich think the rich are more capable innovators, and the poor do not agree in this assessment, it stands to reason that these two groups would have different beliefs about whether inequality affects innovation.

College-educated individuals are consistently more likely to believe in negative externalities. And although not a fully consistent finding, older people generally believe in more inequality externalities. The region of the respondent does not seem to have a significant effect on their beliefs.

5.1.1 The varying polarization of fairness views and externality beliefs

As we described above, party allegiance is a determinant for inequality externality beliefs. To get a sense of the magnitude of this heterogeneity, we compare it to heterogeneity in fairness views. We find that the predictive power of party allegiance on externality beliefs is weaker than the predictive power of party allegiance on fairness views. We illustrate this in Figure 5 by using the questions on fairness and externalities that were posed *before* the treatment intervention, allowing us to use the full sample ($n = 4317$). These two questions ask respondents to agree or disagree with the statements that (i) "*The distribution of money and wealth in the U.S. is basically fair, because everybody has an equal opportunity to succeed*" and (ii) "*Countries with more economic inequality generally function worse*". A similar share of Democrats disagree with the first statement (68%) and agree with the second (71%). The same shares for Independents keep a similar distance, at 57% and 54%. For Republicans, however, the share believing the economic system is unfair drops to 34% while the share believing more unequal countries function worse stays close to the result for Independents at 51%.[20]

A similar result can be found in both wealth and income, which we show in Figure 6. Fairness views are strongly correlated to both wealth and income. Inequality externality beliefs, however, are generally not correlated to either. While there are certain exceptions to this – as noted above for the potential inequality externality of innovation – inequality externality beliefs are generally constant across the distribution. This contrast to fairness views is stark. Inequality externality beliefs, again measured with the pre-treatment externality question, are relatively constant across both the wealth and income distribution at approximately the average 61%. Indeed, externality beliefs slightly increase in income. Fairness beliefs, however, shifts from 54% (income $< \$25k$) and 57% (wealth $< \$25k$) to 44% (income $> \$100k$) and 46% (wealth $> \$200k$). Both shifts are strongly statistically significant. This follows the literature; generally, individuals with higher economic status believe that the distribution is more fair (Valero, 2021). However, they do not seem to believe significantly less in inequality externalities.[21]

5.1.2 The importance of each inequality externality channel

That economic inequality affects a variable does not necessarily imply that the effect of economic inequality on the variable is *important*. To examine which externality channels are deemed most important by respondents we ask them the following question; "*When thinking about how inequality [negatively / positively] affects society, which dimensions do you think matter the most, generally speaking? Please indicate what dimensions you think matter the most by giving scores below that add up to 100.*"

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[20]The figure and values are without controls. The result is robust to adding a standard set of controls.

[21]The figure and values are without controls. The result is robust to adding a standard set of controls.

Figure 5: Distribution of Externality Beliefs and Fairness Views over Party
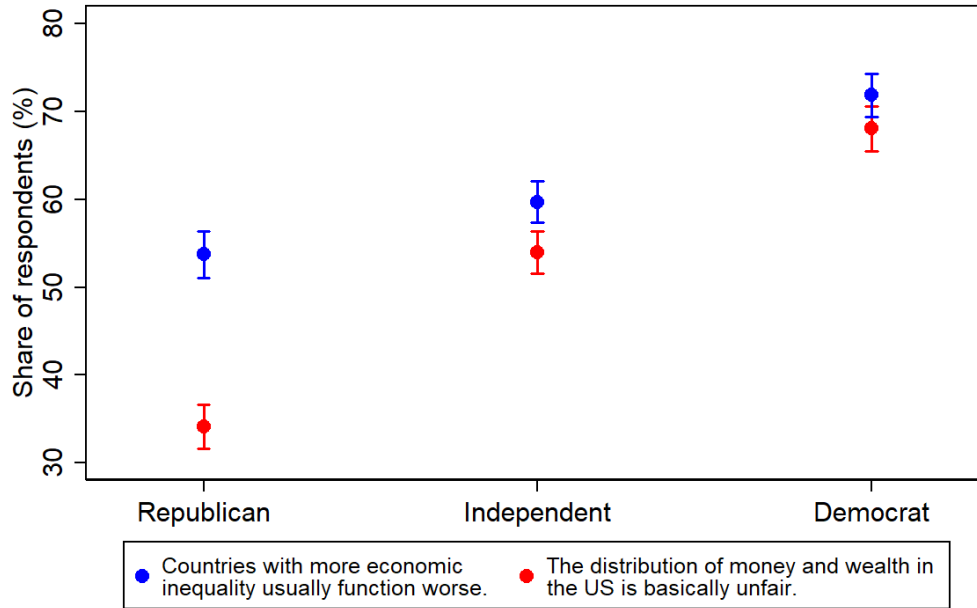
Note. This graph uses the pre-treatment externality and fairness questions with the full sample (n=4317). Respondents are asked to agree or disagree with the following two statements: *"The distribution of money and wealth in the US is basically fair, because everybody has an equal opportunity to succeed"* and *"Countries with more economic inequality usually function worse"*.

Figure 6: Distribution of Externality Beliefs and Fairness Views over Income and Wealth
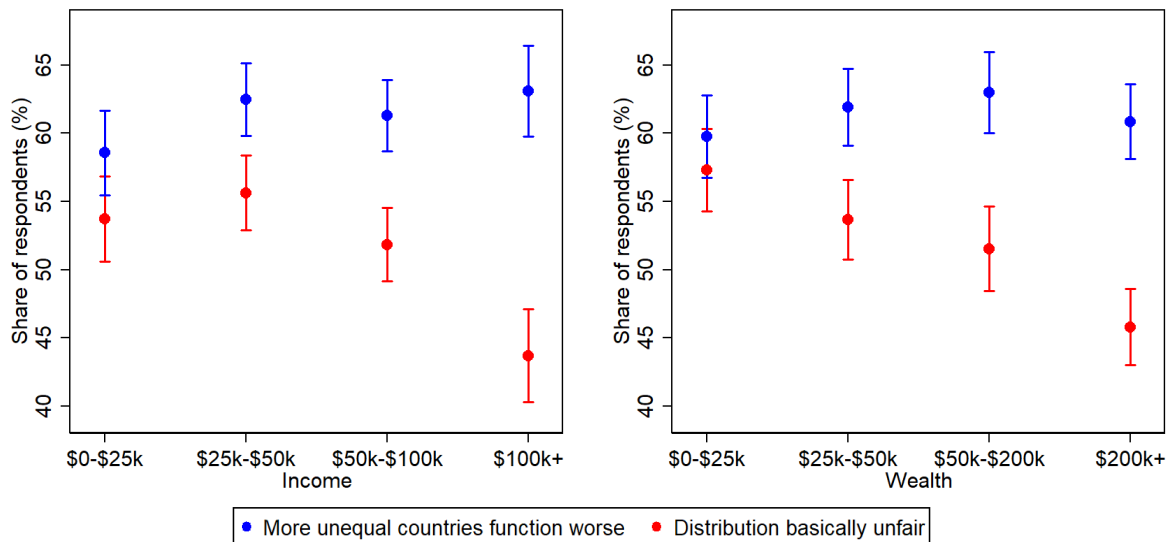
Note. These graphs use the pre-treatment externality and fairness questions with the full sample (n=4317). Respondents are asked whether they agree with the following statements: *"The distribution of money and wealth in the US is basically fair, because everybody has an equal opportunity to succeed."* and *"Countries with more economic inequality usually function worse."*

Figure 7: Magnitudes of each externality channel
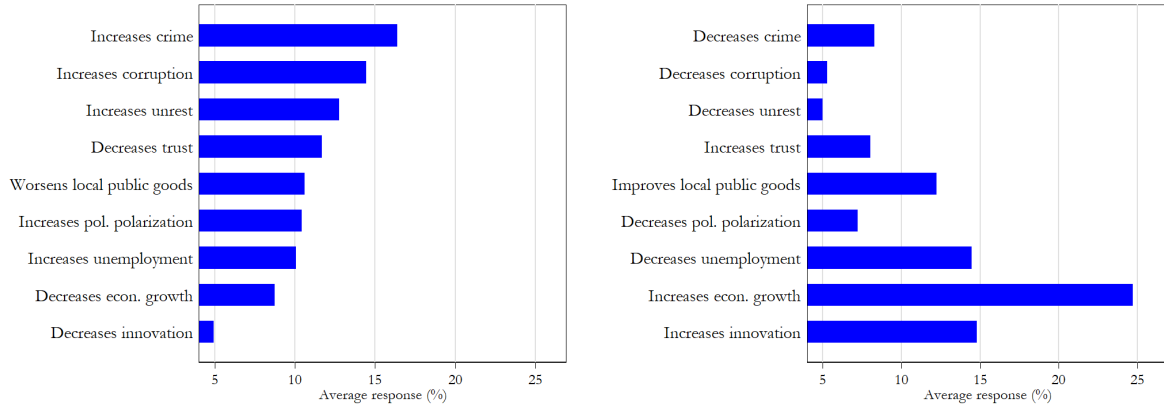
This question only makes sense if the respondent thinks inequality has at least one negative or positive externality. As such, we only ask the negative or positive externality version to those who answered that inequality generally affects society negatively or positively, respectively, in the general externality question shown in Table A14.[22] As such, this should not be seen as a representative sample, but rather an indication of which externalities matter to the subsection of respondents who believe inequality affects society negatively or positively, respectively.

The average responses to this question are shown in Figure 7. There is significant noise in these estimates – the question is complicated and was towards the end of an intellectually tiring survey – but the answers are notably different between the negative and positive externality versions. Most of the options we give are deemed somewhat important as negative externalities. Crime (16.4%) and corruption (14.5%) are highest on the list, followed by social unrest (12.8%) and trust (11.7%). Indeed, every option except innovation (4.9%) is within 8 percentage points of each other. However, the positive externalities are dominated by economic factors. Economic growth (24.7%) is first, then innovation (14.8%) and unemployment (14.5%). As these economic factors are relatively less important in the negative externality version – so among those who thought inequality negatively affects society – this is a potentially important extension to the descriptive results in Figure 3.

5.2 Information treatments

We now turn to the analysis of the information treatments' effect on redistributive preferences.

Assume that individual i's stated redistributive preferences $RP_i(\eta_i, G_i, X_i)$ are a function of fairness views G_i, a set of other characteristics X_i including attention, mood, and so on, and potentially the individual's inequality externality beliefs η_i (if such externality beliefs are a determinant for redistributive preferences). A video information treatment T_q, where q determines the type of information treatment, can affect any of these three determinants;

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[22]We also allow respondents to self-select out of the question by stating that changed their mind.

$$\frac{dRP_i(\eta_i, G_i, X_i)}{dT_q} = \frac{\partial RP_i}{\partial \eta_i}\frac{\partial \eta_i}{\partial T_q} + \frac{\partial RP_i}{\partial G_i}\frac{\partial G_i}{\partial T_q} + \frac{\partial RP_i}{\partial X_i}\frac{\partial X_i}{\partial T_q} \tag{3}$$

These are, in theory, the three different channels through which any of our treatments can affect redistributive preferences. We are specifically interested in whether $\frac{\partial RP_i}{\partial \eta_i} \neq 0$, which would imply that inequality externality beliefs are a causal determinant of redistributive preferences.

Through our dual control approach we can be confident that $\frac{\partial X_i}{\partial T_q} \approx 0$, as the active and passive control treatment effect are not significantly different. In other words, showing respondents a video about inequality-related issues does not significantly change their redistributive preferences due to attention effects, priming, or any other change to X_i (see Section 5.3). If the externality treatments T_η have first-stage effects on externality beliefs and not on fairness views, we then have

$$\frac{dRP_i(\eta_i, G_i, X_i)}{dT_\eta} \propto \frac{\partial RP_i(\eta_i, G_i, X_i)}{\partial \eta_i}, \tag{4}$$

and a significant treatment effect would imply that $\frac{\partial RP_i}{\partial \eta_i} \neq 0$.

5.2.1 Information treatments and first-stage beliefs

The effect of the information treatments on fairness views and externality beliefs can be measured through our pre-specified first-stage outcomes. Generally, we find that the externality treatments strongly affects externality beliefs whereas the fairness treatment only does so in a limited fashion.

Figure 8 characterizes the treatment effects on different beliefs. The first sub-figure shows the result for general externality beliefs (discussed in Section 5.1). All our externality treatments have a significant effect on this outcome, indicating that our treatment was generally successful in shaping subjects' perception that inequalities have negative consequences for society. This is also the case for subjects in the fairness treatment, indicating some limited spillover effects.

The treatment effects on specific externality beliefs are shown in the second, third and fourth sub-figures. The second sub-figure characterizes the effect of our treatments on the belief that inequality increases crime. The crime video has the strongest positive effect on this belief, which is no surprise. The full externality treatment, which also shows a half-sized version of the same crime data, has almost the same impact. The trust treatment has a marginally positive effect on this belief, indicating a spillover between trust and crime externality beliefs. The fairness video has no significant effect, indicating there is no spillover of the fairness treatment on crime-externality beliefs.

For the trust externality beliefs we find a strong and significant effect for the trust and full externality treatment and a significant but weaker effect for the crime externality treatment. The latter indicates, again, that there is a spillover between crime and trust externality beliefs. The fairness treatment also has a positive but insignificant effect on trust externality beliefs. The growth externality beliefs also follow a similar pattern; the externality treatments impact

Figure 8: First-stage effects of treatments
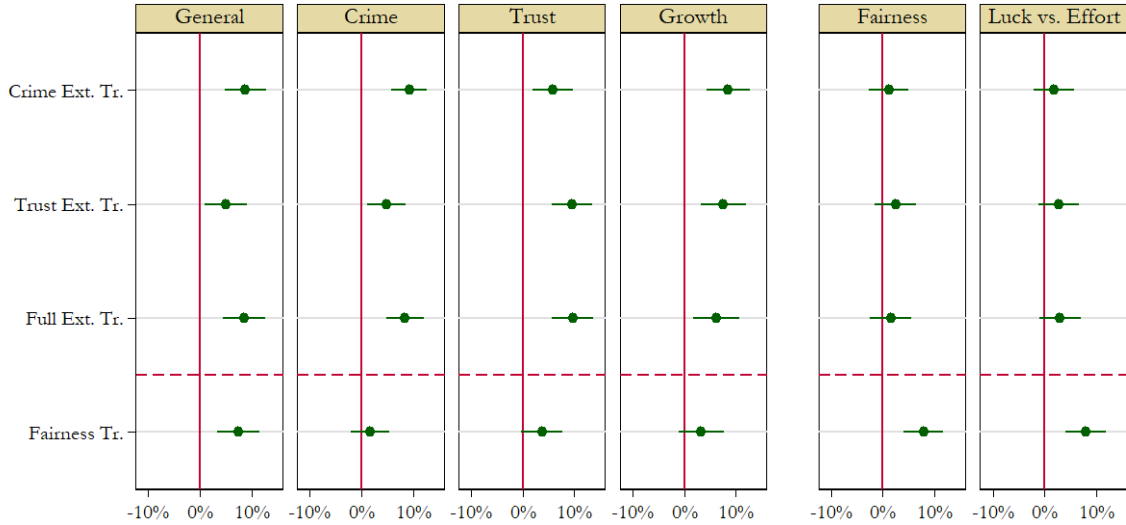
Note. This figure reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Error bars characterize 95% confidence intervals. Table A15 presents the point estimates and standard errors. *Significance levels*: *10%, **5%, ***1%.

the respondents' answers, indicating intra-externality spillovers, whereas the fairness treatment does not.[23]

The strong first stage effect of our externality video on externality beliefs is further corroborated when analyzing the post-treatment open-ended text questions about externality opinions. These questions ask respondents to write about how they think inequality changes society without prompting them specifically in any further direction. Table A14 in the appendix presents the share of answers that include the words "crime", "trust", or "video" by treatment group. As expected from the previous first-stage results, we find a strong effect of the respective treatments on respondents mentioning "crime" or "trust" in their answers. "Crime" is mentioned by about 15% of the crime and full externality treatments, for example, and only about 4% of any other treatment or control group. This again highlights that the treatment worked as intended.[24]

We now turn to the effect of the treatments on fairness views. As shown in the two rightmost sub-figures of Figure 8, the fairness treatment has a significant and strong effect on the view that the distribution of income is unfair and luck-effort beliefs. These treatment effects are similar in magnitude to the first-stage externality treatment effects discussed above. The externality treatments, on the other hand, have only small and insignificant effects on fairness views, indicating that our treatments largely succeeded in preventing spillovers between the two concepts. Indeed, this presents some evidence that the two concepts are relatively independent.

In sum, the presented results show that the prerequisites for Equation 4 substantially hold, and that any significant externality (fairness) treatment effect would strongly imply that exter-

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[23]We only give specific information about economic growth for the full externality treatment, where we show the cross-country non-correlation between inequality and growth.

[24]We also note that the word "video" was barely mentioned by respondents in any group (0.18% of all respondents), which highlights that the video as such is barely discussed in the answers; instead respondents discuss the informational content itself. This indicates the success of the "secondary survey" we describe in Section 3.2.

nality beliefs (fairness views) is a causal determinant of redistributive preferences.

Overall, the first stage treatment effects are strong. Each video increases beliefs in the intended direction by roughly 10 percentage points. These are sizable effects, given that the control means of crime- and trust-externality beliefs are already at 75% and 67% respectively. To put it differently, the treatments help to raise beliefs to near-consensus levels on these matters.

5.2.2 Information treatments and redistributive preferences

We now study whether the treatments shifted respondents' demand for redistribution. Table 5 shows the effect of the different treatments on the pre-specified redistributive preference index as well as the four outcomes from which it originates (see Section 3.3). While the Crime and Trust externality treatments have only weak and mostly insignificant effects on redistributive preferences, the Full externality treatment has a significant and, for this kind of study, reasonably large effect for three of our four measures of redistributive preferences. The effect on the aggregate redistributive preference index is also significant, showing that the index increases by 11 percent of a standard deviation in response to the treatment.

Table 5: Treatment effects

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Increase top taxes b/se	(4) Gov. reduce ineq. b/se	(5) Ineq. is serious issue b/se
Crime Ext. Tr.	0.037	0.031	-0.005	0.007	0.020
	(0.036)	(0.020)	(0.021)	(0.020)	(0.019)
Trust Ext. Tr.	0.043	0.006	0.004	0.036*	0.017
	(0.037)	(0.021)	(0.022)	(0.020)	(0.020)
Full Ext. Tr.	0.107***	0.050**	-0.012	0.048**	0.069***
	(0.037)	(0.021)	(0.022)	(0.020)	(0.020)
Fairness Tr.	0.208***	0.052**	0.065***	0.067***	0.115***
	(0.037)	(0.021)	(0.021)	(0.020)	(0.019)
Leans Republican	-0.635***	-0.190***	-0.210***	-0.264***	-0.249***
	(0.030)	(0.017)	(0.016)	(0.016)	(0.016)
Prior belief unfair	0.707***	0.146***	0.260***	0.260***	0.350***
	(0.027)	(0.015)	(0.015)	(0.014)	(0.015)
Male	-0.138***	-0.056***	-0.061***	-0.036***	-0.046***
	(0.026)	(0.015)	(0.015)	(0.014)	(0.013)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.391	0.169	0.170	0.293	0.313
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

The results from the externality treatments show that informing individuals about negative effects of inequality can prove persuasive to increase support for redistributive preferences. However, the information is more convincing when it is comprehensive and not insular; in other words, discussing the widespread effects inequality could have on society is more impactful than focusing on any single type of externality.

We do not find any effect of any externality treatments on preferences for top-income taxation. As our other externality treatment effects are strongly robust (to different specifications, various data exclusions, and so on[25]), this is somewhat surprising. This can be due to the

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[25]Note in particular that the main treatment effects are robust to the exclusion of the controls. Table A12

respondents not fully internalizing the connection between higher top tax rates and lower inequality or because respondents might believe that the effect of inequality on trust and crime is primarily affected by inequalities near the bottom, on which top tax rates might not be an effective tool. We also note that the active control showed a surprisingly high treatment effect for this variable (see Section 4.3) – the non-result from the externality treatments could also be driven by this anomaly.

The fairness treatment shows strong and significant shifts on all measures of redistributive preferences. The effect on the redistributive preference index is approximately two times larger than that of the full externality treatment (1.94 times the size). This represents our first indication of the relative strength of the fairness and externality arguments. However, caution should be employed in interpreting these numbers directly. The treatment effects are *marginal* effects, and their relative magnitude is determined not only by the intrinsic importance of these arguments in shaping redistributive beliefs, but also by the malleability of these views in respondents and video design choices (see Equation 3). We re-visit this topic in Section 5.3.

It is also notable that, unlike for the externality treatments, we find a strong and significant effect of our fairness treatment on respondents' preferred top tax rate. Comparing this to the full-externality treatment, it indicates that explicit information about the evolution of top-incomes can be more effective in gathering support for increasing top taxation than informing about inequality's effects on trust and crime. If the goal is instead to change broader views on inequality or redistribution, inequality externality arguments may approach the same level of efficacy as fairness arguments, and may indeed be less polarizing and more effective across the income distribution. We return to a discussion on polarization in Section 6.

To characterize the magnitude of the treatment effects, we also compare the treatment effects with the correlation between redistributive preferences and other variables such as political leaning, gender, or fairness views. As shown in Table 5, we find—as expected—large correlations with political leaning and prior fairness views. Republican-leaning subjects, for example, are 20 percentage points less likely to want the government to redistribute as compared to democratically leaning subjects. The largest treatment effects correspond to about a third of this difference between Republican- and Democrat-leaning subjects, and about a fourth of the difference between those who think the economic system is fair or unfair. One other effect that is often cited is the correlation between gender and redistributive preferences – we replicate the frequent finding (e.g. Alesina and Giuliano, 2011) that men favor less redistribution than women. The effect of our externality treatment is similar in magnitude to this correlation.

We note that one of our outcomes – inequality being a serious issue – was also asked in Stantcheva (2021). The treatment effects of the video treatments (0.02 - 0.09) are similar to those here (0.02 - 0.12) – where all outcomes use a dummy from 0 to 1. The main redistribution treatment effect in Stantcheva (2021) is 0.09, which is similar to the treatment effect of the Fairness treatment 0.12.

Mechanism We have already seen that the treatments shift the targeted first-stage belief. The next question we can ask is whether the reduced-form treatment effect is mediated through a

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replicates the regressions but excludes all control variables. The point-estimates are nearly identical to the ones shown in 5, indicating that it is unlikely that unobservable heterogeneity affects the results in any form.

shift in these first stage beliefs.[26] Our treatment is designed to induce a shift in externality beliefs and fairness views which yields a change in preferences for redistribution. Thus, the magnitude of the treatment effects should be reduced after controlling for externality and fairness views elicited *after* the treatment.

Table A19 in the Appendix characterizes the results of such a regression. Compared to the treatment effect of a regression without post-treatment beliefs, the coefficients of the treatment dummies decreases for the treatments that significantly affected redistributive preferences, i.e. the full externality treatment and the fairness treatment. More concretely, the treatment effect of the full-externality treatment on our redistributive preference index was 10 percent of a standard deviation if we do not control for post-treatment externality beliefs and decreases to 5 percent of a standard deviation once we control for post-treatment externality beliefs. This implies a reduction in the magnitude of the treatment effect of nearly 50% ($p = 0.002$, t-test). The reduction in the magnitude of the fairness-treatment's treatment effect is similarly large. Before controlling for beliefs, the magnitude of the Fairness treatment was 20.8 percent of a standard deviation and then decreased to 12.2 percent of a standard deviation ($p=0.000$, t-test). Similar reductions in the treatment effect can be observed for the other redistributive preference. This provides evidence that our reduced form treatment effect is mediated through a shift in beliefs, as intended by the treatment itself.[27]

Emotional reactions   To explore the psychological channel through which the treatments operate and which could explain the differences in their effects, we elicited respondents' emotions from viewing the video. Emotional reactions to the presented video also differ across treatments. At the end of the survey we ask respondents to recall which emotion they felt after watching the video they were shown; respondents were able to answer (potentially several of) anger, interest, surprise, indifference, confusion, or concern. The most striking finding is on anger, which we show in Figure 9. Respondents who are shown the fairness video are significantly more likely to respond anger than those who have seen any other video. While the absolute percentage of such respondents is relatively small (11.7%), the increase from the control video (2.8%) is almost two times as large ($p < 0.0001$, t-test) as for any other video.[28] Subjects in the fairness treatment group are also significantly more likely to respond with *anger* compared to those in the full externality group ($p = 0.001$, t-test). This asymmetry is not carried over for other emotions; the equivalent differences between the fairness and full externality videos are not statistically significant for *concern, surprise, indifference* and *confusion*.[29] This leads us to

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[26]Note that we did not include this analysis in our pre-analysis plan. Nonetheless, we believe it is of interest for the reader.

[27]A complete disappearance of the treatment effect is unlikely given that beliefs are generally measured with noise and that our first-stage belief measurements are bounded. An example of this would be an individual who already thought inequality increases crime before the survey; after watching the full externality video she becomes increasingly convinced of the importance of this causal channel, which shifts her redistributive preferences. Her response to the first-stage crime question is the same (*"More inequality → A lot more crime"*). However, her beliefs have changed, which then affect her redistributive preferences.

[28]The second-highest video is the full externality video (7.8%); third-highest is the crime video (6.1%); fourth-highest, roughly equal to the control, is the trust video (2.9%).

[29]The difference between the fairness and full externality treatments is significant at the 5% level in *interest*. Due to the high levels of *interest* in the active control and trust treatments, where other emotions were less frequently reported, we suspect that this option is to some extent used as a "neutral answer" by respondents who did not have a strong emotional reaction to the video (and thus did not know which other emotion to respond).

hypothesize that part of the difference in efficacy between these two videos, and thus the two type of arguments, come from the extent to which they invoke anger in respondents. We thus find indicative evidence for a trade-off between efficacy (fairness arguments) and broad support and low polarization (externality arguments) in redistributive arguments. We further discuss this in Section 6.

Interaction effects Which individuals reacted particularly strongly to the information treatments? To explore this we pre-specified certain interactions between our treatment dummies and a battery of baseline characteristics. For brevity, most of these pre-specified interactions are discussed in the Appendix. Below we discuss two interactions we deem to be of particular importance.

The first compelling heterogeneous treatment effect is through income.[30] While low-income agents ($> \$25k$) react very strongly to the fairness treatment ($\beta = 0.312$, compared to $\beta = 0.208$ in the full sample), they do not react at all to the full externality treatment ($\beta = 0.001$, compared to $\beta = 0.107$ in the full sample). This effect is reversed for top-income individuals ($> \$100k$), who react more strongly to the externality treatment ($\beta = 0.188$) than to the fairness treatment ($\beta = 0.143$). The two treatment effects are essentially equal above \$50k;[31] the larger size of the fairness treatment effect is driven entirely by individuals with incomes below $\$50k$. This has intriguing consequences for the efficacy of each argument for different income groups; this is further discussed in Section 6.

The second compelling heterogeneous treatment effect is through the self-reported variable that indicates

Figure 9: Treatment effects on anger

This figure characterizes the treatment effect of regressions regressing the respondents reporting that they experienced anger after watching the video. Error bars depict 95% confident intervals. Standard errors are clustered at the subject levels. The distribution of emotional reactions by treatment is found in Table A17

whether subjects learned something new. This is conceptually linked to the preceding discussion of the mechanism; the intuition is that subjects who learned something new are also more likely to adjust their beliefs conditional on receiving the information. Table A22 displays the results of such a regression. As expected, subjects that indicate to have learned something new in the video have significantly higher treatment effects for the redistributive index than those that did not learn something new in the crime, full externality, or fairness treatment groups.

While respondents were not required to enter any emotion, this is not explicitly stated, and most respondents seem to have thought at least one emotion was required – only 27/3833 (1%) respondents left the question blank. The average number of emotions per respondent is also very similar in all videos (between 1.09 and 1.15). The difference in *interest*, then, most likely follows from a zero-sum effect as the fairness video provokes more emotions overall (specifically anger).

[30]Note that we did not pre-specify this interaction, but include it as it is both robust and of particular interest.

[31]In this sample $\beta = 0.111$ for the full externality treatment and $\beta = 0.117$ for the fairness treatment.

This corroborates the findings from the previous section that our reduced form effects can be explained through a shift in actual beliefs.

5.3 Comparing the importance of externality beliefs and fairness views as determinants of redistributive preferences

In the preceding section, we showed that both fairness views and inequality externality beliefs are causal determinants of preferences for redistribution. This section characterizes the relative importance of inequality externality concerns and fairness views on redistributive preferences. We undertake this exercise because fairness views have been identified as a crucial motive behind preferences for redistribution (Almås et al., 2020; Alesina and Giuliano, 2011), thus serving as a useful benchmark. To that end, we pre-specified three different approaches.

Comparing the effects of the information treatments First, as we have already discussed, we can compare the treatment effects of our information treatments characterized by Table 5. The fairness video has about twice the effect on our pre-specified index of redistributive preferences as the full externality video. We can reject equality of the two coefficients at the 5% significance level (p = 0.012, t-test). As these are marginal effects that are also dependent on the efficacy of the treatment video, this is only indicative evidence for the relative strength of these arguments as a whole.

Predictive power of externality beliefs, political leaning, and fairness views In the second method we explore the predictive power of each type of belief on redistributive preferences. We run descriptive regressions that include fairness views, externality beliefs, political preferences, and "economist determinants" as regressors, and we compare the explanatory power of these models using the adjusted R^2. These regressions were pre-specified; in the rare case when they were not this is noted explicitly.

Table 6 displays the results of these regressions. Note that all regressions only include observations from the baseline control group. Column (1) characterizes a regression that only includes the control vector; Column (2) includes our two main fairness variables: the belief that society is unfair because some get much more than they are entitled to and some get too little, and the belief that one gets rich due to luck rather than hard work; Column (3) includes our two main externality variables, the belief that unequal countries generally function worse, and the belief that inequality generally affects society in a negative way; Column (4) characterizes a regression that includes the strict political variables of whether the respondent leans Republican, and whether the respondent supports Kamala Harris and Bernie Sanders (rather than Mitt Romney or Donald Trump); Column (5) characterizes a regression that includes two variables economists often consider as potential determinants for redistributive preferences, namely whether the respondent generally trusts the government to do the right thing and whether the respondent agrees that higher taxes make people work much less; Column (6) displays the results of a regression that includes all variables from regressions (1) through (5).

The controls include groupings for gender, age, income, employment status, education and region, which explains only about 12% of variation in the redistributive preference index. All

Table 6: Predictive power of various beliefs

	(1) RP Index b/se	(2) RP Index b/se	(3) RP Index b/se	(4) RP Index b/se	(5) RP Index b/se	(6) RP Index b/se
Rich because of luck		0.624*** (0.060)				0.401*** (0.057)
Society is unfair		0.620*** (0.059)				0.416*** (0.056)
Belief uneq. countr. worse			0.434*** (0.058)			0.269*** (0.050)
Neg. externality belief			0.640*** (0.058)			0.272*** (0.054)
Leans Republican				-0.429*** (0.084)		-0.245*** (0.072)
Sanders/Harris supporter				0.533*** (0.085)		0.260*** (0.075)
Trusts the government					0.436*** (0.066)	0.131** (0.054)
Taxation reduces work					-0.115* (0.061)	-0.004 (0.048)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.104	0.382	0.297	0.296	0.148	0.494
Observations	932.000	932.000	932.000	932.000	932.000	932.000

Note. This table reports results from a regression of different redistributive preference outcomes on fairness views, political views, externality beliefs and attitudes towards the government, as well as socio-economic control variables. Controls not listed include gender, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

models explain more variation than the only-control regression, as expected. Focusing on the adjusted R^2, it becomes clear that the fairness variables have the most predictive power for preferences for redistribution with an $R^2_{adj} = 0.395$. This is followed by the externality beliefs and political views, which are equally predictive at $R^2_{adj} = 0.311$. Last is the "economist" regression, with a relatively low predictive power of $R^2_{adj} = 0.166$.

The first three of these models all have relatively strong predictive power. Including two simple fairness, externality or political dummies leads to a 20-30 percentage point increase in explaining variation in redistributive preferences. This is a sizable increase. The fairness module is clearly strongest; the externality or political modules explain about two thirds of the variation the fairness module does. However, it is also clear that the externality module itself explains a sizable portion of variation.

We can also explore whether externality views provide any *additional* predictive power to a fairness-based model of preferences for redistribution. Model (5) indicates that it may; when including all variables into a single regression, all variables remain strong predictors of redistributive preferences except for the taxation reduces work-variable, which is no longer significant. The point estimates drop for all variables, indicating that while they are to some extent correlated with each other, each still captures *independent* correlation with redistributive preferences. This is further reflected in the increase of the adjusted R^2 of nearly 10 percentage points compared to a model that only includes classical fairness views and socio-demographic control variables. We further this analysis in the Appendix by exploring three-variable versions of the fairness and externality modules (without the other two modules); the findings there confirm that the

externality variables are weaker predictors than the fairness variables but capture variation that is not explained by the fairness variables.

This method on its own does not show that inequality externality beliefs are a determinant for preferences for redistribution. Consider the possibility that externality beliefs are not determinants in themselves but rather simply correlated to redistributive preferences (similar to, for example, being Republican). Intrinsic weaknesses like these are why we explore the topic through different methods, and in particular induce exogeneous variation in our information experiment. Nonetheless, this method allows us to make two separate conclusions. First, externality beliefs are somewhat weaker predictors of redistributive preferences as compared to classical fairness views in our survey. Second, externality views are similarly important in predicting redistributive preferences as compared to political affiliation. Putting the two together, the horse-race regressions strengthen the conclusion from the experimental analysis; while fairness views are overall stronger determinants of redistributive preferences than externality beliefs, such beliefs remain an important determinant of redistributive preferences.

Ranking motives behind preferences for redistribution While the treatment effects characterizes the importance of each motive at the margin and the horse-race regression describe the predictive power of each motive, we now study the absolute relative importance of different motives behind redistributive preferences. To this end, we analyze the results from a survey-item conceptualized for this question. In this item subjects were asked to allocate 100 points across different motives behind preferences for redistribution. For example, a respondent who only cares about maximizing her own income should allocate 100 points to "I do not like to give up money"; a respondent who cares equally about inequality's negative effects on society, the fairness of the post-tax income distribution, and maximizing her own income should allocate 33 points to each motive; etc. The survey-item is particularly useful to assess the relative importance of externality beliefs and fairness views in influencing preferences over redistribution, as it forces the respondents to trade these motives off against each other.

Figure 10 characterizes the mean weight put on the respective motives. The motive that attains the highest average support is income maximization. This is closely followed by a diminished marginal utility (DMU) argument that a dollar is worth more to the rich than to the poor. Negative externalities ("Inequality changes society for the better (more inequality $\longrightarrow$ a better society through various ways")) are the third most important motive, attaining an average of 18 points. A broadly framed fairness motive ("High inequality is unfair") actually ranks slightly behind the inequality motive and the mean weight is weakly different (p = 0.08, t-test). A general aversion against taxation, positive externality concerns, and efficiency concerns attain only weak average support from our sample.[32] This last point on efficiency concerns is consistent with the findings in Table 6 and in Stantcheva (2021), among others; efficiency

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[32]One may argue that the presented averages just reflect idiosyncratic noise and not clear motives behind preferences for redistribution. This is, however, unlikely to be the case. Figure B7 in the Appendix shows the share of subjects that weakly rank a given motive first for the same question; the distribution strongly resembles that in Figure 10. One can also replicate Figure 10 while only including the sub-populations of subjects that rank a given motive first. This is presented in Figure B8. This decomposition shows both that subjects have consistent views – the positive externality answer is at the bottom for the negative externality group and vice versa, for example – and that respondents can be described as having one primary motive and other secondary motives.

Figure 10: Mean share for each motive behind preferences for redistribution
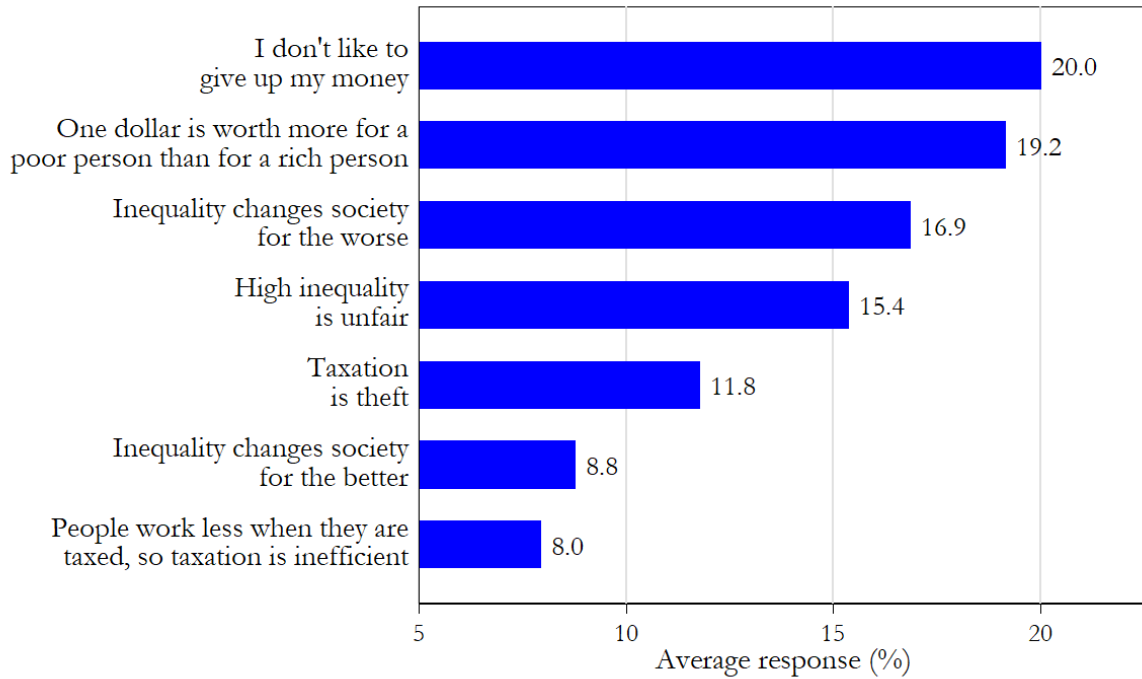
Question text: *When thinking about your preferred level of redistribution, what matters most to you? Please indicate what dimensions matter by giving scores below that add up to 100.* Answer option texts are identical to graph labels. Standard errors are approximately 0.6%.

concerns do not seem to be strong determinants of U.S. citizens' redistributive preferences.

What does this tell us about the relative importance of externality concerns and fairness views? First, one should note that inequality externality concerns rank as one of the most important motives within our control group. This is remarkable given that the control group has not faced any information about inequality externalities and only one related question[33] before answering this survey module. Second, negative externality concerns are similar in magnitude as broad but explicit fairness views. When adding up positive and negative externality concerns, externality beliefs become the strongest of all motives, even surpassing the selfish motive. If one adds-up the DMU and the fairness motives to one broad other-regarding motive, general externality concerns are about three-quarters (74%) as important as other-regarding motives as a redistributive determinant - thus echoing the results from the two methods described above.[34]

Motives behind partisan redistributive split   One might also ask how much of the partisan split in redistributive beliefs is explained by variation in externality and fairness beliefs respectively. To explore this question we employ a Gelbach decomposition (**?**). We use the decomposition to illustrate which portion of the partisan gap in the redistributive preference index goes through either the two main externality variables or the two main fairness variables (seen in Table 6), governmental trust, or efficiency concerns. In total, 46% of Republicans' lower support

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[33]The pre-treatment externality question shown at the beginning of Section 3.2.
[34]If including "Taxation is theft" as a fairness motive, this falls to 60%.

for redistribution cannot be explained by these variables or a list of standard controls. Of the remaining 54%, most can be accounted for mainly by fairness views (27% of the partisan gap); externality beliefs (12%); individual controls (10%); and governmental trust (5%). Efficiency concerns are not a relevant factor ($\sim$0%).

Two consistent patterns emerge from this analysis: (1) Fairness concerns are generally speaking more powerful in predicting preferences for redistribution. This is true when comparing the share of total variation explained by different motives or when studying them at the margin, as we do in our information treatments. (2) Inequality externalities are still strong predictors of redistributive preferences, and they seem to be between half and two-thirds as important as fairness views, broadly speaking. A conservative reading of our 100-points question would argue that their relative importance is higher and should be benchmarked at 70%. This comparison shows that inequality externality beliefs are a relevant and important motive behind redistributive preferences.

5.4 Robustness

Population weights Even though we targeted representativity along several observable dimensions, we slightly over or under sample populations with some characteristics as described in Section 4.2. To establish representativity ex-post, we replicate our key analyses by reweighing along gender, race, age-groups, party, holding a college degree, income group, and geographic region. Regressions in Table A16 regress redistributive preferences on our treatments; Regressions in Table A18 regress posterior beliefs on treatments; and Regressions in Table A25 replicate the horse-race regressions using population weights. The results for the latter two regressions are nearly identical. For the former, reweighting has only small effects on the magnitude of the significant treatment effects. As standard errors increase under the reweighting procedure, certain clearly significant treatment effects in the original weighting are, however, no longer 5% significant in the reweighted data.

Keeping all respondents As prespecified, we dropped the 5% fastest and slowest respondents, as well as those that spent less time watching the video than the length of the video. Additionally, we dropped respondents with unusual or strange responses to open text questions. We replicate our main regressions keeping these respondents. As shown in Tables A26, A27 and A28, we do not find any meaningful differences compared to the analyses using our main sample.

Failing any attention check Furthermore, we replicate our main regressions while excluding all respondents that failed *at least* one attention check. While the first-stage effects and the horserace regressions, Table A30 and A31 respectively, remain very similar to our main specification, the effect of the full externality treatment on RP-Index becomes marginally significant as shown in Table A29. This is likely to be due to a lack of power that results from dropping one-third of our sample given that controlling for passing or failing an attention check does not result in any differences, as shown in Table A32.

Specifying only one control group As shown in Section 4.3 we merge our two control groups given that they are sufficiently similar on a set of pre-specified criteria. As a robustness check, we first-stage and reduced form treatment effect regressions but drop either the active or the passive control group in Tables A33, A34, A35, and A36. The treatment effects are slightly stronger when only considering the passive control group as the baseline compared to when only specifying the active control group as the baseline. While the treatment effect becomes marginally significant for the full-externality treatment effect on the RP-index due to lower statistical power, the magnitudes are comparable across the specifications, showing that the conclusions from the data are identical from the data.

Not controlling for observable characteristics We replicate our main regressions without controlling for any observable characteristics. As shown in Tables A37 and A38 reduced form and first-stage treatment effects are similar to our main specification in magnitude and significance. This is expected given our randomized treatment design.

Using non-dichotomized outcome variables In our main specifications, we dichotomize our outcomes and explanatory variables when applicable. In Tables A41, A37, and A42 we replicate our main regressions without dichotomizing any outcomes or control variables and, furthermore, we recompute the RP-Index based on non-dichotomized beliefs. As shown in the tables, the results are similar to those presented previously.

Multiple hypothesis testing In the main regression tables (Table 5) we run a total of twenty tests for statistical significance. On this scale, Type I errors can become a serious problem and lead to erroneous inference of statistical significance. To correct for this we use the false discovery rate (FDR) sharpened q-values as described in Anderson (2008). FDR sharpened q-values are classical p-values that are corrected for the expected number of significant treatment effects that are truly null effects. Where a p-value threshold of 0.05 gives a false positive rate of 5% among all treatment effects that are truly null, a q-value threshold of 0.05 gives a false *discovery* rate of 5% among all *significant* treatment effects. This correction has no significant effect on our conclusions. None of the treatment effects with $p < 0.05$ in our original specifications have q-values above 0.05, indicating that this is a negligible concern. The results of this correction are shown in Table A43.

Survey bias At the end of the survey, respondents were asked whether they considered the survey biased in an either left-wing or right-wing fashion. The large majority of respondents (72.0%) did not think the survey was biased in either direction. More respondents answered that the survey was left-wing biased (21.5%) than right-wing biased (6.5%). Republican respondents are more likely to consider the survey left-wing biased (33%) than Independent respondents (21%) or Democrat respondents (10%).

There is no statistically significant differences in the percentage of respondents who believe the survey was left-wing biased over treatment groups. The control groups are only mildly different (19.1%) to the treatment average (22.3%). All treatment groups are between 21% and

23%. This is shown in Table A44. All main treatment effects are robust to including a dummy for left-wing bias as a control.

6 Discussion

Preferences for redistribution and polarization   There are several structural differences between redistributive arguments based on either (a) fairness concerns or (b) inequality externality concerns. In this section we discuss some implications of these differences. The two most crucial are who is *at fault*, and who is *affected*.

Consider an argument for redistribution based on the unfairness of the income distribution. Whenever one person deserves more of an existing pie, another who already has resources must be deserving of less. Such arguments can be more or less polarized; arguing that the poor deserve more is different from arguing that the rich are rent-seeking, which is again different from assigning blame for the perceived unfair system. However, as many political commentators are prone to point out, any fairness-based argument is founded on opposition and thus polarization. Somewhat stylized, there must be at least always a villain—the rich—*or* a victim—the poor; often there are both.

Inequality externality concerns are fundamentally different. First, there are fewer traditional villains. Externality arguments are, broadly speaking, about the unintended consequences of economic inequality. These unintended consequences do not have to be the fault of any particular individual, nor do they require "winners and losers" in a traditional sense (though they can have them). If higher inequality leads to less trust, for example, it is undoubtedly unfortunate – but it is difficult to argue that any one portion of society has sole responsibility for such a development. The villain in inequality externality arguments, as far as there is one, is usually *inequality itself*, and the victim is often all of us.

As an example of this difference; arguing that the economic system is unfair can be perceived to discredit those with high incomes. Arguing that higher-inequality societies function worse, on the other hand, is not particularly targeted at anyone.

The importance of this distinction can be summarized in two main points. First, fairness arguments could be more polarizing than externality arguments, creating divisions and fostering anger in a way that externality arguments avoid. Second, these two types of arguments could have different target audiences, with fairness arguments being more effective near the bottom and externality arguments being more broadly applicable.

Our survey results underline these ideas. It is most clearly seen in the likelihood of respondents reporting *anger* after watching the fairness treatment. Some relatively simple information about the evolution of wages and productivity made one out of every eight or nine people report this emotion – significantly higher than for any of our other treatments, even those discussing homicides.[35] This indicates the high potential for polarization in fairness arguments. Heterogeneous treatment effects in income also indicate that the externality argument may be more universal. While the fairness treatment was significantly less effective on respondents who earn more than $50,000 a year, the effect of the full externality treatment was similar across the

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[35]The equivalent numbers for the three externality treatments is one in 13, 16 and 34 respondents.

income distribution – if anything increasing at top incomes.[36]

As we discussed in Section 5.1.1, fairness views are also more polarized across income, wealth and party allegiance than externality views. Fairness views, such as the view that the economic system is unfair, are significantly more common among low-income and low-wealth individuals, both in our sample and in other surveys (Valero, 2021). Externality views, on the other hand, have either weak or non-existent correlations with income and wealth. A similar pattern is true for party allegiance; the heterogeneity between Democrats, Independents, and Republicans is much stronger in fairness views than for externality beliefs. Overall, fairness views are polarized across various dimensions whereas externality views are relatively constant across the population.

There are two main points to take from this discussion. First, it seems likely that, when arguing for more redistribution, there is a trade-off between maximum efficacy (fairness arguments) and low polarization (externality arguments). Politicians and policy leaders who wish to create more demand for redistribution, yet want to keep polarization low, could do well by using externality arguments instead of fairness arguments. We believe this is a notable finding in an increasingly polarized world. Second, our results imply that the audience for these arguments may be different; the efficacy of fairness arguments could be disproportionately localized at the bottom of the income and wealth distributions, unlike more widely effective inequality externality arguments.

Welfare-theoretical ramifications Welfare theory is often based on individualist utility functions, which usually assumes no relevant externalities. Even if some externalities do exist, they can usually be ignored either because they are not of a macroeconomic scale or not explicitly economic in nature (and potentially based on welfare-irrelevant concepts such as altruism or jealousy). If economic inequality has externalities, however, it presents difficulties to this framework that most other externalities do not. It is a resource-based externality which is influenced by any individual's resources, largely independent of how they were procured, which exists on a macroeconomic scale. It also does not rely on feelings or other arguments that can be disregarded on philosophical grounds.[37] Beyond rare exceptions (e.g. Thurow (1971); Alesina and Giuliano (2011); Støstad and Cowell (2020)) this has been largely ignored in economic theory, likely because causal evidence of inequality's societal effects is empirically difficult to produce.[38] This paper shows that the vast majority of individuals believe that economic inequality has such externalities and that they are of a significant magnitude. Further, this might influence their actual preferences. As such, our results indicate that the ramifications of treating economic inequality as an externality in welfarist models might require further study.

7   Conclusion

This paper marks the first positive analysis of individuals' inequality externality beliefs as a determinant for redistributive preferences. Using a representative survey of 4,371 U.S. citizens we

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[36]This is in line with theoretical analysis and correlational evidence by Rueda and Stegmueller (2016) who study the relationship between preferences for redistribution and (fear of) crime.

[37]The main other externality that meet all these requirements is global climate change.

[38]These difficulties are intrinsic, such as the lack of exogenous variation in inequality; the difficulties would remain even if externality effects were large.

find that individuals believe inequality affects society through various ways, and that individuals largely believe that inequality has *negative* rather than *positive* effects on society. A large majority of individuals believe economic inequality increases crime (76%), decreases trust (68%), decreases economic growth (52%), for example. In collecting these and other data points, this paper has thus created the first extensive database of inequality externality beliefs in any country.

The paper has also shown that inequality externality beliefs are a strong determinant for redistributive preferences. An exogenously provided information treatment was used to conclusively show this; an information treatment showing comprehensive information about inequality externalities shifted individuals' views about redistributive preferences by a significant amount. This information treatment, as well as our customized survey module and the analysis of the explanatory power of various motives behind redistributive preferences all indicate that externality beliefs are between a half to two-thirds as important as fairness beliefs in determining redistributive preferences. As such, this paper presents the first strong evidence that individuals' beliefs about how inequality affects society is impactful for their redistributive preferences.

The work further discussed the main differences between fairness arguments and inequality externality arguments. The three main distinguishing differences were argued to be the overall efficacy of the argument first, the potential polarization of the argument second, and the target audience of these arguments third. Generally speaking, fairness arguments are somewhat more effective than externality arguments. However, while fairness arguments necessarily create opposition – by pointing out who does or does not deserve their incomes, for example – externality arguments focus on a shared enemy of inequality's unintended consequences. As such, fairness arguments are more prone to polarization and have a more variable efficacy across the income distribution than externality arguments. Survey results back up this argument; the fairness treatment lead to more anger in respondents and was more effective on lower income individuals. In addition, fairness views are more heavily correlated to income than externality beliefs. Overall, these two types of arguments have structural differences that policy makers and economists would do well to note.

Finally, these results have a broader dimension of academic and policy-making value. When economic inequality has externalities, the core problem of economics becomes not just to maximize income efficiently but also to find the correct trade-off between more income and less inequality. What amount of resource inequality is safe and sustainable? Should we limit top incomes entirely? These questions are relevant questions when inequality has externalities and go beyond simple egalitarianism. Accepting inequality externalities as real and serious presents trade-offs that are much more complex than those posed in the existing literature around redistributive preferences. We hope further work will explore these issues more thoroughly.

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A Tables

Table A1: Balance table for posterior externality beliefs

Variable	(1) Passive Control	(2) Active Control	(3) Difference
General neg. ext.	0.582	0.614	0.032
	(0.494)	(0.487)	(0.032)
Ineq. incr. crime	0.757	0.761	0.005
	(0.430)	(0.427)	(0.028)
Ineq. red. trust	0.669	0.698	0.029
	(0.471)	(0.460)	(0.031)
Ineq. incr. growth	0.190	0.193	0.003
	(0.392)	(0.395)	(0.026)
Society is unfair (post)	0.587	0.609	0.022
	(0.493)	(0.489)	(0.033)
Rich because of hard work	0.392	0.383	-0.009
	(0.489)	(0.487)	(0.032)
Observations	538	394	932

Note. This table represent mean (standard deviations) for posterior externality beliefs of respondents in the active (column 1) and passive (column 2) control groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A2: Balance table for prior views and values

Variable	(1) Passive Control	(2) Active Control	(3) Difference
Prior belief fair	0.481	0.492	0.011
	(0.500)	(0.501)	(0.033)
Belief uneq countr. worse.	0.584	0.617	0.033
	(0.493)	(0.487)	(0.032)
Trusts the government	0.288	0.327	0.039
	(0.453)	(0.470)	(0.031)
Belief work less if tax	0.400	0.376	-0.024
	(0.490)	(0.485)	(0.032)
Observations	538	394	932

Note. This table represent mean (standard deviations) for posterior fairness views of respondents in the active (column 1) and passive (column 2) control groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A3: Balance table for observable characterstics

Variable	(1) Passive Control	(2) Active Control	(3) Difference
Leans Republican	0.532	0.492	-0.039
	(0.499)	(0.501)	(0.033)
Prior belief unfair	0.519	0.508	-0.011
	(0.500)	(0.501)	(0.033)
Trusts the government	0.288	0.327	0.039
	(0.453)	(0.470)	(0.031)
Male	0.498	0.495	-0.003
	(0.500)	(0.501)	(0.033)
Black	0.087	0.081	-0.006
	(0.283)	(0.274)	(0.018)
Neither black or white	0.162	0.107	-0.055**
	(0.369)	(0.309)	(0.022)
Income: 0-25k	0.214	0.236	0.022
	(0.410)	(0.425)	(0.028)
Income: 25-50k	0.331	0.249	-0.082***
	(0.471)	(0.433)	(0.030)
Income: 50-100k	0.257	0.312	0.056*
	(0.437)	(0.464)	(0.030)
Income: 100k and more	0.199	0.203	0.004
	(0.400)	(0.403)	(0.027)
Age 30-39	0.164	0.188	0.024
	(0.370)	(0.391)	(0.025)
Age 40-49	0.182	0.150	-0.032
	(0.386)	(0.357)	(0.025)
Age 50-59	0.128	0.147	0.019
	(0.335)	(0.355)	(0.023)
Age 60-69	0.175	0.162	-0.012
	(0.380)	(0.369)	(0.025)
Age 70 and above	0.206	0.223	0.017
	(0.405)	(0.417)	(0.027)
4-year college degree or more	0.459	0.513	0.054
	(0.499)	(0.500)	(0.033)
Unemployed	0.099	0.107	0.008
	(0.298)	(0.309)	(0.020)
Outside the labor force	0.457	0.431	-0.026
	(0.499)	(0.496)	(0.033)
West	0.258	0.206	-0.053*
	(0.438)	(0.405)	(0.028)
North-East	0.138	0.190	0.053**
	(0.345)	(0.393)	(0.025)
Midwest	0.238	0.228	-0.009
	(0.426)	(0.420)	(0.028)
Observations	538	394	932

Note. This table represent mean (standard deviations) for socio-demographic variables of respondents in the active (column 1) and passive (column 2) control groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A4: Balance table Trust vs. Control

Variable	(1) Control	(2) Crime	(3) Difference
Leans Republican	0.515	0.525	0.010
	(0.500)	(0.500)	(0.023)
Prior belief unfair	0.514	0.529	0.016
	(0.500)	(0.499)	(0.023)
Trusts the government	0.305	0.285	-0.020
	(0.461)	(0.452)	(0.021)
Male	0.497	0.466	-0.031
	(0.500)	(0.499)	(0.023)
Black	0.085	0.095	0.011
	(0.279)	(0.294)	(0.013)
Neither black or white	0.138	0.128	-0.011
	(0.346)	(0.334)	(0.016)
Income: 0-25k	0.223	0.235	0.012
	(0.417)	(0.424)	(0.019)
Income: 25-50k	0.296	0.267	-0.029
	(0.457)	(0.443)	(0.021)
Income: 50-100k	0.280	0.307	0.026
	(0.449)	(0.461)	(0.021)
Income: 100k and more	0.201	0.192	-0.009
	(0.401)	(0.394)	(0.018)
Age 30-39	0.174	0.158	-0.016
	(0.379)	(0.365)	(0.017)
Age 40-49	0.168	0.166	-0.002
	(0.374)	(0.372)	(0.017)
Age 50-59	0.136	0.144	0.007
	(0.343)	(0.351)	(0.016)
Age 60-69	0.170	0.182	0.013
	(0.375)	(0.386)	(0.018)
Age 70 and above	0.214	0.211	-0.002
	(0.410)	(0.408)	(0.019)
4-year college degree or more	0.482	0.498	0.017
	(0.500)	(0.500)	(0.023)
Unemployed	0.102	0.093	-0.009
	(0.303)	(0.291)	(0.014)
Outside the labor force	0.446	0.426	-0.021
	(0.497)	(0.495)	(0.023)
West	0.236	0.269	0.033
	(0.425)	(0.444)	(0.020)
North-East	0.160	0.166	0.006
	(0.367)	(0.372)	(0.017)
Midwest	0.234	0.175	-0.059***
	(0.424)	(0.380)	(0.019)
Prior belief unfair	0.514	0.529	0.016
	(0.500)	(0.499)	(0.023)
Belief work less if tax	0.389	0.372	-0.018
	(0.488)	(0.484)	(0.022)
Trusts the government	0.305	0.285	-0.020
	(0.461)	(0.452)	(0.021)
Belief pay less than prod.	0.734	0.741	0.007
	(0.442)	(0.439)	(0.020)
Belief uneq countr. worse.	0.598	0.643	0.045**
	(0.491)	(0.479)	(0.022)
Observations	932	933	1,865

Note. This table represents mean (standard deviations) for pre-treatment beliefs and characteristics in the Control (column 1) and Crime (column 2) groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A5: Balance table Trust vs. Control

Variable	(1) Control	(2) Trust	(3) Difference
Leans Republican	0.515	0.527	0.012
	(0.500)	(0.500)	(0.024)
Prior belief unfair	0.514	0.526	0.012
	(0.500)	(0.500)	(0.024)
Trusts the government	0.305	0.325	0.020
	(0.461)	(0.469)	(0.022)
Male	0.497	0.476	-0.020
	(0.500)	(0.500)	(0.024)
Black	0.085	0.103	0.018
	(0.279)	(0.304)	(0.014)
Neither black or white	0.138	0.127	-0.011
	(0.346)	(0.333)	(0.016)
Income: 0-25k	0.223	0.227	0.003
	(0.417)	(0.419)	(0.020)
Income: 25-50k	0.296	0.320	0.024
	(0.457)	(0.467)	(0.022)
Income: 50-100k	0.280	0.282	0.002
	(0.449)	(0.450)	(0.022)
Income: 100k and more	0.201	0.171	-0.030
	(0.401)	(0.377)	(0.019)
Age 30-39	0.174	0.172	-0.002
	(0.379)	(0.378)	(0.018)
Age 40-49	0.168	0.166	-0.002
	(0.374)	(0.372)	(0.018)
Age 50-59	0.136	0.145	0.009
	(0.343)	(0.353)	(0.017)
Age 60-69	0.170	0.164	-0.006
	(0.375)	(0.370)	(0.018)
Age 70 and above	0.214	0.213	-0.000
	(0.410)	(0.410)	(0.020)
4-year college degree or more	0.482	0.468	-0.014
	(0.500)	(0.499)	(0.024)
Unemployed	0.102	0.099	-0.003
	(0.303)	(0.299)	(0.014)
Outside the labor force	0.446	0.455	0.008
	(0.497)	(0.498)	(0.024)
West	0.236	0.248	0.012
	(0.425)	(0.432)	(0.021)
North-East	0.160	0.162	0.003
	(0.367)	(0.369)	(0.018)
Midwest	0.234	0.215	-0.019
	(0.424)	(0.411)	(0.020)
Prior belief unfair	0.514	0.526	0.012
	(0.500)	(0.500)	(0.024)
Belief work less if tax	0.389	0.364	-0.026
	(0.488)	(0.481)	(0.023)
Trusts the government	0.305	0.325	0.020
	(0.461)	(0.469)	(0.022)
Belief pay less than prod.	0.734	0.772	0.038*
	(0.442)	(0.420)	(0.021)
Belief uneq countr. worse.	0.598	0.636	0.039*
	(0.491)	(0.481)	(0.023)
Observations	932	825	1,757

Note. This table represents mean (standard deviations) for pre-treatment beliefs and characteristics in the Control (column 1) and Trust (column 2) groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A6: Balance table Full ext. vs. Control

Variable	(1) Control	(2) FullExt	(3) Difference
Leans Republican	0.515	0.507	-0.008
	(0.500)	(0.500)	(0.024)
Prior belief unfair	0.514	0.523	0.009
	(0.500)	(0.500)	(0.024)
Trusts the government	0.305	0.303	-0.002
	(0.461)	(0.460)	(0.022)
Male	0.497	0.497	0.000
	(0.500)	(0.500)	(0.024)
Black	0.085	0.091	0.007
	(0.279)	(0.288)	(0.014)
Neither black or white	0.138	0.158	0.020
	(0.346)	(0.365)	(0.017)
Income: 0-25k	0.223	0.216	-0.007
	(0.417)	(0.412)	(0.020)
Income: 25-50k	0.296	0.290	-0.006
	(0.457)	(0.454)	(0.022)
Income: 50-100k	0.280	0.335	0.055**
	(0.449)	(0.472)	(0.022)
Income: 100k and more	0.201	0.158	-0.042**
	(0.401)	(0.365)	(0.018)
Age 30-39	0.174	0.168	-0.006
	(0.379)	(0.374)	(0.018)
Age 40-49	0.168	0.180	0.012
	(0.374)	(0.385)	(0.018)
Age 50-59	0.136	0.133	-0.003
	(0.343)	(0.340)	(0.016)
Age 60-69	0.170	0.177	0.007
	(0.375)	(0.382)	(0.018)
Age 70 and above	0.214	0.188	-0.026
	(0.410)	(0.391)	(0.019)
4-year college degree or more	0.482	0.533	0.051**
	(0.500)	(0.499)	(0.024)
Unemployed	0.102	0.083	-0.019
	(0.303)	(0.276)	(0.014)
Outside the labor force	0.446	0.403	-0.043*
	(0.497)	(0.491)	(0.024)
West	0.236	0.245	0.009
	(0.425)	(0.430)	(0.021)
North-East	0.160	0.153	-0.007
	(0.367)	(0.360)	(0.017)
Midwest	0.234	0.227	-0.006
	(0.424)	(0.419)	(0.020)
Prior belief unfair	0.514	0.523	0.009
	(0.500)	(0.500)	(0.024)
Belief work less if tax	0.389	0.350	-0.040*
	(0.488)	(0.477)	(0.023)
Trusts the government	0.305	0.303	-0.002
	(0.461)	(0.460)	(0.022)
Belief pay less than prod.	0.734	0.776	0.042**
	(0.442)	(0.417)	(0.021)
Belief uneq countr. worse.	0.598	0.616	0.018
	(0.491)	(0.487)	(0.023)
Observations	932	809	1,741

Note. This table represents mean (standard deviations) for pre-treatment beliefs and characteristics in the Control (column 1) and Full Externality (column 2) groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A7: Balance table Fairness vs. Control

Variable	(1) Control	(2) Fairness	(3) Difference
Leans Republican	0.515	0.526	0.011
	(0.500)	(0.500)	(0.024)
Prior belief unfair	0.514	0.500	-0.014
	(0.500)	(0.500)	(0.024)
Trusts the government	0.305	0.275	-0.029
	(0.461)	(0.447)	(0.021)
Male	0.497	0.540	0.043*
	(0.500)	(0.499)	(0.024)
Black	0.085	0.096	0.012
	(0.279)	(0.295)	(0.014)
Neither black or white	0.138	0.148	0.010
	(0.346)	(0.355)	(0.017)
Income: 0-25k	0.223	0.208	-0.016
	(0.417)	(0.406)	(0.019)
Income: 25-50k	0.296	0.271	-0.025
	(0.457)	(0.445)	(0.021)
Income: 50-100k	0.280	0.321	0.041*
	(0.449)	(0.467)	(0.022)
Income: 100k and more	0.201	0.201	0.000
	(0.401)	(0.401)	(0.019)
Age 30-39	0.174	0.159	-0.014
	(0.379)	(0.366)	(0.018)
Age 40-49	0.168	0.175	0.007
	(0.374)	(0.381)	(0.018)
Age 50-59	0.136	0.151	0.015
	(0.343)	(0.359)	(0.017)
Age 60-69	0.170	0.178	0.008
	(0.375)	(0.383)	(0.018)
Age 70 and above	0.214	0.206	-0.007
	(0.410)	(0.405)	(0.019)
4-year college degree or more	0.482	0.514	0.032
	(0.500)	(0.500)	(0.024)
Unemployed	0.102	0.094	-0.008
	(0.303)	(0.292)	(0.014)
Outside the labor force	0.446	0.436	-0.011
	(0.497)	(0.496)	(0.023)
West	0.236	0.221	-0.015
	(0.425)	(0.415)	(0.020)
North-East	0.160	0.156	-0.004
	(0.367)	(0.363)	(0.017)
Midwest	0.234	0.212	-0.022
	(0.424)	(0.409)	(0.020)
Prior belief unfair	0.514	0.500	-0.014
	(0.500)	(0.500)	(0.024)
Belief work less if tax	0.389	0.354	-0.035
	(0.488)	(0.479)	(0.023)
Trusts the government	0.305	0.275	-0.029
	(0.461)	(0.447)	(0.021)
Belief pay less than prod.	0.734	0.740	0.006
	(0.442)	(0.439)	(0.021)
Belief uneq countr. worse.	0.598	0.576	-0.022
	(0.491)	(0.495)	(0.023)
Observations	932	872	1,804

Note. This table represents mean (standard deviations) for pre-treatment beliefs and characteristics in the Control (column 1) and Fairness (column 2) groups. Column (3) characterizes the difference across the two. *Significance levels*: *10%, **5%, ***1%.

Table A8: Definitional text for externality questions

Externality	Additional definition
The amount of crime	*Note: When we say the amount of crime we mean the overall crime rate, including homicides, robberies, property crime and more.*
The overall level of trust	*Note: When we say the total level of trust we mean the strength of a country's social fabric. Some examples are whether most people trust others, whether people cooperate with each other, how many people return lost wallets, and so on.*
The amount of social unrest	None
The rate of economic growth	None
The amount of corruption	None
The overall amount of unemployment	None
The overall amount of innovation	None
The overall quality of life	*Note: Here we want you to compare between people with the same incomes living in more or less unequal societies.*
The overall amount of political polarization	*Note: When we say political polarization we mean to what extent people's and politicians' opinions are divided on political issues, as well as how strong these divisions are.*
The quality of democratic institutions	*Note: When we say the quality of democratic institutions we mean the capable and equitable functioning of the political system, the avoidance of abuses of power, the equality of the rule of law, whether civil liberties are respected, and so on.*
The quality of local public goods	*Note: When we say the quality of local public goods we mean the quality of things like schools, local government services, parks, youth centers and more.*

Table A9: Main correlations of socio-demographic and externality beliefs

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se
Leans Republican	-0.145***	-0.070***	-0.105***	-0.125***
	(0.016)	(0.013)	(0.015)	(0.017)
Prior belief unfair	0.291***	0.160***	0.187***	0.225***
	(0.015)	(0.013)	(0.014)	(0.016)
Trusts the government	0.013	0.037***	0.023	0.040**
	(0.015)	(0.013)	(0.014)	(0.017)
Male	-0.005	0.001	0.011	-0.039**
	(0.014)	(0.012)	(0.014)	(0.015)
Black	-0.104***	-0.114***	-0.090***	-0.050*
	(0.025)	(0.024)	(0.024)	(0.027)
Neither black or white	-0.050**	-0.047***	-0.034*	-0.007
	(0.020)	(0.018)	(0.020)	(0.022)
Income: 25-50k	0.018	0.019	-0.013	0.008
	(0.019)	(0.017)	(0.018)	(0.021)
Income: 50-100k	0.010	-0.003	-0.021	-0.010
	(0.020)	(0.017)	(0.019)	(0.021)
Income: 100k and more	-0.024	-0.000	-0.058**	-0.048*
	(0.024)	(0.020)	(0.023)	(0.025)
Age 30-39	0.028	-0.017	-0.049**	-0.051*
	(0.026)	(0.023)	(0.024)	(0.027)
Age 40-49	0.053**	-0.005	-0.007	-0.006
	(0.025)	(0.022)	(0.024)	(0.027)
Age 50-59	0.085***	0.014	0.012	0.013
	(0.027)	(0.023)	(0.025)	(0.028)
Age 60-69	0.090***	0.025	0.014	-0.016
	(0.026)	(0.023)	(0.025)	(0.028)
Age 70 and above	0.105***	0.038*	0.022	-0.039
	(0.027)	(0.023)	(0.026)	(0.029)
4-year college degree or more	0.042***	0.041***	0.056***	0.038**
	(0.015)	(0.013)	(0.014)	(0.016)
Unemployed	0.026	0.005	0.018	-0.007
	(0.025)	(0.022)	(0.024)	(0.027)
Outside the labor force	0.006	0.016	0.007	0.006
	(0.017)	(0.015)	(0.016)	(0.018)
West	0.003	-0.000	-0.002	-0.020
	(0.018)	(0.015)	(0.017)	(0.019)
North-East	0.004	-0.015	-0.002	-0.015
	(0.020)	(0.018)	(0.019)	(0.021)
Midwest	-0.005	-0.015	0.023	-0.026
	(0.018)	(0.016)	(0.017)	(0.019)
Constant	0.502***	0.728***	0.680***	0.553***
	(0.031)	(0.027)	(0.029)	(0.032)
Controls	Yes	Yes	Yes	Yes
Adjusted R2	0.150	0.071	0.082	0.094
Observations	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from regressions that regress externality beliefs on socio-demographic variables. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A10: Correlations of socio-demographic and externality beliefs, 2

	(1) Ineq. red. innovation b/se	(2) Ineq. incr. unrest b/se	(3) Ineq. worsens dem. inst. b/se	(4) Ineq. worsens public goods b/se
Leans Republican	-0.099***	-0.102***	-0.143***	-0.108***
	(0.025)	(0.015)	(0.023)	(0.024)
Prior belief unfair	0.188***	0.178***	0.212***	0.232***
	(0.022)	(0.014)	(0.021)	(0.023)
Trusts the government	0.079***	0.034**	-0.031	0.015
	(0.024)	(0.015)	(0.023)	(0.023)
Male	-0.004	0.028**	0.003	-0.003
	(0.023)	(0.014)	(0.021)	(0.022)
Black	-0.118***	-0.118***	-0.086**	0.001
	(0.040)	(0.025)	(0.037)	(0.038)
Neither black or white	0.006	-0.058***	0.004	0.010
	(0.033)	(0.020)	(0.029)	(0.030)
Income: 25-50k	-0.028	0.042**	-0.001	-0.022
	(0.030)	(0.019)	(0.028)	(0.029)
Income: 50-100k	-0.046	0.021	-0.036	-0.001
	(0.031)	(0.020)	(0.029)	(0.030)
Income: 100k and more	-0.123***	0.017	-0.034	-0.068*
	(0.037)	(0.023)	(0.034)	(0.036)
Age 30-39	-0.079**	0.018	-0.030	-0.028
	(0.039)	(0.026)	(0.038)	(0.039)
Age 40-49	-0.029	0.073***	0.051	0.000
	(0.039)	(0.025)	(0.037)	(0.039)
Age 50-59	-0.103**	0.059**	0.074*	0.060
	(0.042)	(0.027)	(0.040)	(0.040)
Age 60-69	-0.081**	0.133***	0.119***	0.021
	(0.040)	(0.026)	(0.039)	(0.040)
Age 70 and above	-0.104**	0.127***	0.091**	0.013
	(0.043)	(0.027)	(0.040)	(0.042)
4-year college degree or more	0.043*	0.070***	0.062***	0.054**
	(0.023)	(0.014)	(0.022)	(0.022)
Unemployed	-0.050	0.007	0.020	-0.042
	(0.041)	(0.025)	(0.037)	(0.038)
Outside the labor force	-0.019	0.021	0.034	-0.000
	(0.026)	(0.016)	(0.024)	(0.026)
West	-0.008	-0.020	-0.020	0.029
	(0.028)	(0.017)	(0.026)	(0.027)
North-East	0.013	-0.012	-0.008	0.032
	(0.032)	(0.020)	(0.029)	(0.031)
Midwest	-0.036	-0.004	-0.051*	-0.024
	(0.028)	(0.018)	(0.027)	(0.028)
Constant	0.512***	0.540***	0.545***	0.511***
	(0.048)	(0.030)	(0.045)	(0.048)
Controls	Yes	Yes	Yes	Yes
Adjusted R2	0.074	0.096	0.095	0.091
Observations	2135.000	4371.000	2177.000	2098.000

Note. This table reports results from regressions that regress externality beliefs on socio-demographic variables. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A11: Correlations of socio-demographic and externality beliefs, 3

	(1) Ineq. inc. corruption b/se	(2) Ineq. inc. pol. pol. b/se	(3) Ineq. inc. unemp. b/se	(4) Ineq. dec. QoL b/se
Leans Republican	-0.106***	-0.104***	-0.129***	-0.177***
	(0.022)	(0.022)	(0.024)	(0.023)
Prior belief unfair	0.180***	0.131***	0.200***	0.234***
	(0.020)	(0.021)	(0.022)	(0.022)
Trusts the government	-0.004	-0.008	0.009	0.017
	(0.022)	(0.022)	(0.024)	(0.022)
Male	-0.011	0.022	-0.033	0.037*
	(0.020)	(0.020)	(0.022)	(0.021)
Black	-0.033	-0.105***	-0.064	-0.065*
	(0.034)	(0.037)	(0.040)	(0.037)
Neither black or white	0.012	-0.051*	-0.016	-0.049
	(0.028)	(0.030)	(0.030)	(0.030)
Income: 25-50k	0.017	0.017	0.021	0.079***
	(0.026)	(0.028)	(0.029)	(0.029)
Income: 50-100k	-0.030	0.049*	-0.029	0.057*
	(0.027)	(0.028)	(0.031)	(0.030)
Income: 100k and more	-0.010	0.037	-0.067*	0.043
	(0.033)	(0.032)	(0.037)	(0.035)
Age 30-39	0.031	-0.023	0.016	0.005
	(0.036)	(0.038)	(0.038)	(0.037)
Age 40-49	0.041	0.024	0.058	0.035
	(0.036)	(0.038)	(0.038)	(0.037)
Age 50-59	0.100***	0.077*	0.079**	0.023
	(0.037)	(0.040)	(0.040)	(0.039)
Age 60-69	0.144***	0.139***	0.005	0.013
	(0.037)	(0.038)	(0.041)	(0.040)
Age 70 and above	0.158***	0.167***	0.049	-0.015
	(0.038)	(0.039)	(0.041)	(0.041)
4-year college degree or more	0.028	0.091***	0.000	0.043**
	(0.021)	(0.021)	(0.023)	(0.022)
Unemployed	0.040	0.001	-0.015	0.092**
	(0.034)	(0.036)	(0.038)	(0.036)
Outside the labor force	0.001	0.001	-0.029	0.065**
	(0.024)	(0.023)	(0.026)	(0.026)
West	-0.027	-0.000	0.035	0.004
	(0.024)	(0.025)	(0.027)	(0.027)
North-East	-0.016	-0.035	-0.013	0.003
	(0.029)	(0.029)	(0.032)	(0.029)
Midwest	-0.032	-0.036	-0.032	0.024
	(0.026)	(0.026)	(0.028)	(0.027)
Constant	0.627***	0.577***	0.548***	0.481***
	(0.043)	(0.045)	(0.046)	(0.045)
Controls	Yes	Yes	Yes	Yes
Adjusted R2	0.075	0.087	0.078	0.122
Observations	2096.000	2102.000	2143.000	2104.000

Note. This table reports results from regressions that regress externality beliefs on socio-demographic variables. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A12: Treatment effects without controls

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Increase top taxes b/se	(4) Gov. reduce ineq. b/se	(5) Ineq. is serious issue b/se
Crime Ext. Tr.	0.036	0.031	-0.006	0.005	0.022
	(0.046)	(0.022)	(0.023)	(0.023)	(0.023)
Trust Ext. Tr.	0.055	0.010	0.005	0.041*	0.023
	(0.047)	(0.023)	(0.024)	(0.024)	(0.024)
Full Ext. Tr.	0.124***	0.059**	-0.014	0.056**	0.078***
	(0.048)	(0.023)	(0.024)	(0.024)	(0.024)
Fairness Tr.	0.173***	0.042*	0.053**	0.052**	0.102***
	(0.047)	(0.023)	(0.023)	(0.024)	(0.023)
Controls	No	No	No	No	No
R2	0.004	0.002	0.002	0.002	0.006
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from regressions that regress preferences for redistribution on treatment variables *without* controlling for other factors. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A13: Treatment effects with controls

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Increase top taxes b/se	(4) Gov. reduce ineq. b/se	(5) Ineq. is serious issue b/se
Crime Ext. Tr.	0.037	0.031	-0.005	0.007	0.020
	(0.036)	(0.020)	(0.021)	(0.020)	(0.019)
Trust Ext. Tr.	0.043	0.006	0.004	0.036*	0.017
	(0.037)	(0.021)	(0.022)	(0.020)	(0.020)
Full Ext. Tr.	0.107***	0.050**	-0.012	0.048**	0.069***
	(0.037)	(0.021)	(0.022)	(0.020)	(0.020)
Fairness Tr.	0.208***	0.052**	0.065***	0.067***	0.115***
	(0.037)	(0.021)	(0.021)	(0.020)	(0.019)
Leans Republican	-0.635***	-0.190***	-0.210***	-0.264***	-0.249***
	(0.030)	(0.017)	(0.016)	(0.016)	(0.016)
Prior belief unfair	0.707***	0.146***	0.260***	0.260***	0.350***
	(0.027)	(0.015)	(0.015)	(0.014)	(0.015)
Trusts the government	0.174***	0.070***	0.016	0.115***	0.050***
	(0.028)	(0.017)	(0.016)	(0.015)	(0.015)
Male	-0.138***	-0.056***	-0.061***	-0.036***	-0.046***
	(0.026)	(0.015)	(0.015)	(0.014)	(0.013)
Black	0.016	0.081***	-0.124***	0.000	0.066***
	(0.045)	(0.028)	(0.026)	(0.026)	(0.023)
Neither black or white	0.077**	0.060***	-0.009	0.038*	0.022
	(0.037)	(0.021)	(0.021)	(0.020)	(0.019)
Income: 25-50k	0.018	-0.011	0.039*	0.009	-0.012
	(0.036)	(0.020)	(0.020)	(0.019)	(0.018)
Income: 50-100k	-0.084**	-0.038*	0.008	-0.038**	-0.052***
	(0.036)	(0.020)	(0.020)	(0.019)	(0.019)
Income: 100k and more	-0.131***	-0.055**	-0.004	-0.048**	-0.082***
	(0.042)	(0.024)	(0.024)	(0.022)	(0.022)
Age 30-39	0.103**	0.021	0.050*	0.060**	0.018
	(0.046)	(0.027)	(0.026)	(0.025)	(0.024)
Age 40-49	0.024	-0.014	0.091***	-0.029	-0.013
	(0.046)	(0.027)	(0.026)	(0.025)	(0.024)
Age 50-59	-0.046	-0.090***	0.114***	-0.055**	-0.036
	(0.049)	(0.028)	(0.027)	(0.027)	(0.026)
Age 60-69	-0.170***	-0.147***	0.119***	-0.132***	-0.084***
	(0.048)	(0.028)	(0.027)	(0.026)	(0.025)
Age 70 and above	-0.274***	-0.183***	0.112***	-0.225***	-0.098***
	(0.050)	(0.028)	(0.027)	(0.027)	(0.026)
4-year college degree or more	-0.041	-0.001	-0.012	-0.029**	-0.018
	(0.027)	(0.015)	(0.015)	(0.014)	(0.014)
Unemployed	0.029	-0.003	0.032	0.000	0.012
	(0.047)	(0.026)	(0.026)	(0.025)	(0.024)
Outside the labor force	-0.029	-0.024	0.046***	-0.021	-0.042***
	(0.030)	(0.017)	(0.017)	(0.016)	(0.016)
West	-0.018	-0.016	0.006	0.000	-0.016
	(0.032)	(0.018)	(0.018)	(0.017)	(0.017)
North-East	0.113***	0.033	0.057***	0.051***	0.022
	(0.036)	(0.021)	(0.020)	(0.019)	(0.019)
Midwest	0.010	-0.017	0.044**	-0.010	-0.003
	(0.032)	(0.018)	(0.018)	(0.017)	(0.017)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.391	0.169	0.170	0.293	0.313
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from regressions that regress preferences for redistribution on treatment variables and reporting all controls. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A14: Share of subjects mentioning "crime", "trust" or "video" when asking them why they hold a certain general externality belief.

	Mentioned crime (%)	Mentioned trust (%)	Mentioned video (%)
Crime tr.	**17.04**	0.32	0.43
Trust tr.	4.48	**6.30**	0.12
Full ext tr.	**13.23**	**3.71**	0.37
Fairness tr.	4.13	0.23	0.00
Control (passive)	4.46	0.32	0.00
Control (active)	4.57	0.00	0.00

Table A15: First-stage effects of treatments

	(1) General neg. ext.	(2) Ineq. incr. crime	(3) Ineq. red. trust	(4) Ineq. red. growth	(5) Society unfair (post)	(6) Rich b/c hard work
	b/se	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.088***	0.093***	0.059***	0.086***	0.012	-0.018
	(0.021)	(0.018)	(0.020)	(0.022)	(0.020)	(0.020)
Trust Ext. Tr.	0.050**	0.048**	0.096***	0.076***	0.025	-0.028
	(0.021)	(0.019)	(0.020)	(0.023)	(0.020)	(0.020)
Full Ext. Tr.	0.085***	0.084***	0.097***	0.062***	0.016	-0.030
	(0.021)	(0.019)	(0.020)	(0.023)	(0.020)	(0.020)
Fairness Tr.	0.075***	0.017	0.037*	0.033	0.079***	-0.079***
	(0.021)	(0.019)	(0.021)	(0.022)	(0.020)	(0.020)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.159	0.084	0.093	0.102	0.239	0.241
Observations	4371.000	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A16: Treatment effects with controls and population weights.

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Gov. reduce ineq. b/se	(4) Ineq. is serious issue b/se	(5) Increase top taxes b/se
Crime Ext. Tr.	-0.007	0.021	-0.023	0.006	-0.015
	(0.051)	(0.029)	(0.027)	(0.026)	(0.028)
Trust Ext. Tr.	-0.008	-0.007	0.015	-0.005	-0.015
	(0.056)	(0.031)	(0.029)	(0.029)	(0.030)
Full Ext. Tr.	0.091*	0.064**	0.035	0.052**	-0.019
	(0.051)	(0.030)	(0.028)	(0.027)	(0.030)
Fairness Tr.	0.148***	0.023	0.055**	0.089***	0.045
	(0.050)	(0.030)	(0.027)	(0.026)	(0.029)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.386	0.184	0.273	0.309	0.181
Observations	4363.000	4363.000	4363.000	4363.000	4363.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. Observations are reweighted to match representativity by gender, race, age, political affiliation, college degree, income-group, and geographic region. *Significance levels*: *10%, **5%, ***1%.

Table A17: Emotional reactions to treatments

	(1) Active control	(2) Crime	(3) Trust	(4) Full externality	(5) Fairness
Anger	2.8%	6.2%	2.9%	7.8%	11.8%
Concern	19.5%	37.2%	28.2%	32.0%	32.9%
Surprise	10.8%	13.9%	12.5%	13.0%	12.9%
Interest	41.5%	37.1%	42.2%	37.8%	34.0%
Indifference	17.7%	17.7%	19.2%	17.5%	17.9%
Confusion	16.9%	4.2%	6.0%	5.8%	4.5%
Observations	390	927	822	806	867

Table A18: First-stage effects of treatments with population weights

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.061**	0.074***	0.031	0.049*	0.014	0.006
	(0.028)	(0.025)	(0.027)	(0.029)	(0.026)	(0.027)
Trust Ext. Tr.	0.003	0.059**	0.090***	0.058*	0.033	0.036
	(0.031)	(0.027)	(0.028)	(0.031)	(0.028)	(0.028)
Full Ext. Tr.	0.088***	0.101***	0.106***	0.057*	0.015	0.037
	(0.028)	(0.026)	(0.027)	(0.031)	(0.027)	(0.028)
Fairness Tr.	0.073***	0.019	0.033	0.003	0.062**	0.086***
	(0.028)	(0.027)	(0.029)	(0.030)	(0.027)	(0.026)
Controls						
R2	0.170	0.091	0.097	0.103	0.246	0.233
Observations	4363.000	4363.000	4363.000	4363.000	4363.000	4363.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. Observations are reweighted to match representativity by gender, race, age, political affiliation, college degree, income-group, and geographic region. *Significance levels*: *10%, **5%, ***1%.

Table A19: Treatment effects including beliefs as regressors

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Increase top taxes b/se	(4) Gov. reduce ineq. b/se	(5) Ineq. is serious issue b/se
Crime Ext. Tr.	-0.009	0.021	-0.030	-0.006	0.003
	(0.033)	(0.020)	(0.020)	(0.019)	(0.018)
Trust Ext. Tr.	-0.001	-0.004	-0.020	0.022	0.001
	(0.034)	(0.021)	(0.021)	(0.019)	(0.019)
Full Ext. Tr.	0.054	0.039*	-0.043**	0.032*	0.050***
	(0.034)	(0.021)	(0.021)	(0.019)	(0.019)
Fairness Tr.	0.122***	0.032	0.031	0.034*	0.079***
	(0.033)	(0.021)	(0.020)	(0.019)	(0.018)
General neg. ext.	0.285***	0.055***	0.127***	0.097***	0.130***
	(0.028)	(0.017)	(0.018)	(0.016)	(0.016)
Ineq. incr. crime	0.050	0.030	0.052***	-0.006	-0.004
	(0.032)	(0.018)	(0.020)	(0.018)	(0.018)
Ineq. red. trust	0.076**	-0.002	0.093***	0.006	0.012
	(0.031)	(0.018)	(0.019)	(0.017)	(0.017)
Society is unfair (post)	0.407***	0.110***	0.114***	0.170***	0.191***
	(0.030)	(0.017)	(0.019)	(0.017)	(0.018)
Rich because of hard work	-0.367***	-0.088***	-0.138***	-0.163***	-0.139***
	(0.029)	(0.017)	(0.018)	(0.017)	(0.017)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.508	0.197	0.254	0.365	0.396
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes on the treatment indicators and post-treatment inequality beliefs and fairness views, as well as socio-economic control variables. Controls not listed include pre-treatment fairness views, race, income-group, age-group, gender, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A20: Treatment effects interacted with male dummy

	(1)	(2)	(3)	(4)	(5)
	RP Index	Wants redistribution	Increase top taxes	Gov. reduce ineq.	Ineq. is serious issue
	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.024	0.049*	-0.019	0.014	-0.010
	(0.051)	(0.030)	(0.029)	(0.028)	(0.027)
Trust Ext. Tr.	0.012	0.005	-0.012	0.036	-0.011
	(0.051)	(0.031)	(0.030)	(0.029)	(0.028)
Full Ext. Tr.	0.010	0.048	-0.088***	0.016	0.039
	(0.052)	(0.032)	(0.030)	(0.029)	(0.028)
Fairness Tr.	0.194***	0.072**	0.052*	0.071**	0.085***
	(0.053)	(0.032)	(0.030)	(0.029)	(0.028)
Male	-0.198***	-0.041	-0.108***	-0.044	-0.092***
	(0.051)	(0.030)	(0.030)	(0.028)	(0.028)
CrimeXmale	0.024	-0.038	0.027	-0.015	0.060
	(0.073)	(0.041)	(0.042)	(0.040)	(0.039)
TrustXmale	0.062	0.003	0.032	-0.001	0.056
	(0.075)	(0.043)	(0.043)	(0.040)	(0.040)
FullExtXmale	0.196***	0.004	0.153***	0.065	0.060
	(0.075)	(0.043)	(0.043)	(0.040)	(0.040)
FairnessXmale	0.030	-0.038	0.029	-0.006	0.059
	(0.074)	(0.043)	(0.042)	(0.040)	(0.039)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.392	0.169	0.173	0.294	0.314
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes on the treatment indicators and their interaction with a male dummy. Controls not listed include pre-treatment fairness views, race, income-group, age-group, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A21: Treatment effects interacted with prior externality belief

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Increase top taxes b/se	(4) Gov. reduce ineq. b/se	(5) Ineq. is serious issue b/se
Crime Ext. Tr.	0.121**	0.062*	0.021	0.023	0.068**
	(0.059)	(0.032)	(0.035)	(0.032)	(0.031)
Trust Ext. Tr.	0.090	0.017	-0.018	0.059*	0.072**
	(0.059)	(0.033)	(0.035)	(0.032)	(0.032)
Full Ext. Tr.	0.137**	0.074**	0.001	0.030	0.091***
	(0.058)	(0.033)	(0.035)	(0.032)	(0.032)
Fairness Tr.	0.220***	0.045	0.069**	0.063**	0.139***
	(0.056)	(0.031)	(0.034)	(0.031)	(0.030)
Crime*Unequal countries function worse	-0.153**	-0.054	-0.049	-0.031	-0.086**
	(0.074)	(0.042)	(0.044)	(0.041)	(0.040)
Trust*Unequal countries function worse	-0.091	-0.022	0.028	-0.042	-0.096**
	(0.075)	(0.043)	(0.045)	(0.041)	(0.041)
Full Ext*Unequal countries function worse	-0.056	-0.041	-0.025	0.026	-0.040
	(0.075)	(0.043)	(0.044)	(0.041)	(0.041)
Fairness*Unequal countries function worse	-0.013	0.014	-0.004	0.010	-0.038
	(0.073)	(0.043)	(0.043)	(0.040)	(0.039)
Belief uneq countr. worse.	0.314***	0.081***	0.116***	0.102***	0.153***
	(0.051)	(0.030)	(0.031)	(0.028)	(0.028)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.405	0.173	0.181	0.302	0.323
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes on the treatment indicators and their interaction with pre-treatment externality view. Controls not listed include pre-treatment fairness views, race, income-group, age-group, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A22: Treatment effects interacted with those that say they learned something new in the video

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Increase top taxes b/se	(4) Gov. reduce ineq. b/se	(5) Ineq. is serious issue b/se
Crime Ext. Tr.	-0.152***	-0.049*	-0.052	-0.064**	-0.054*
	(0.055)	(0.029)	(0.032)	(0.029)	(0.029)
Trust Ext. Tr.	-0.046	-0.053*	0.033	-0.024	-0.022
	(0.056)	(0.031)	(0.034)	(0.030)	(0.030)
Full Ext. Tr.	-0.057	-0.060*	-0.009	-0.025	0.011
	(0.059)	(0.032)	(0.036)	(0.032)	(0.032)
Fairness Tr.	0.012	0.006	0.028	-0.053*	0.036
	(0.057)	(0.031)	(0.033)	(0.030)	(0.030)
Learned something new	0.097*	-0.010	0.088***	0.033	0.029
	(0.053)	(0.031)	(0.031)	(0.029)	(0.030)
Crime*Learned something new	0.220***	0.121***	0.021	0.085**	0.090**
	(0.077)	(0.043)	(0.044)	(0.041)	(0.041)
Trust*Learned something new	0.077	0.090**	-0.087*	0.069	0.039
	(0.079)	(0.045)	(0.046)	(0.042)	(0.043)
FullExt*Learned something new	0.174**	0.156***	-0.053	0.082*	0.064
	(0.080)	(0.045)	(0.047)	(0.043)	(0.044)
Fairness*Learned something new	0.231***	0.071	0.008	0.156***	0.098**
	(0.078)	(0.045)	(0.045)	(0.042)	(0.041)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.403	0.176	0.175	0.305	0.320
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes on the treatment indicators and their interaction with self-reported indicator to have learned something new. Controls not listed include pre-treatment fairness views, race, income-group, age-group, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A23: Treatment effects interacted with Republican leaning dummy

	(1)	(2)	(3)	(4)	(5)
	RP Index	Wants redistribution	Increase top taxes	Gov. reduce ineq.	Ineq. is serious issue
	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.039	0.068**	0.009	-0.026	0.006
	(0.051)	(0.032)	(0.029)	(0.030)	(0.028)
Trust Ext. Tr.	0.063	0.033	0.023	0.033	0.002
	(0.052)	(0.034)	(0.029)	(0.030)	(0.029)
Full Ext. Tr.	0.192***	0.116***	0.020	0.061**	0.079***
	(0.051)	(0.033)	(0.029)	(0.029)	(0.028)
Fairness Tr.	0.218***	0.069**	0.061**	0.069**	0.115***
	(0.051)	(0.033)	(0.028)	(0.029)	(0.027)
Leans Republican	-0.592***	-0.135***	-0.188***	-0.273***	-0.256***
	(0.053)	(0.031)	(0.031)	(0.029)	(0.029)
CrimeXRepublicanLeaning	-0.005	-0.071*	-0.028	0.065	0.027
	(0.073)	(0.041)	(0.042)	(0.040)	(0.039)
TrustXRepublicanLeaning	-0.039	-0.054	-0.035	0.005	0.028
	(0.074)	(0.043)	(0.043)	(0.040)	(0.040)
FullExtXRepublicanLeaning	-0.165**	-0.128***	-0.062	-0.027	-0.020
	(0.074)	(0.043)	(0.043)	(0.040)	(0.040)
FairnessXRepublicanLeaning	-0.020	-0.034	0.008	-0.003	0.000
	(0.073)	(0.043)	(0.042)	(0.040)	(0.039)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.391	0.171	0.171	0.294	0.313
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes on the treatment indicators and their interaction with an indicator that the respondent leans republican. Controls not listed include pre-treatment fairness views, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A24: Treatment effects interacted with dummy indicating that the subject believes that the current economic system in the US is unfair

	(1)	(2)	(3)	(4)	(5)
	RP Index	Wants redistribution	Increase top taxes	Gov. reduce ineq.	Ineq. is serious issue
	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.022	-0.007	0.006	0.024	0.009
	(0.051)	(0.027)	(0.032)	(0.028)	(0.028)
Trust Ext. Tr.	0.039	-0.011	0.036	0.036	-0.004
	(0.052)	(0.028)	(0.033)	(0.028)	(0.029)
Full Ext. Tr.	0.091*	0.038	-0.011	0.041	0.064**
	(0.053)	(0.028)	(0.033)	(0.029)	(0.030)
Fairness Tr.	0.147***	0.009	0.088***	0.035	0.080***
	(0.052)	(0.028)	(0.032)	(0.028)	(0.029)
Prior belief unfair	0.669***	0.103***	0.286***	0.251***	0.322***
	(0.051)	(0.030)	(0.030)	(0.028)	(0.028)
CrimeXdPriorUnfair	0.030	0.073*	-0.021	-0.031	0.022
	(0.073)	(0.041)	(0.042)	(0.040)	(0.039)
TrustXdPriorUnfair	0.008	0.033	-0.062	0.001	0.040
	(0.074)	(0.042)	(0.044)	(0.040)	(0.040)
FullExtXdPriorUnfair	0.031	0.024	-0.002	0.013	0.010
	(0.075)	(0.043)	(0.043)	(0.041)	(0.040)
FairnessXdPriorUnfair	0.119	0.084**	-0.046	0.065*	0.068*
	(0.073)	(0.042)	(0.042)	(0.039)	(0.039)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.391	0.170	0.171	0.294	0.314
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes on the treatment indicators and their interaction with pre-treatment fairness views. Controls not listed include, political leaning, pre-treatment fairness views, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A25: Predictive power of various beliefs with population weights

	(1) RP Index b/se	(2) RP Index b/se	(3) RP Index b/se	(4) RP Index b/se	(5) RP Index b/se	(6) RP Index b/se
Rich because of hard work		-0.612***				-0.398***
		(0.084)				(0.081)
Society is unfair (post)		0.546***				0.360***
		(0.083)				(0.077)
Belief uneq countr. worse.			0.510***			0.344***
			(0.080)			(0.072)
General neg. ext.			0.555***			0.256***
			(0.082)			(0.081)
Leans Republican				-0.335**		-0.215*
				(0.137)		(0.110)
SandersKamala				0.573***		0.268**
				(0.138)		(0.111)
govtrust					0.228***	0.064
					(0.054)	(0.048)
Agrees/disagrees that people work much less if taxed more					-0.054	-0.001
					(0.038)	(0.032)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Only Control Group	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.092	0.328	0.277	0.263	0.131	0.448
Observations	929.000	929.000	929.000	929.000	929.000	929.000

Note. This table reports results from a regression of different redistributive preference outcomes on fairness views, political views, externality beliefs and attitudes towards the government, as well as socio-economic control variables. Controls not listed include gender, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. Observations are reweighted to match representativity by gender, race, age, political affiliation, college degree, income-group, and geographic region. *Significance levels*: *10%, **5%, ***1%.

Table A26: Treatment effects with controls using all completed responses

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Gov. reduce ineq. b/se	(4) Ineq. is serious issue b/se	(5) Increase top taxes b/se
Crime Ext. Tr.	0.039	0.034*	0.013	0.023	-0.015
	(0.035)	(0.020)	(0.019)	(0.019)	(0.020)
Trust Ext. Tr.	0.055	0.012	0.049**	0.014	0.004
	(0.036)	(0.021)	(0.019)	(0.020)	(0.021)
Full Ext. Tr.	0.098***	0.046**	0.047**	0.060***	-0.013
	(0.036)	(0.020)	(0.019)	(0.019)	(0.021)
Fairness Tr.	0.202***	0.056***	0.070***	0.106***	0.056***
	(0.036)	(0.021)	(0.019)	(0.019)	(0.020)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.360	0.169	0.272	0.277	0.159
Observations	4865.000	4865.000	4865.000	4865.000	4865.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A27: First-stage effects of treatments using all completed responses

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.083***	0.092***	0.060***	0.087***	0.014	0.017
	(0.020)	(0.018)	(0.019)	(0.021)	(0.019)	(0.019)
Trust Ext. Tr.	0.042**	0.042**	0.090***	0.081***	0.020	0.021
	(0.020)	(0.019)	(0.020)	(0.022)	(0.020)	(0.020)
Full Ext. Tr.	0.073***	0.074***	0.087***	0.058***	0.009	0.027
	(0.020)	(0.018)	(0.020)	(0.022)	(0.019)	(0.019)
Fairness Tr.	0.066***	0.018	0.038*	0.035*	0.067***	0.071***
	(0.020)	(0.019)	(0.020)	(0.021)	(0.019)	(0.019)
Controls						
R2	0.162	0.092	0.100	0.097	0.234	0.219
Observations	4865.000	4865.000	4865.000	4865.000	4865.000	4865.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A28: Predictive power of various beliefs using all completed responses

	(1) RP Index b/se	(2) RP Index b/se	(3) RP Index b/se	(4) RP Index b/se	(5) RP Index b/se	(6) RP Index b/se
Rich because of hard work		-0.550***				-0.337***
		(0.059)				(0.056)
Society unfair (post)		0.628***				0.440***
		(0.058)				(0.056)
Belief uneq countr. worse.			0.457***			0.298***
			(0.056)			(0.050)
General neg. ext.			0.600***			0.224***
			(0.055)			(0.052)
Leans Republican				-0.361***		-0.194***
				(0.084)		(0.072)
SandersKamala				0.592***		0.331***
				(0.085)		(0.076)
govtrust					0.220***	0.081**
					(0.036)	(0.033)
Agrees/disagrees that people work much less if taxed more					-0.097***	-0.012
					(0.025)	(0.020)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Only Control Group	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.090	0.346	0.274	0.279	0.138	0.465
Observations	1026.000	1026.000	1026.000	1026.000	1026.000	1026.000

Note. This table reports results from a regression of different redistributive preference outcomes on fairness views, political views, externality beliefs and attitudes towards the government, as well as socio-economic control variables. Controls not listed include gender, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A29: Treatment effects with controls using only respondents that passed all attention checks

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Gov. reduce ineq. b/se	(4) Ineq. is serious issue b/se	(5) Increase top taxes b/se
Crime Ext. Tr.	0.027	0.038	0.011	0.007	-0.016
	(0.043)	(0.025)	(0.024)	(0.023)	(0.025)
Trust Ext. Tr.	0.021	0.008	0.039	0.009	-0.026
	(0.045)	(0.026)	(0.024)	(0.024)	(0.026)
Full Ext. Tr.	0.075*	0.045*	0.056**	0.050**	-0.040
	(0.044)	(0.026)	(0.024)	(0.024)	(0.026)
Fairness Tr.	0.185***	0.050*	0.081***	0.094***	0.047*
	(0.043)	(0.026)	(0.024)	(0.023)	(0.026)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.436	0.201	0.335	0.360	0.192
Observations	2892.000	2892.000	2892.000	2892.000	2892.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A30: First-stage effects of treatments using only respondents that passed all attention checks

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.096***	0.099***	0.058**	0.107***	-0.000	0.011
	(0.025)	(0.021)	(0.024)	(0.027)	(0.024)	(0.024)
Trust Ext. Tr.	0.046*	0.047**	0.096***	0.062**	0.036	0.000
	(0.025)	(0.023)	(0.024)	(0.028)	(0.024)	(0.024)
Full Ext. Tr.	0.075***	0.081***	0.102***	0.054*	0.016	0.020
	(0.025)	(0.022)	(0.024)	(0.028)	(0.024)	(0.024)
Fairness Tr.	0.084***	0.035	0.044*	0.037	0.082***	0.054**
	(0.025)	(0.023)	(0.025)	(0.027)	(0.024)	(0.024)
Controls						
R2	0.169	0.086	0.095	0.121	0.278	0.284
Observations	2892.000	2892.000	2892.000	2892.000	2892.000	2892.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A31: Predictive power of various beliefs using only respondents that passed all attention checks

	(1) RP Index b/se	(2) RP Index b/se	(3) RP Index b/se	(4) RP Index b/se	(5) RP Index b/se	(6) RP Index b/se
Rich because of hard work		-0.642***				-0.383***
		(0.080)				(0.075)
Society unfair (post)		0.624***				0.396***
		(0.076)				(0.072)
Belief uneq countr. worse.			0.448***			0.281***
			(0.073)			(0.067)
General neg. ext.			0.681***			0.298***
			(0.073)			(0.068)
Leans Republican				-0.366***		-0.195**
				(0.114)		(0.099)
SandersKamala				0.629***		0.328***
				(0.114)		(0.104)
govtrust					0.256***	0.043
					(0.047)	(0.045)
Agrees/disagrees that people work much less if taxed more					-0.090***	-0.003
					(0.033)	(0.025)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Only Control Group	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.130	0.411	0.344	0.337	0.188	0.525
Observations	597.000	597.000	597.000	597.000	597.000	597.000

Note. This table reports results from a regression of different redistributive preference outcomes on fairness views, political views, externality beliefs and attitudes towards the government, as well as socio-economic control variables. Controls not listed include gender, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A32: Treatment effects with controls and controlling for passing attention checks

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.086***	0.091***	0.056***	0.084***	0.010	0.018
	(0.020)	(0.018)	(0.020)	(0.022)	(0.020)	(0.020)
Trust Ext. Tr.	0.046**	0.044**	0.090***	0.072***	0.021	0.026
	(0.021)	(0.019)	(0.020)	(0.023)	(0.020)	(0.020)
Full Ext. Tr.	0.078***	0.079***	0.090***	0.057**	0.011	0.028
	(0.021)	(0.019)	(0.020)	(0.023)	(0.020)	(0.020)
Fairness Tr.	0.070***	0.013	0.033	0.029	0.076***	0.078***
	(0.021)	(0.019)	(0.021)	(0.022)	(0.020)	(0.020)
Controls						
R2	0.167	0.091	0.101	0.106	0.244	0.242
Observations	4371.000	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region, failing or passing any attention check. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A33: Treatment effects with controls dropping active control group

	(1)	(2)	(3)	(4)	(5)
	RP Index	Wants redistribution	Gov. reduce ineq.	Ineq. is serious issue	Increase top taxes
	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.058	0.024	0.016	0.014	0.029
	(0.042)	(0.024)	(0.023)	(0.023)	(0.025)
Trust Ext. Tr.	0.064	-0.001	0.044*	0.012	0.037
	(0.043)	(0.025)	(0.023)	(0.023)	(0.026)
Full Ext. Tr.	0.127***	0.043*	0.056**	0.064***	0.021
	(0.043)	(0.025)	(0.024)	(0.023)	(0.026)
Fairness Tr.	0.228***	0.045*	0.076***	0.110***	0.099***
	(0.042)	(0.025)	(0.023)	(0.022)	(0.025)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.392	0.172	0.292	0.317	0.167
Observations	3977.000	3977.000	3977.000	3977.000	3977.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A34: First-stage effects of treatments dropping active control group

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.098***	0.092***	0.067***	0.095***	0.020	0.022
	(0.024)	(0.021)	(0.024)	(0.025)	(0.023)	(0.023)
Trust Ext. Tr.	0.060**	0.048**	0.105***	0.084***	0.033	0.031
	(0.025)	(0.022)	(0.024)	(0.026)	(0.024)	(0.023)
Full Ext. Tr.	0.095***	0.084***	0.106***	0.071***	0.024	0.032
	(0.025)	(0.022)	(0.024)	(0.026)	(0.024)	(0.024)
Fairness Tr.	0.084***	0.016	0.045*	0.042	0.087***	0.082***
	(0.024)	(0.022)	(0.024)	(0.026)	(0.023)	(0.023)
Controls						
R2	0.158	0.084	0.093	0.103	0.237	0.245
Observations	3977.000	3977.000	3977.000	3977.000	3977.000	3977.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A35: Treatment effects with controls dropping passive control group

	(1)	(2)	(3)	(4)	(5)
	RP Index	Wants redistribution	Gov. reduce ineq.	Ineq. is serious issue	Increase top taxes
	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.010	0.039	-0.004	0.028	-0.049*
	(0.047)	(0.027)	(0.025)	(0.026)	(0.026)
Trust Ext. Tr.	0.016	0.014	0.024	0.025	-0.040
	(0.048)	(0.028)	(0.026)	(0.026)	(0.027)
Full Ext. Tr.	0.081*	0.058**	0.036	0.079***	-0.056**
	(0.048)	(0.028)	(0.026)	(0.026)	(0.027)
Fairness Tr.	0.180***	0.060**	0.055**	0.123***	0.020
	(0.048)	(0.028)	(0.025)	(0.025)	(0.027)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.390	0.170	0.294	0.314	0.176
Observations	3833.000	3833.000	3833.000	3833.000	3833.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A36: First-stage effects of treatments dropping passive control group

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.075***	0.093***	0.047*	0.077***	-0.000	0.015
	(0.027)	(0.024)	(0.026)	(0.028)	(0.026)	(0.026)
Trust Ext. Tr.	0.037	0.048**	0.083***	0.066**	0.013	0.024
	(0.027)	(0.024)	(0.026)	(0.029)	(0.026)	(0.026)
Full Ext. Tr.	0.072***	0.084***	0.086***	0.053*	0.004	0.027
	(0.027)	(0.024)	(0.026)	(0.029)	(0.026)	(0.026)
Fairness Tr.	0.061**	0.017	0.025	0.023	0.066***	0.075***
	(0.027)	(0.025)	(0.027)	(0.029)	(0.026)	(0.026)
Controls						
R2	0.155	0.085	0.090	0.098	0.234	0.243
Observations	3833.000	3833.000	3833.000	3833.000	3833.000	3833.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A37: Treatment effects without controls

	(1) RP Index b/se	(2) Wants redistribution b/se	(3) Gov. reduce ineq. b/se	(4) Ineq. is serious issue b/se	(5) Increase top taxes b/se
Crime Ext. Tr.	0.036	0.031	0.005	0.022	-0.006
	(0.046)	(0.022)	(0.023)	(0.023)	(0.023)
Trust Ext. Tr.	0.055	0.010	0.041*	0.023	0.005
	(0.047)	(0.023)	(0.024)	(0.024)	(0.024)
Full Ext. Tr.	0.124***	0.059**	0.056**	0.078***	-0.014
	(0.048)	(0.023)	(0.024)	(0.024)	(0.024)
Fairness Tr.	0.173***	0.042*	0.052**	0.102***	0.053**
	(0.047)	(0.023)	(0.024)	(0.023)	(0.023)
Controls	No	No	No	No	No
R2	0.004	0.002	0.002	0.006	0.002
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A38: First-stage effects of treatments without controls

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.092***	0.094***	0.059***	0.089***	0.015	0.018
	(0.022)	(0.018)	(0.021)	(0.023)	(0.023)	(0.022)
Trust Ext. Tr.	0.052**	0.049**	0.096***	0.079***	0.030	0.033
	(0.023)	(0.020)	(0.021)	(0.024)	(0.023)	(0.023)
Full Ext. Tr.	0.088***	0.084***	0.101***	0.069***	0.019	0.032
	(0.023)	(0.019)	(0.021)	(0.024)	(0.023)	(0.023)
Fairness Tr.	0.068***	0.012	0.033	0.028	0.067***	0.066***
	(0.023)	(0.020)	(0.022)	(0.024)	(0.023)	(0.022)
Controls						
R2	0.005	0.009	0.007	0.005	0.002	0.002
Observations	4371.000	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A39: Predictive power of various beliefs without controls

	(1) RP Index b/se	(2) RP Index b/se	(3) RP Index b/se	(4) RP Index b/se	(5) RP Index b/se	(6) RP Index b/se
Rich because of hard work		-0.655***				-0.418***
		(0.063)				(0.060)
Society unfair (post)		0.646***				0.445***
		(0.063)				(0.060)
Belief uneq countr. worse.			0.422***			0.249***
			(0.063)			(0.054)
General neg. ext.			0.622***			0.217***
			(0.063)			(0.057)
Leans Republican				-0.458***		-0.292***
				(0.089)		(0.079)
SandersKamala				0.581***		0.334***
				(0.089)		(0.081)
govtrust					0.216***	0.029
					(0.040)	(0.036)
Agrees/disagrees that people work much less if taxed more					-0.092***	-0.004
					(0.028)	(0.021)
Controls	No	No	No	No	No	No
Only Control Group	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.104	0.317	0.183	0.249	0.046	0.443
Observations	932.000	932.000	932.000	932.000	932.000	932.000

Note. This table reports results from a regression of different redistributive preference outcomes on fairness views, political views, externality beliefs and attitudes towards the government, as well as socio-economic control variables. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A40: Treatment effects with controls using non-dichotomized variables

	(1)	(2)	(3)	(4)	(5)
	RP Index	Wants redistribution	Gov. reduce ineq.	Ineq. serious issue	Increase top taxes
	b/se	b/se	b/se	b/se	b/se
Crime Ext. Tr.	0.026	0.107	0.024	0.039	-0.043
	(0.036)	(0.069)	(0.048)	(0.044)	(0.059)
Trust Ext. Tr.	0.033	-0.006	0.066	0.040	0.031
	(0.036)	(0.071)	(0.049)	(0.045)	(0.061)
Full Ext. Tr.	0.098***	0.179**	0.106**	0.140***	0.007
	(0.036)	(0.071)	(0.049)	(0.045)	(0.062)
Fairness Tr.	0.209***	0.288***	0.180***	0.263***	0.182***
	(0.035)	(0.071)	(0.048)	(0.044)	(0.058)
Controls	Yes	Yes	Yes	Yes	Yes
R2	0.422	0.318	0.386	0.357	0.142
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different redistributive preference outcomes and the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A41: First-stage effects of treatments using non-dichotomized variables

	(1) General neg. ext. b/se	(2) Ineq. incr. crime b/se	(3) Ineq. red. trust b/se	(4) Ineq. red. growth b/se	(5) Society unfair (post) b/se	(6) Rich b/c hard work b/se
Crime Ext. Tr.	0.194***	0.238***	-0.162***	-0.173***	0.047	-0.018
	(0.046)	(0.044)	(0.046)	(0.050)	(0.050)	(0.020)
Trust Ext. Tr.	0.119**	0.138***	-0.252***	-0.118**	0.017	-0.028
	(0.048)	(0.045)	(0.047)	(0.051)	(0.052)	(0.020)
Full Ext. Tr.	0.201***	0.223***	-0.265***	-0.127**	0.013	-0.030
	(0.048)	(0.046)	(0.048)	(0.052)	(0.053)	(0.020)
Fairness Tr.	0.170***	0.079*	-0.104**	-0.049	0.204***	-0.079***
	(0.047)	(0.047)	(0.048)	(0.051)	(0.051)	(0.020)
Controls						
R2	0.163	0.096	0.108	0.091	0.269	0.241
Observations	4371.000	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports results from a regression of different externality beliefs and fairness views on the treatment dummies, as well as socio-economic control variables. Controls not listed in the table include political leaning, gender, trust in government, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A42: Predictive power of various beliefs using RP-index based on non-dichotomized variables

	(1) RP Index b/se	(2) RP Index b/se	(3) RP Index b/se	(4) RP Index b/se	(5) RP Index b/se	(6) RP Index b/se
Rich b/c hard work		-0.657***				-0.388***
		(0.063)				(0.055)
Society unfair (post)		0.280***				0.214***
		(0.025)				(0.022)
Belief uneq. countr. worse			0.254***			0.142***
			(0.031)			(0.024)
General neg. ext.			0.265***			0.077***
			(0.031)			(0.025)
Leans Republican				-0.374***		-0.149**
				(0.084)		(0.065)
SandersKamala				0.690***		0.359***
				(0.085)		(0.068)
govtrust					0.322***	0.156***
					(0.039)	(0.032)
Agrees/disagrees that people work much less if taxed more					-0.120***	-0.036*
					(0.028)	(0.020)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Only Control Group	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.114	0.455	0.323	0.350	0.207	0.593
Observations	932.000	932.000	897.000	932.000	932.000	897.000

Note. This table reports results from a regression of different redistributive preference outcomes on fairness views, political views, externality beliefs and attitudes towards the government, as well as socio-economic control variables. Controls not listed include gender, race, income-group, age-group, education, employment status, geographic region. Standard errors are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A43: Treatment effects with FDR sharpened q-values

	(1) RP Index	(2) Wants redistribution	(3) Increase top taxes	(4) Gov. reduce ineq.	(5) Ineq. is serious issue
Crime Ext. Tr.	0.037	0.031	-0.005	0.007	0.020
p-value	(.308)	(.127)	(.817)	(.705)	(.313)
q-value	(.288)	(.147)	(.610)	(.597)	(.288)
Trust Ext. Tr.	0.043	0.006	0.004	0.036*	0.017
p-value	(.244)	(.800)	(.842)	(.075)	(.407)
q-value	(.256)	(.610)	(.610)	(.091)	(.324)
Full Ext. Tr.	0.107***	0.050**	-0.012	0.048**	0.069***
p-value	(.004)	(.019)	(.572)	(.018)	(.001)
q-value	(.011)	(.032)	(.475)	(.032)	(.004)
Fairness Tr.	0.208***	0.052**	0.065***	0.067***	0.115***
p-value	(.000)	(.015)	(.002)	(.001)	(.000)
q-value	(.001)	(.032)	(.007)	(.004)	(.001)
Controls	Yes	Yes	Yes	Yes	Yes
Observations	4371.000	4371.000	4371.000	4371.000	4371.000

Note. This table reports FDR sharpened q-values from the regression in Table 5. p-values and q-values are in parentheses. *Significance levels*: *10%, **5%, ***1%.

Table A44: Respondents' belief about the survey bias by treatment group

	Right-Wing Bias (%)	No Bias (%)	Left-Wing Bias (%)
Crime tr.	5.68	71.49	22.83
Trust tr.	5.21	73.45	21.33
Full ext tr.	7.66	70.33	22.00
Fairness tr.	6.19	70.87	22.94
Control (passive)	7.81	73.98	18.22
Control (active)	6.85	72.84	20.30

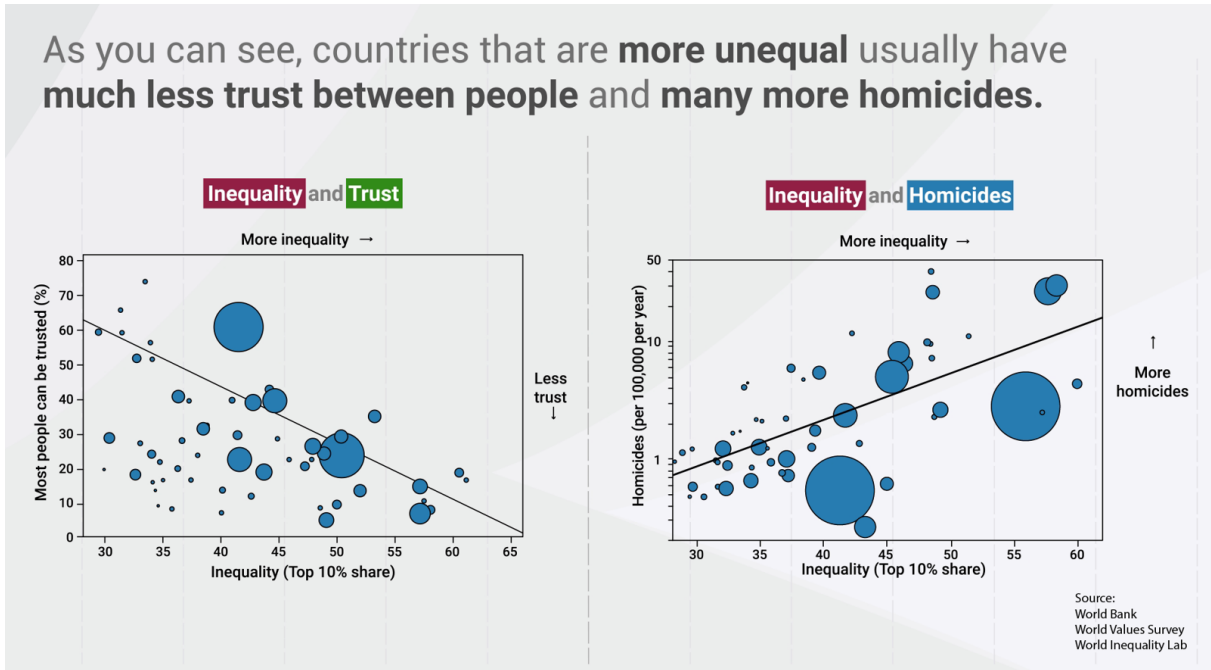# B Figures

Figure B1: Screenshot from the crime externality video
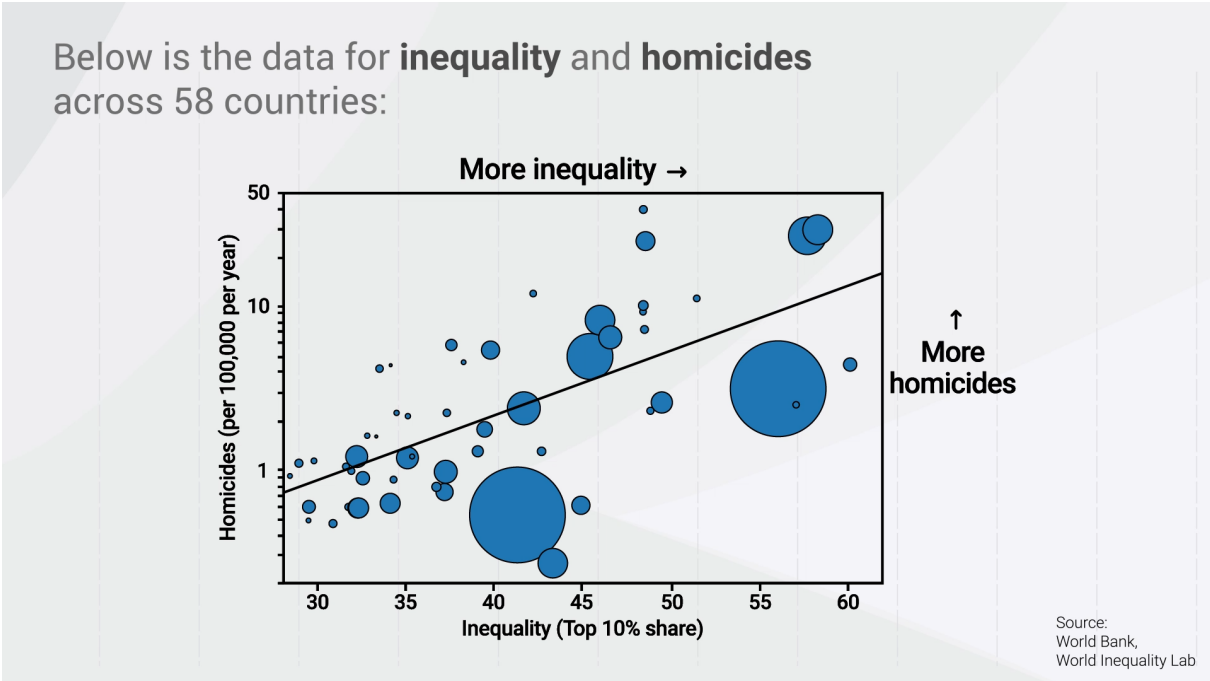
Note. This is a screenshot for the crime externality video. To watch the full video on Youtube, please click on `https://youtu.be/v2M4SOWzwHc`

Figure B2: Screenshot from the trust externality video
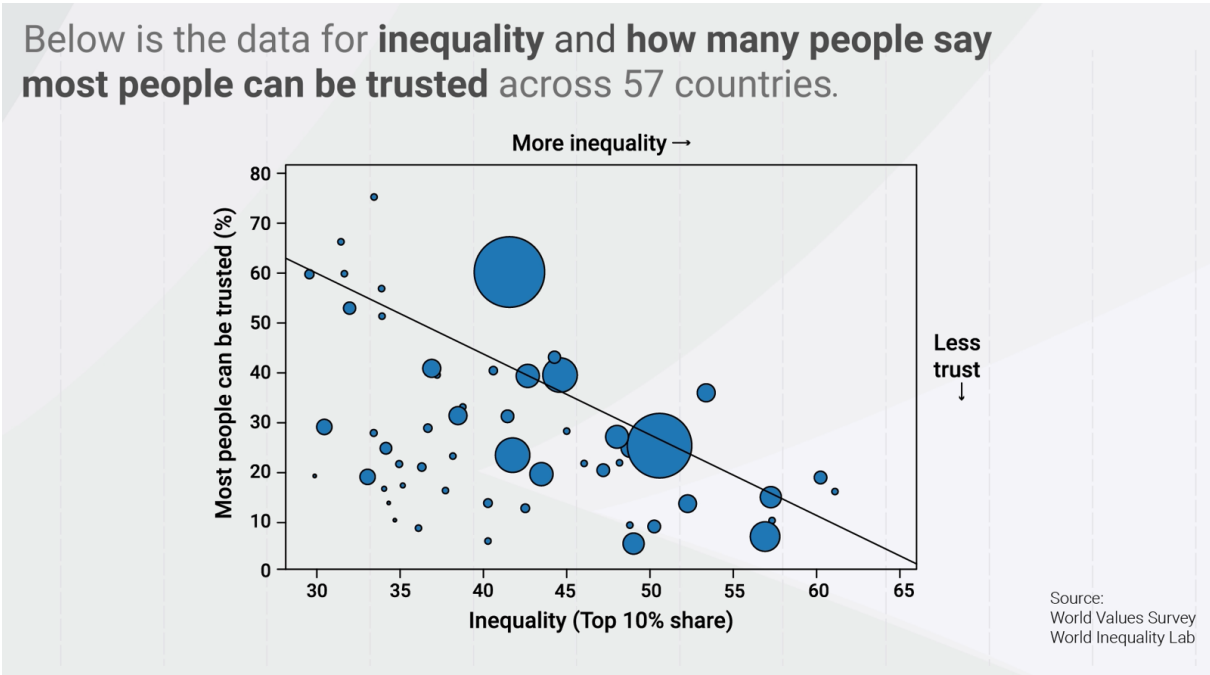
Note. This is a screenshot for the trust externality video. To watch the full video on Youtube, please click on `https://youtu.be/BGK-w5BcltA`

Figure B3: Screenshot from the full externality video

Note. This is a screenshot for the full externality video. To watch the full video on Youtube, please click on `https://youtu.be/-gTkpPEBa74`

Figure B4: Screenshot from the fairness video
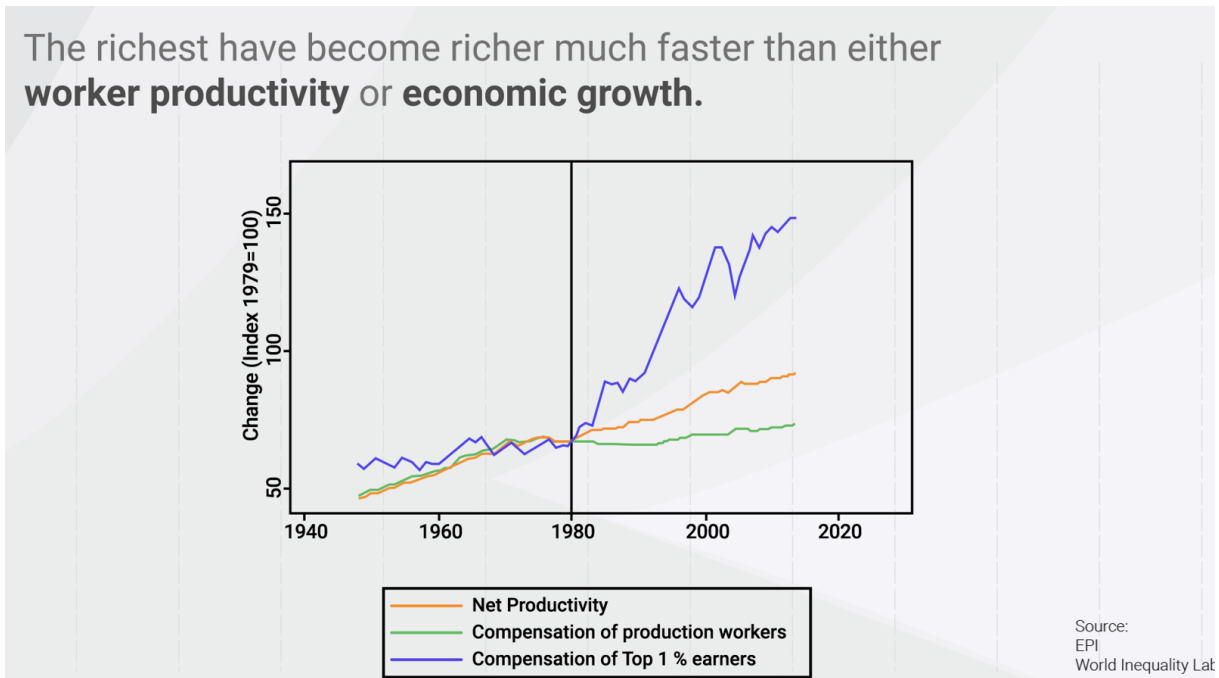
Note. This is a screenshot for the fairness video. To watch the full video on Youtube, please click on `https://youtu.be/2kZY144GHnA`

Figure B5: Screenshot from the active control video
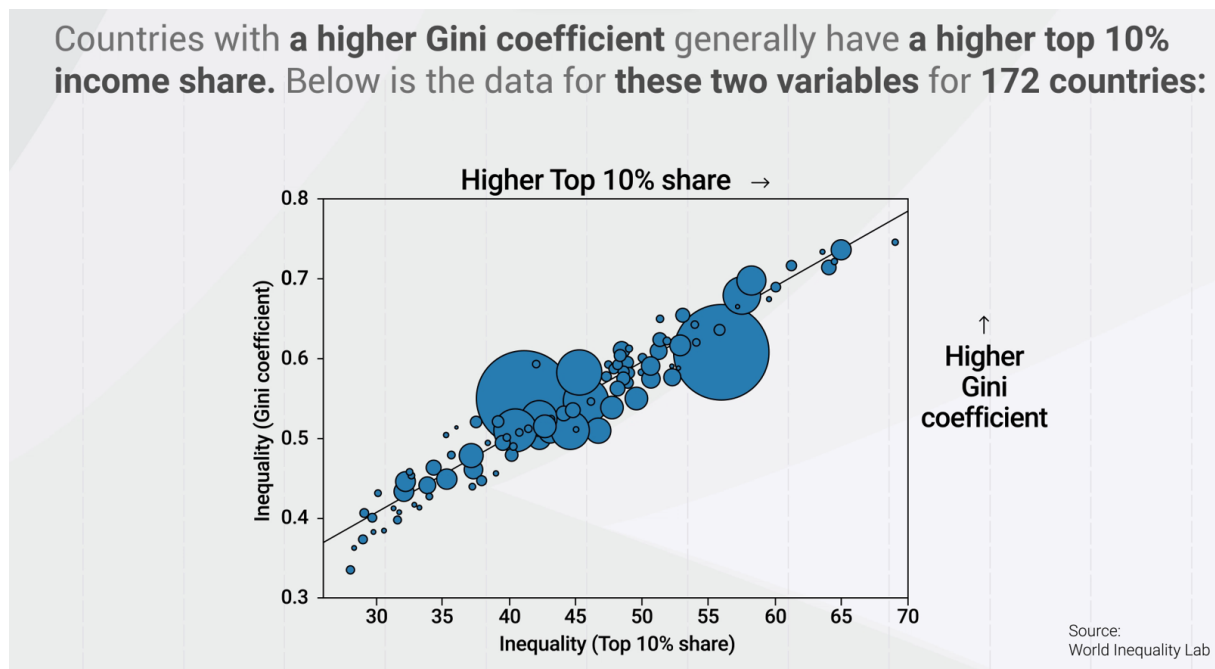
Note. This is a screenshot for the active control video. To watch the full video on Youtube, please click on `https://youtu.be/3EelsEIbUcE`

Figure B6: Relationship between state-level political leaning in the survey and 2020 state-level election outcomes
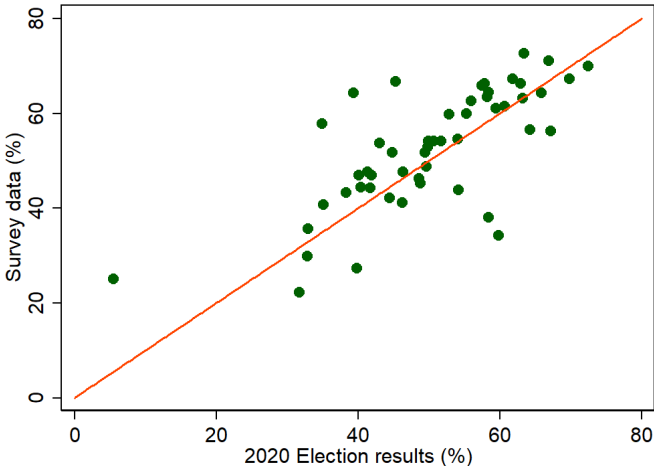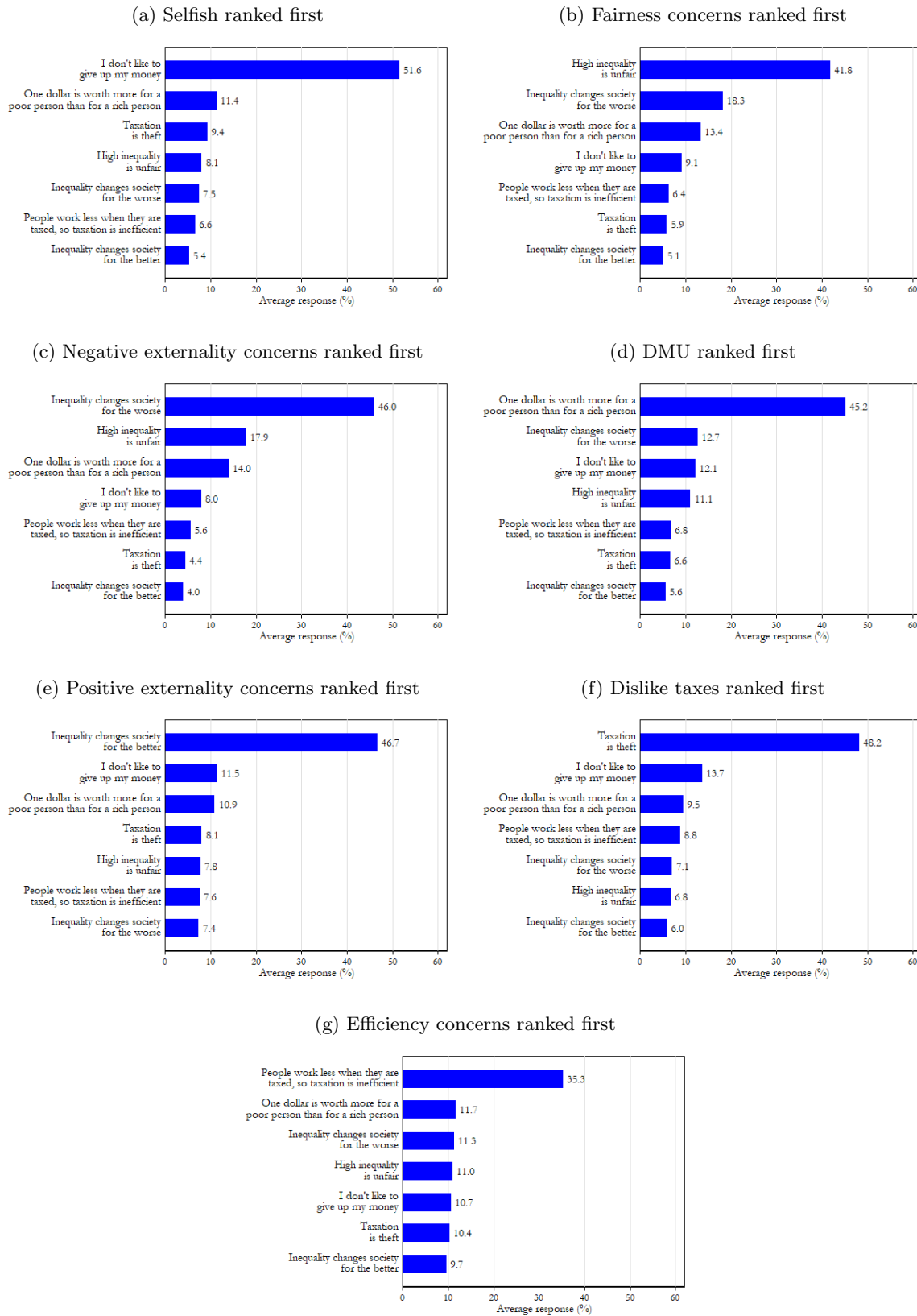

Note. This figure plots state-level shares of respondents stating that they lean towards the Republican party against the state-level share of votes going to the Republican party. The diagonal line characterizes the points where both would coincide.

Figure B7: Share of subjects that rank a given motive first
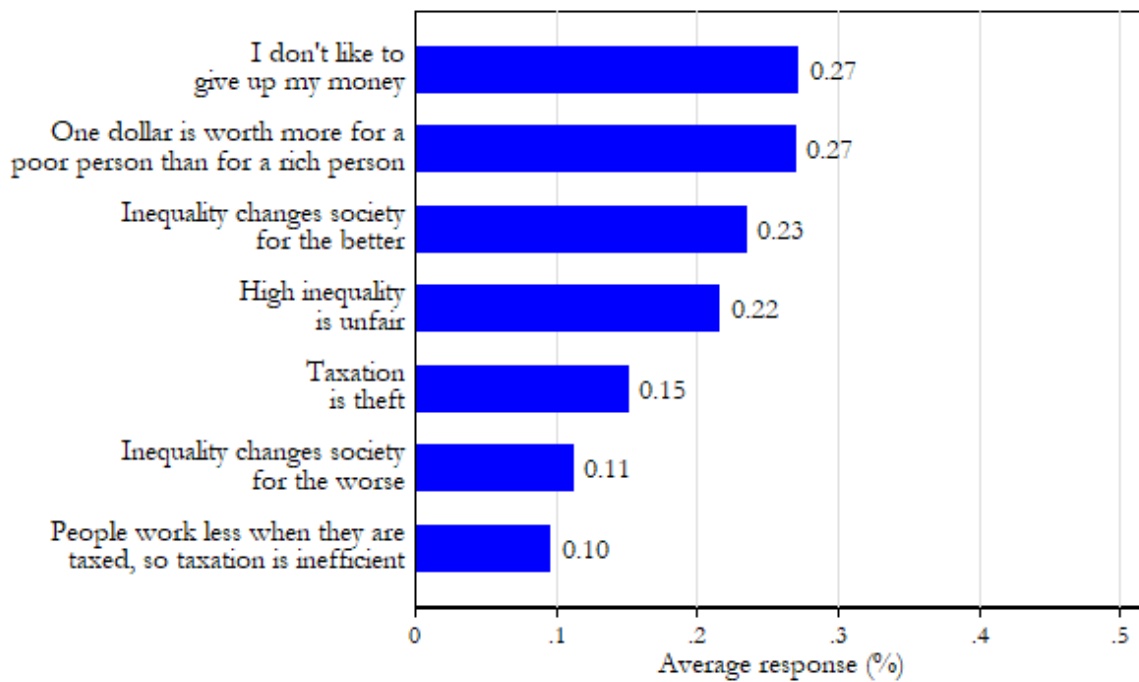
Question text: *When thinking about your preferred level of redistribution, what matters most to you? Please indicate what dimensions matter by giving scores below that add up to 100.* Answer option texts are identical to graph labels.

Figure B8: Share of points going to each motive conditional on the given motive attaining the highest share of points

(a) Selfish ranked first

(b) Fairness concerns ranked first

(c) Negative externality concerns ranked first

(d) DMU ranked first

(e) Positive externality concerns ranked first

(f) Dislike taxes ranked first

(g) Efficiency concerns ranked first

Question text: *When thinking about your preferred level of redistribution, what matters most to you? Please indicate what dimensions matter by giving scores below that add up to 100.* Answer option texts are identical to graph labels.