

Inequality as a Constraint on (Repugnant) Markets

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Abstract

When third parties oppose repugnant transactions, legal bans often prevent welfare-improving trades. We provide the first causal evidence that financial inequality between transacting parties drives such opposition. In a pre-registered vignette experiment ($N = 1,073$), we alter the income levels of buyer and seller across five vignettes describing repugnant transactions. We test the effect in two independent samples (a U.S. sample and a sample drawn from selected European countries) and find that inequality increases willingness to prevent transactions by 21%. The effect goes beyond the effect of low income: opposition rises substantially more when a low-income seller faces a richer buyer than when both parties have equally low incomes. Inequality also affects repugnance norms, suggesting it strengthens the collectively enforced character of repugnance. Moreover, we show that the same market can be contested for opposing reasons depending on the relational context: under equal incomes, high prices increase opposition (coercion); under inequality, low prices increase opposition (exploitation). Our findings suggest that market design addressing socioeconomic asymmetry between parties may reduce resistance to repugnant markets.

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[I]n respect of riches, no citizen shall ever be wealthy enough to buy another, and none poor enough to be forced to sell himself. – Jean Jacques Rousseau, The Social Contract

1 Introduction

“In a repugnant transaction, participants are willing to transact, but third parties disapprove and wish to prevent the transaction” (Leider and Roth, 2010, p. 1222). From an economic perspective, repugnance is a constraint on markets: when third-party opposition translates into legal restrictions or bans, welfare-improving trades do not occur (Roth, 2007; Elías et al., 2017). Prominent examples include markets for organs and prostitution. The costs can be large. For U.S. kidney markets alone, the overall costs of banning donor compensation are \$46 billion per year (Held et al., 2016). Beyond such direct costs, bans may shift activity into unregulated black markets with high social costs, as in the case of prostitution (Cunningham and Shah, 2018; Platt et al., 2018). Understanding what drives repugnance is therefore a prerequisite for designing institutions that relax socially imposed market constraints and thereby generate welfare gains.

A large literature shows that repugnance is multi-dimensional and sensitive to context. Prior work emphasizes a broad range of dimensions, such as exploitation, undue influence and coercion, fairness, dignity, sacred values, unknown risks, regret, and objectification.¹ Correspondingly, experiments have varied many features of contested exchanges, such as compensation levels, the timing and form of payment, the identity of the buyer, or attributes of the seller, to study how perceived repugnance responds.² The predominant focus in this work is *what is sold* and *who sells*.

A defining feature of many real-world contested markets, however, is also *who sells to whom*. In domains such as prostitution, access to reproductive labor or participation in risky medical studies, transactions often occur across pronounced socioeconomic differences. Egalitarian critiques of markets stress that such asymmetries can convert vulnerability into bargaining leverage and can make formally voluntary exchanges objectionable by embedding them into and reinforcing existing social hierarchies (Sandel, 2012; Satz, 2010). In an influential conceptualization, Kanbur (2001) identifies inequality between the transacting parties as one of three core drivers of repugnance. Huesmann and Wambach (2025) conceptualize this idea in a theoretical model. To the best of our

¹A non-exhaustive list of papers discussing and/or analyzing dimensions of repugnance includes Ambuehl (2024); Stüber (2024); Leuker et al. (2021); Elías et al. (2019); Clemens (2018); Ambuehl and Ockenfels (2017); Elías et al. (2016); Ambuehl et al. (2015); Elías et al. (2015); Leider and Roth (2010); Satz (2010); Roth (2007); Tetlock (2003); Kanbur (2001); Fiske and Tetlock (1997).

²A non-exhaustive list of papers that experimentally vary features of repugnant exchanges is Ambuehl (2024); Grodeck et al. (2024); Persson and Tinghög (2024); Stüber (2024); Leuker et al. (2021); Roth and Wang (2020); Elías et al. (2019); Clemens (2018); Ambuehl and Ockenfels (2017); Elías et al. (2017); Elías et al. (2016); Held et al. (2016); Ambuehl et al. (2015); Elías et al. (2015); Kessler and Roth (2014); Leider and Roth (2010); Satz (2010); Becker and Elías (2007); Roth (2007); Tetlock (2003); Kanbur (2001); Fiske and Tetlock (1997).

knowledge, despite its prominence in theory and public debate, there is no empirical evidence on the causal effect of inequality on third-party opposition. Our paper addresses this gap.

We study the inequality–repugnance link in an online vignette experiment ($N = 1073$) covering five canonical repugnant markets (kidney sales, prostitution, paid surrogate motherhood, loan sharking, and waste trade between countries) as well as a neutral benchmark (selling a coin collection). Among these, kidney sales serves as our primary vignette, given its prominence in both the literature and ongoing policy debates on market design. The remaining vignettes allow us to assess the generality of the inequality effect across domains. Participants are randomly assigned to one of three between-subject income conditions: (i) *equality-high* (buyer and seller each earn about \$101k), (ii) *inequality* (buyer earns about \$101k, seller about \$33k), and (iii) *equality-low* (buyer and seller each earn about \$33k).³ Following the definition in Leider and Roth (2010), we operationalize repugnance as third-party willingness to prevent a transaction.

We find strong evidence that income asymmetry increases repugnance. Moving from *equality-high* to *inequality* raises willingness to prevent kidney sales by about 27% (9.5 pp, $p \approx 0.009$) and, pooling all repugnant vignettes, by about 21% (7.3 pp, $p \approx 0.000$). This effect appears in every repugnant scenario we study. Importantly, it is not explained by seller’s low income alone: when both parties have equally low incomes, opposition rises only modestly, and the additional effect of inequality over and above low income is highly significant.

A distinctive feature of repugnance is that it acts as a social constraint. Private moral discomfort alone lacks the collective force to restrict markets. Once individuals share the same disapproval, opposition to a transaction becomes binding through political pressure, regulation, or bans. Although the literature commonly describes repugnance as a norm, repugnance norms have received little empirical attention. We elicit incentivized beliefs about others’ prevention judgments to capture whether repugnance norms (measured as normative expectations) are perceived to exist, and whether inequality shifts these perceptions.

We document a tight link between individual opposition and repugnance norms. Compared to those who do not favor prevention, participants who favor prevention believe that a substantially larger share of others also favor prevention. More importantly, our inequality treatment shifts not only private judgments but also perceived norms. Since

³In our inequality condition the buyer is always richer than the seller. We did not include a reversed inequality scenario with a rich seller and a poor buyer because we anticipated that such hypothetical scenarios would be viewed as unrealistic. Later we show that respondents indeed view such income reversal as highly unrealistic.

repugnance constrains markets through its collectively enforced character, this suggests that inequality changes not only private moral attitudes but also the perceived social license to oppose markets.

To assess the generalizability of our findings, we implement the experiment in both a U.S. sample and a sample drawn from selected European countries with comparatively strong egalitarian traditions. The two samples exhibit descriptive differences in baseline opposition. Supporting our main hypothesis, inequality increases repugnance in both samples. This strengthens confidence that the finding is not an artifact of a single cultural context.

To shed light on mechanisms, we measure a battery of repugnance dimensions for kidney sales following Elías et al. (2019). Inequality increases concerns across the set of dimensions we study, with the largest effects for exploitation and undue influence. Open-ended responses corroborate these findings: exploitation is the most frequently cited reason among respondents who favor prevention, and its prevalence rises significantly under inequality.

Existing literature shows that high incentives can increase repugnance as they are perceived to be coercive (Ambuehl, 2024; Stüber, 2024; Ambuehl and Ockenfels, 2017; Ambuehl et al., 2015). In the second part of our experiment, we additionally vary the agreed-upon prices (\$15,000 vs. \$150,000) and provide novel evidence that different price–inequality interactions can activate diametrically opposing repugnance channels. Under equal incomes, high prices weakly increase opposition, consistent with coercion concerns documented in prior work. Under inequality, the pattern reverses: low prices substantially increase opposition, consistent with exploitation concerns. This points to a broader insight: changes in a transaction’s relational context can activate different and even counteracting repugnance channels.

Our study makes four contributions. First, we test the inequality–repugnance link across five canonical repugnant markets rather than a single one. The existing experimental literature has predominantly studied one market at a time, e.g., kidney sales (Leider and Roth, 2010; Elías et al., 2019; Stüber, 2024), egg donation (Ambuehl and Ockenfels, 2017), and incentivized blood/organ supply (Ambuehl et al., 2015; Ambuehl, 2024), leaving the generality of any single channel an open question. We document that financial inequality increases repugnance across the domains we study, providing the first direct empirical test of the cross-market claim in Kanbur (2001). Second, we foreground the relationship *between* buyer and seller (*who sells to whom*) as a distinct dimension of contested exchanges. The closest prior evidence varies attributes of one transacting party at a time: Leider and Roth (2010) and Elías et al. (2019) change the buyer’s identity

from the organ’s recipient to a public agency; Ambuehl and Ockenfels (2017) and Stüber (2024) vary seller cognitive ability, financial resources, or reservation prices. Holding both parties’ attributes constant and varying only the income gap between them, we show that the relational asymmetry alone can have similarly strong effects. Third, we provide the first systematic empirical evidence on *repugnance norms*. Roth (2007) and others describe repugnance as a socially enforced norm, but the only prior elicitation we are aware of is Elías et al. (2019), who ask about prevailing views on a single market. Drawing on the normative-expectations framework of Bicchieri (2006); Bicchieri and Xiao (2009), we elicit beliefs about others’ repugnance judgments and show that inequality shifts not only private moral judgments but also perceived societal opposition. This strengthens the case that repugnance operates as a binding, collectively enforced market constraint rather than a purely private moral discomfort. Fourth, we document a novel externality of income inequality: beyond shaping distributive outcomes *within* markets, inequality affects *which* markets societies tolerate at all. Taken together, these results suggest that market design that reduces, reshapes, or removes socioeconomic asymmetry within an exchange may reduce third-party resistance.

The remainder of the paper is structured as follows. Section 2 motivates the conceptual relevance of inequality, norms, and cross-sample validation and formulates our hypotheses. Section 3 describes the experimental design. Section 4 presents main results and evidence on mechanisms. Section 5 concludes.

2 Background and Hypotheses

To motivate our experimental design, we discuss the three core aspects of our study below: (1) the inequality treatment, (2) cross-sample validation, and (3) repugnance norms. We finish with a discussion of our main hypotheses in the light of these arguments.

Inequality Some transactions appear to reliably trigger stable moral resistance from third parties even when they appear to be consensual and mutually beneficial. This phenomenon, called repugnance, shapes which markets exist, how they are regulated, and whether market design can succeed in practice (Roth, 2007). The most obvious question in settings of repugnant transactions is thus *what is sold*. Leuker et al. (2021) compile and study a large set of potentially repugnant transactions/markets. A defining feature of many morally contested markets, however, is also *who sells*. Existing experimental literature has therefore varied characteristics of buyers and sellers and shows that these affect perceived repugnance. For example, Ambuehl and Ockenfels (2017) alter the cogni-

tive ability and financial resources of potential egg donors in a vignette study, and Stüber (2024) manipulates reservation prices and prosociality of potential donors.

In domains such as prostitution, access to reproductive labor or participation in risky medical studies, transactions often occur across pronounced socioeconomic differences. Accordingly, public arguments and policy debates routinely invoke inequality as a major factor.⁴ This view is conceptualized in political philosophy (Satz, 2010) and popular scientific literature (Sandel, 2012). For instance, Kanbur (2001) defines inequality as one of the three key drivers in repugnant markets. These views also connect to broader debates about equality and justice. Distributive egalitarian traditions argue that background economic disparities can undermine fairness and meaningful opportunity (Rawls, 1971), while relational egalitarian accounts stress that equality concerns the terms of social relations – whether people stand to one another as equals rather than as superiors and inferiors (Anderson, 1999). Both perspectives motivate the expectation that repugnant transactions are evaluated partly by the social relationship enacted in the transaction.

How does inequality affect repugnance? Critiques of the moral limits of markets stress that markets can convert vulnerability into bargaining leverage and reshape social meanings in ways that remain objectionable even under formal consent (Sandel, 2012). Relatedly, others emphasize that exchanges are especially troubling when they arise from, reinforce, or depend upon severe inequalities in power, status, and exit options (Satz, 2010). These perspectives converge on the expectation that observers will not evaluate repugnant transactions solely by the presence of money, the identity of either transacting party, or abstract consent, but also by the socioeconomic asymmetry between participants – that is, by what an exchange seems to *do* within existing hierarchies. However, to the best of our knowledge, no empirical assessment of the relationship between repugnance and inequality exists. Existing literature asks *what is sold* and *who sells*. To fill the gap discussed above, we add the question *who sells to whom* by treating inequality between transacting parties as a central attribute of the exchange.

More specifically, we operationalize inequality as *financial* inequality by varying the income levels of the transacting parties in our vignettes. We focus on financial inequality for various reasons: (1) it directly targets the ubiquitous exploitation/undue-inducement dimension discussed in the repugnance literature. (2) It is broad in scope as it plausibly strongly correlates with other inequality dimensions. (3) Unlike inequalities like race or gender, it is readily manipulable with standard policy tools via taxation and redistribution. (4) In contrast to other inequalities, which may systematically shape the moral

⁴Some sources include Albertsen (2025); Clapp (2025); Okumu (2025); Topol (2025); Bennett (2023); Basel Institute of Governance (2021); Feichtner et al. (2021).

interpretation of different transactions in context-specific ways (e.g., race in surrogate motherhood), financial inequality operates as a proxy for bargaining power and thus is less likely to alter the qualitative assessment of a given transaction type in divergent ways.

Cross-Sample Validation We implement the experiment in two independent samples, a U.S. sample and a sample drawn from selected European countries, to test whether the inequality effect replicates across distinct populations. Repugnance is shaped by social norms, moral traditions, and institutional backgrounds, and existing work suggests that acceptance of repugnant markets can differ substantially across populations (Roth and Wang, 2020; Leuker et al., 2021). This is particularly relevant for our setting as the role of inequality in moral evaluations plausibly depends on the broader environment: in societies with stronger preferences for redistribution and lower tolerated inequality, relative positions may be more salient, and egalitarian considerations more normatively entrenched. Accordingly, cross-country variation provides a natural way to study whether baseline levels of repugnance differ across contexts and whether the effect of inequality is moderated by these contexts.

Our pre-registration lists the cross-country comparisons as main hypotheses. We retain these as pre-registered, but report them with the following caveats, which prevent valid cross-country inference. First, the European sample is not composed of native English speakers, while the experiment was administered in English. Reading comprehension, nuance recognition, and willingness to engage with text-heavy vignettes may systematically differ between the samples. Second, all samples are drawn from Prolific and none of them are nationally representative; all skew younger, more educated, and more online than the general populations. Further, our European sample is not designed to be representative of Europe as a whole. Rather, we deliberately selected countries with relatively strong egalitarian traditions to create contrast with the U.S. sample along the dimension most relevant to our hypothesis. In conclusion, any observed sample differences may reflect language, sampling, or country-selection artifacts rather than genuine cross-country variation in repugnance. We therefore treat the two samples as an external-validity check on the inequality finding rather than as a basis for substantive cross-country claims. The pre-registered cross-country hypotheses below (C1, C2) are reported for transparency, but should be interpreted descriptively.

Repugnance Norms Third, we study repugnance not only as an individual judgment but also as a perceived social norm. The description of repugnance as a norm is ubiquitous

in the literature.⁵ That is, repugnance is viewed as a constraint arising from third-party disapproval that is socially enforced through political pressure, stigma, or legal restrictions (Roth, 2007). A key feature of such norm-driven opposition is that individuals' own views coexist with beliefs about what others think and what society will tolerate. However, no systematic empirical assessment of normative aspects of repugnance exists. To our knowledge, the only study tentatively addressing the issue is Elías et al. (2019), who ask respondents to state their belief about the share of people in the United States who would favor certain configurations of kidney markets. To capture this social component, we elicit incentivized beliefs about the share of respondents who would favor preventing each transaction.⁶ This allows us to assess whether repugnant transactions are perceived as governed by normative expectations (i.e., whether people believe opposition is widespread) and whether these expectations shift with our inequality manipulation. If inequality increases perceived repugnance partly by changing how observers think others view the exchange, then we should observe corresponding movements in beliefs, strengthening the interpretation of inequality as a driver of collectively enforced resistance rather than merely private moral discomfort.

Hypotheses The above arguments motivate the following pre-registered main and secondary hypotheses:⁷

H1: Inequality *Financial inequality between transacting parties increases repugnance.*

S1: More than Low Income *The effect of financial inequality in H1 is stronger than the effect of low income in equality settings.*

S2: Common Market Transactions *The effect of financial inequality in H1 is stronger in classical repugnance scenarios (kidney sales, prostitution, surrogate motherhood, loan sharking, waste trade) than in common market transactions (selling a coin collection).*

C1: Europe vs. US *The European and U.S. samples differ in how repugnant they view transactions.*

⁵Explicit mentions can be found in, e.g., Persson and Tinghög (2024); Grodeck et al. (2024); Stüber (2021); Sandel (2012); Leider and Roth (2010); Satz (2010); Roth (2007); Kanbur (2001).

⁶Bicchieri (2006) argues that whether people follow a norm depends on the presence of both normative (injunctive norms) and empirical expectations (descriptive norms) while Bicchieri and Xiao (2009) show that in cases the two conflict, the empirical norms matter more. Given we are eliciting judgments in hypothetical scenarios and beliefs about others' judgments, the beliefs we elicit are closer to measuring normative expectations rather than empirical expectations.

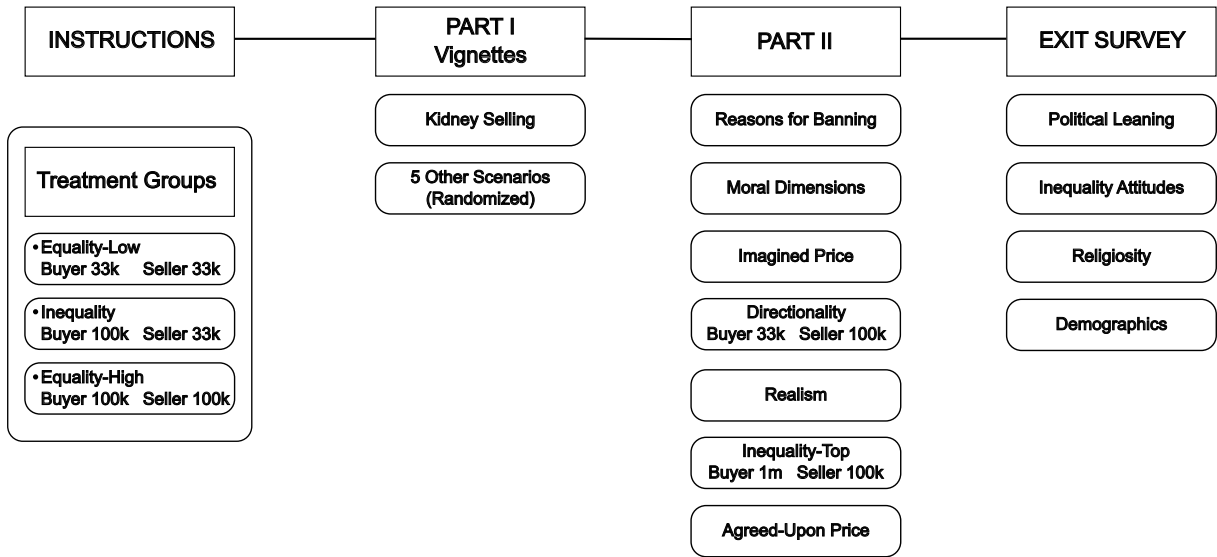
⁷<https://osf.io/rme97>

C2: Stronger H1 Europe *The effect of financial inequality in H1 is stronger for Europeans than for U.S. respondents.*

3 Experimental Design

The experiment was run from November 27 to December 3, 2025 on Prolific using a sample of U.S. residents and participants from selected European countries (Belgium, Denmark, Finland, France, Germany, Luxembourg, the Netherlands, Norway, Sweden). Because we wanted to test whether the inequality effect generalizes beyond a single sample, we recruited a second sample from selected European countries with comparatively strong pro-egalitarian views. Since there is no canonical ranking of countries by this criterion, we relied on informed judgment. Respondents were balanced on basic demographics and required to speak English.

Figure 1: Experimental Setup



Notes: The figure illustrates the experimental flow. Participants were randomly assigned to one of three between-subject income conditions and evaluated six vignettes in Part I (kidney first; remaining five randomized). Part II elicited reasons, moral dimensions, imagined price, realism of reversed inequality, an *inequality-top* scenario, and a low-vs.-high price comparison, all for the kidney scenario. The exit survey collected demographics, religiosity, and political attitudes. Full instrument in Section F.

To enhance data quality, we implement several complementary measures. At the start of the experiment, participants stated their willingness to provide truthful answers following Elías et al. (2019). Previous research has shown that such soft commitments

motivate respondents to give more complete and accurate responses (Cibelli, 2017). Further, we ensure that participants do not switch tabs or browsers by informing them that tab switching may affect eligibility for the bonus payment; those who switch receive a warning. Excluding the tab switchers does not affect our results in any meaningful way (see Section 4.5). The experiment also included multiple attention checks.

The experimental setup is depicted in Figure 1. The experiment consisted of two parts. Participants were randomly assigned to one of three treatment groups. The groups were (1) *equality-high* (buyer and seller \sim \$101,000), (2) *equality-low* (buyer and seller \sim \$33,000), and (3) *inequality* (buyer \sim \$101,000, seller \sim \$33,000).

Income levels were chosen to match the U.S. household income distribution in 2022.⁸ The low income was set at \$33,000, roughly the 20th percentile, and the high income at approximately \$101,000, roughly the 60th percentile (United States Census Bureau, 2024). We chose a low income level far above the poverty threshold to avoid conflating inequality with destitution. We also chose a moderate inequality gap, corresponding to a 40-percentile split, to support more general conclusions about the role of inequality. To reduce repetitiveness, displayed incomes were randomly perturbed by adding $\varepsilon = X \cdot 100$ where $X \sim \text{Uniform}(\{-10, -9, \dots, 9, 10\})$.

Participants then evaluated six vignettes. Four vignettes described classical interpersonal repugnant transactions (kidney sales, prostitution, surrogate motherhood, loan sharking), one described a common repugnant transaction between countries (waste trade), and one vignette described a neutral transaction (selling a coin collection). We included the waste trade vignette to test whether inequality effects extend beyond interpersonal contexts. Following Leider and Roth (2010); Elías et al. (2015, 2019), we included the neutral vignette as an internal-validity check. Reassuringly, in this vignette, the prevention rate is close to zero. Motivated by its prominence in the literature, the kidney vignette was always presented first to maximally utilize respondents’ attention. The remaining vignettes were presented in randomized order.

Each vignette began with a short introduction. Because not everyone is familiar with topics such as surrogate motherhood or organ transplants, this text was intended to provide background information to the transaction. We were careful to avoid loaded terms and to describe each scenario as neutrally as possible. The vignette then described a buyer and a seller, with additional experimentally irrelevant attributes (e.g., names, age, residence, occupation) included to increase realism and reduce the salience of the income manipulation. All attributes except buyer and seller income were held constant

⁸To ensure that the low income party would not be perceived as too poor, we chose the household income distribution instead of the individual income distribution.

across treatment groups. The full scenario texts are reported in Section F.

For each vignette, participants answered our binary outcome question of main interest, “*In your opinion, should society prevent this transaction?*”⁹ We also elicited incentivized beliefs on a 0–100% scale, “*What percentage of participants do you believe will answer ‘Yes’ to the question above?*” The belief question is incentivized via randomly choosing one of the belief questions and a tolerance band of $\pm 10\%$ around the true value. Correct answers to the randomly selected question generate a bonus payment of \$2.¹⁰ As motivated previously, this belief measure allowed us (1) to assess the strength of normative expectations (Bicchieri and Xiao, 2009), (2) to test whether inequality shifts these expectations, and (3) to strengthen internal validity by incentivizing belief reports.

Part II, which deals only with the kidney scenario, started with an open text elicitation of the reasons for preventing/not preventing the transaction. We then elicited a battery of repugnance dimensions following Elías et al. (2019). Participants evaluated the kidney transaction on Likert scales measuring exploitation, violation of autonomy, undue influence, violation of fairness, and violation of dignity. To match the scope of our paper, we omitted fairness to the buyer and instead measured whether the transaction inflicts societal harm in the future (Kanbur, 2001).¹¹ The exact wording is reported in Section F. Participants then stated the price they imagined for the kidney transaction and reported the donor’s imagined health status. These items were asked after the vignettes to avoid priming.

Next, we presented two kidney scenarios side by side. One corresponded to the inequality treatment with a poor seller. The other reversed the income positions, with a high-income seller (approximately \$101,000) and a low-income buyer (approximately \$33,000). Participants rated the realism of each scenario on a Likert scale and explained their rating in an open text field.

⁹We employ a binary outcome measure to match the underlying normative framing of the question (permit vs. prevent) and to ensure comparability with prior vignette studies in this literature. While more fine-grained scales could increase statistical sensitivity, they would introduce additional interpretive ambiguity regarding the relevant threshold for social prohibition.

¹⁰Strictly speaking, this scoring rule is theoretically not incentive compatible as responses may be biased toward central or “safe” values rather than exact beliefs. However, Danz et al. (2022) emphasize that most commonly used scoring rules are behaviorally incentive incompatible, and recommend simpler rules as a more robust alternative. Following their advice, we adopted this rule, which strikes a balance between clarity for participants and incentives for accurate reporting.

¹¹Elías et al. (2019) consider fairness judgments in the context of exogenously specified compensation schemes for kidney donation. In our vignettes, by contrast, the transaction involves implicit bilateral bargaining over an unspecified price (e.g., kidney sale), making “fairness to the buyer” less well-defined and potentially conflating distributive fairness with more general concerns such as exploitation and undue inducement. We therefore omit this item to maintain conceptual alignment between the measures and the structure of the vignette.

After this, to examine the effect of inequality at the higher levels of the income distribution, we presented a scenario with a very rich buyer (\$1,000,000) and a high-income seller (\$100,000). While the baseline inequality treatment covered roughly the 20th to 60th percentiles, this scenario captured inequality between the 60th and above the 95th percentile. Part II ended with a side-by-side comparison of two scenarios that varied the agreed-upon price (low \$15,000 vs. high \$150,000) to study the role of high incentives.

The experiment concluded with demographic questions. We elicited political leaning on social and economic issues following Ambuehl and Ockenfels (2017). We also measured views on income inequality and redistribution, religious confession and religiosity, as well as standard demographics (gender, education, employment status, household income, and country of birth).

4 Results

This section presents the experimental results. Throughout, our primary outcome is whether respondents think society should prevent the described transaction. Following the definition in Leider and Roth (2010), we interpret this outcome as a policy-relevant form of third-party opposition: it captures the kind of judgment that can translate into formal bans, regulation, or political constraints, and thus into binding limits on market design (Roth, 2007; Elías et al., 2017). Since the vignettes we study are textbook examples of repugnant transactions, we treat willingness to prevent as a sufficient statistic for the level of repugnance following the repugnance definition in Leider and Roth (2010). Unless stated otherwise, we estimate linear probability models (LPMs). Coefficients can be read as changes in the probability of supporting prevention (e.g., a coefficient of 0.05 corresponds to a 5 percentage-point change). Because each respondent evaluates multiple vignettes, we cluster standard errors at the respondent level.

4.1 Sample Definition

We follow the pre-registered exclusion criteria and remove participants who fail both attention checks as well as participants with completion times more than two standard deviations above or below the mean.¹² This yields a final analysis sample of $N = 536$ respondents from the United States and $N = 537$ respondents from Europe (total $N = 1073$). Random assignment to the three income conditions succeeded as indicated by

¹²As pre-registered, we additionally run robustness checks excluding participants who switched browser tabs more than three times.

covariate balance in Appendix Table B.1. Observable differences between treatment arms are small and statistically indistinguishable from zero.

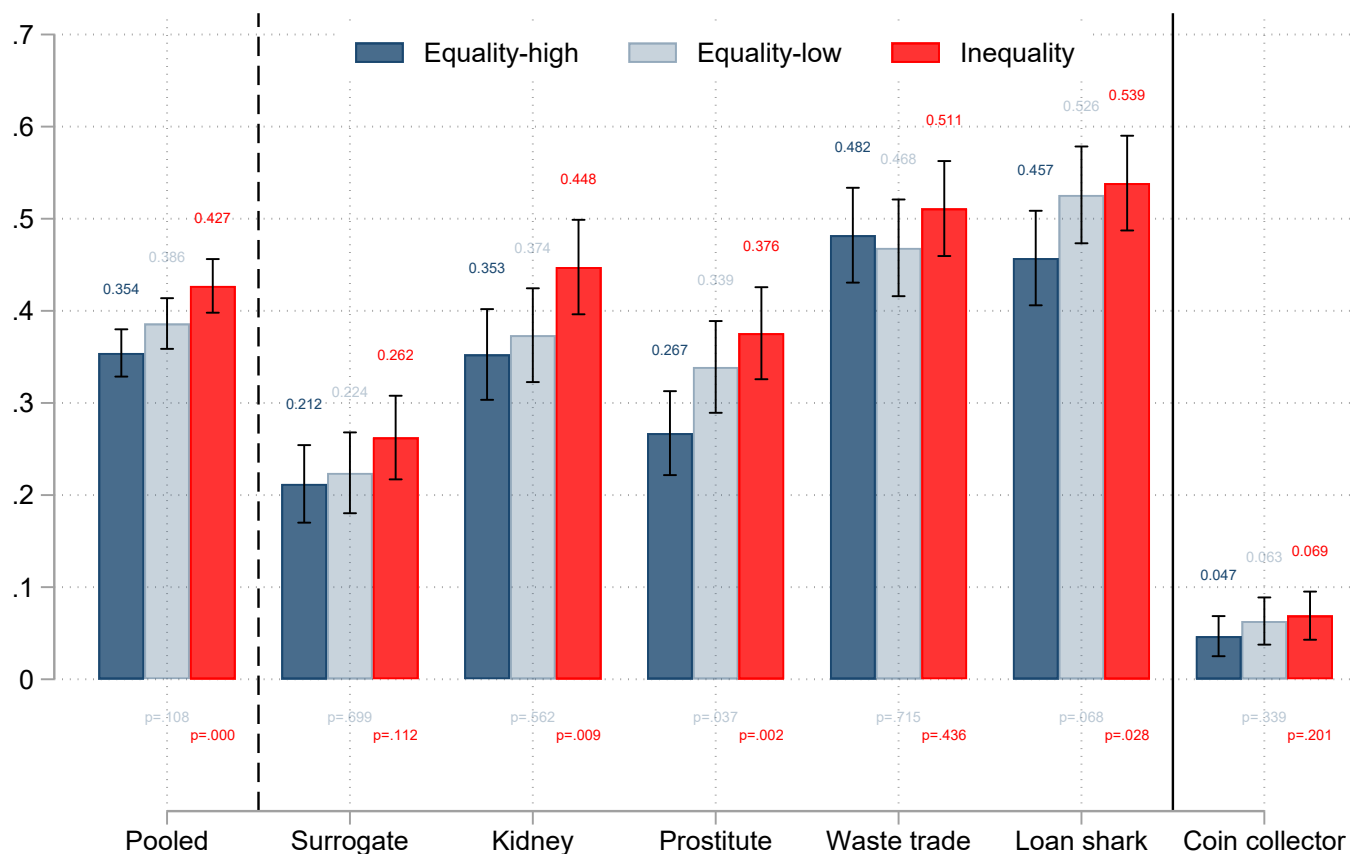
4.2 Descriptive Patterns

We begin by describing baseline opposition levels and how they vary across domains. Figure 2 plots the share of respondents who answer “Yes” to the question “*In your opinion, should society prevent this transaction?*” by vignette and treatment condition, pooling both samples. Figure A.1 in the appendix shows the same figure split by sample.

Two descriptive patterns stand out. First, opposition differs sharply across transaction types: the neutral benchmark (selling a coin collection) generates very low baseline support for prevention, while classical repugnant transactions generate substantially higher opposition. The waste trade and loan shark vignettes evoke the highest repugnance. Interestingly, the surrogate motherhood scenario faces relatively low levels of opposition. This cross-vignette variation is useful for interpreting later heterogeneity analyses, because it allows us to compare how the same inequality manipulation operates in markets with different baseline levels of repugnance. Descriptive differences in baseline opposition between the two samples are visible in Figure A.1, but we do not interpret them substantively given the sample-construction limitations discussed in Section 2.

Figure 2: Baseline Willingness to Prevent Across Treatment Groups

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Notes: The figure plots mean support for prevention by vignette and income condition, pooling the U.S. and European samples. Error bars are 95% confidence intervals. The “Pooled” column averages across the five repugnant vignettes: to account for within-respondent correlation, person-level means are first computed across vignettes, and the standard error is then taken across respondents. p -values are calculated using Welch t -tests comparing *equality-high* to each of the two other treatment groups. The neutral coin collection vignette is included to benchmark general “anti-market” sentiment. Figure A.1 in the appendix shows the same figure split by sample.

4.3 Main Hypotheses

This section summarizes results for our main and secondary hypotheses from a single regression. We estimate the following linear probability model (LPM):

$$\begin{aligned}
 Y_{iv} = & \alpha + \beta_1 \mathbb{1}\{\text{Inequality}_i\} + \beta_2 \mathbb{1}\{\text{EqualityLow}_i\} \\
 & + \gamma \mathbb{1}\{\text{Europe}_i\} \\
 & + \delta_1 \mathbb{1}\{\text{Inequality}_i\} \times \mathbb{1}\{\text{Europe}_i\} + \delta_2 \mathbb{1}\{\text{EqualityLow}_i\} \times \mathbb{1}\{\text{Europe}_i\} \\
 & + \lambda_v + \varepsilon_{iv}.
 \end{aligned} \tag{1}$$

where Y_{iv} is the indicator for supporting prevention in vignette v , λ_v are vignette fixed effects. The omitted category is *equality-high* in the U.S. sample. We estimate (1) (i) pooling the five repugnant vignettes and (ii) separately by vignette. In the pooling equation, we include vignette fixed effects. Standard errors are clustered at the respondent level. For robustness, we discuss the results from the same equation including a vector of covariates in Section 4.5.

Calculating Average Marginal Treatment Effects To investigate our hypotheses, we compute average marginal effects implied by the regression in equation 1. That is, we average the difference between the *inequality* arm and the *equality-high* arm over the empirical distribution of region samples (H1) and the Europe–U.S. difference over the empirical distribution of treatment groups (C1). The “More than low income” estimand (S1) is constructed as the difference between the average effect of *inequality* minus *equality-high* (H1) and the average effect of *equality-low* minus *equality-high*. The differential inequality effect between Europe and the U.S. corresponds to $\hat{\delta}_1$ (C2). These estimands and corresponding standard errors are depicted in Table 1. For ease of exposition, we relegate the pre-registered results from corresponding Welch t -tests to Section 4.5. The results are qualitatively almost identical and quantitatively very similar.

H1: Inequality In line with H1, inequality increases the willingness to prevent certain transactions. Pooling all repugnant scenarios, we find a 7.2 pp ($p \approx 0.000$) higher likelihood to prevent. A Mann-Whitney U test on respondent-level mean prevention rates corroborates this result ($\Delta = 7.3$ pp, $p \approx 0.001$). The effect in absolute terms is largest for the prostitution vignette (11.1 pp, $p \approx 0.001$) and smallest for the waste trade example (2.8 pp, $p \approx 0.454$). Most importantly, the results support the generality of our inequality hypothesis: inequality increases repugnance across the repugnant vignettes. Our results

empirically support theoretical egalitarian claims.

A useful benchmark for the effect of inequality is the neutral coin-collection scenario. Since this transaction does not evoke intrinsic moral opposition, treatment effects reflect more general reactions to unequal exchange. Reassuringly, no strong effects of inequality arise.

S1: More than Low Income The results support our hypothesis that the inequality treatment effect goes over and above a pure low income effect. To disentangle these effects, we compare equality-low vs. equality-high with inequality vs. equality-high (see H1). When two parties with equally low incomes transact, repugnance increases relative to transactions between two high-income parties. However, when a low-income party transacts with a high-income party, repugnance is even higher. We interpret the difference between these contrasts as the additional effect of inequality. Here, we find that the effect of inequality is larger by 0.041 ($p \approx 0.046$). The pattern for this finding is highly consistent: the point estimates are positive for each vignette analyzed separately.

S2: Common Market Transactions We find strong support for the hypothesis that the effect of inequality is larger for classical repugnant scenarios (kidney sales, prostitution, surrogate motherhood, loan sharking, waste trade) than for common market transactions (selling a coin collection). The difference between the estimate for H1 across all repugnant scenarios (column 1) and the one for the coin collection vignette (column 6) is 4.874 pp ($p \approx 0.034$).¹³ This shows that the role of inequality is indeed more prominent in repugnant market transactions than in common market transactions.

C1: Europe vs. U.S. Pooling all repugnant vignettes, European respondents display higher repugnance towards the transactions (4.1 pp, $p \approx 0.011$). A Mann-Whitney U test on respondent-level mean prevention rates across all repugnant vignettes corroborates this finding ($\Delta = 4.2$ pp, $p \approx 0.002$). Europeans are on average 14.4 pp ($p \approx 0.000$) more likely to prevent the kidney transaction. Similarly, in the surrogate motherhood vignette European respondents have a 10.3 pp ($p \approx 0.000$) higher likelihood of preventing compared to U.S. respondents.

C2: Stronger H1 Europe We do not find support for the hypothesis that inequality increases repugnance more among Europeans than among U.S. citizens.

¹³Percentile inference comes from 1000 bootstrap draws (stratified at the treatment group level and clustered by respondent) of running the regression and taking the respective difference.

Table 1: Main Results

	Pooled	Separate					Neutral
	All repugnant	Surrogate	Kidney	Prostitution	Waste trade	Loan shark	Coin collector
H1: Inequality	0.072 ^{***} (0.020)	0.048 (0.031)	0.092 ^{**} (0.036)	0.111 ^{***} (0.034)	0.028 (0.037)	0.081 ^{**} (0.037)	0.023 (0.017)
S1: More than Low Income	0.041 ^{**} (0.020)	0.038 (0.032)	0.074 ^{**} (0.037)	0.037 (0.036)	0.043 (0.038)	0.013 (0.038)	0.006 (0.019)
C1: Europe vs. US	0.041 ^{**} (0.016)	0.103 ^{***} (0.026)	0.144 ^{***} (0.029)	-0.138 ^{***} (0.028)	0.072 ^{**} (0.031)	0.024 (0.031)	-0.049 ^{***} (0.014)
C2: Stronger H1 Europe	-0.054 (0.039)	-0.050 (0.063)	-0.116 (0.072)	-0.040 (0.068)	-0.035 (0.074)	-0.030 (0.074)	0.007 (0.034)

Notes: All entries are average marginal effects computed from Equation 1 using margins/linear combinations. Standard errors clustered at the participant level. Column (1) includes vignette fixed effects; scenario columns do not. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

4.4 Additional Outcomes and Mechanisms

Norms Grounded in the literature stressing the relevance of normative expectations in guiding behavior (Bicchieri, 2006), we hypothesize a strong association between own repugnance views and beliefs about others’ repugnance views. Moreover, if inequality has the hypothesized general relevance in repugnance settings (H1), it should not only impact own views, but also beliefs about others’ views. Therefore, we analyze the following hypotheses:

T Norms (1) *Repugnance judgments correlate with normative expectations.* (2) *Financial inequality increases repugnance norms.*

Figure A.2 shows the same descriptive results as above, exchanging the willingness to prevent with the beliefs about others’ willingness to prevent. An informative and straightforward observation is that the normative expectations for preventing are much stronger than participants’ own willingness (own: 0.334, expectations: 0.439, $p \approx 0.000$).

Regarding (1), respondents’ beliefs correlate strongly with their own willingness to prevent across vignettes. While respondents not opposing a certain transaction believe that 34% would prevent a transaction, the respective value is 64% for those who do want to prevent (difference: 30.8 pp, $p \approx 0.000$). This implies a striking relative increase of 92% in willingness to prevent and a strong association between repugnance judgments and repugnance norms.

Table 2 summarizes the estimates from Equation (1) replacing Y_{iv} with repugnance norms. While attenuated in magnitude compared to own repugnance judgments, the patterns in norms are strikingly similar and statistically highly significant.

The most interesting aspect for our purposes is how inequality affects repugnance norms (2). As with repugnance judgments, we find a positive effect when pooling all repugnant vignettes (0.034, $p \approx 0.002$) as well as for each repugnant vignette taken separately except for the waste trade scenario. Similar to the case of repugnance judgments, we do not find support for the hypothesis that the treatment effect in H1 is stronger for Europeans (C2). In fact, we find the opposite, though statistically insignificant effect across the board of vignettes. Finally, the “More than Low Income” result also holds for norms. Compared to the equality-low group, we again find an overall positive inequality effect of 2.2 pp ($p \approx 0.038$).

Prices High prices can be viewed as coercive, increasing repugnance of transactions (Ambuehl, 2024; Stüber, 2024; Elías et al., 2019; Ambuehl and Ockenfels, 2017; Ambuehl

Table 2: Equation 1 Using Beliefs

	Pooled	Separate					Neutral
	All repugnant	Surrogate	Kidney	Prostitution	Waste trade	Loan shark	Coin collector
H1: Inequality	0.034 ^{***} (0.011)	0.031 [*] (0.018)	0.062 ^{***} (0.018)	0.037 ^{**} (0.017)	-0.007 (0.019)	0.044 ^{**} (0.018)	0.024 (0.021)
S1: More than Low Income	0.022 ^{**} (0.011)	-0.001 (0.018)	0.023 (0.018)	0.035 ^{**} (0.017)	0.038 ^{**} (0.019)	0.014 (0.018)	-0.012 (0.022)
C1: Europe vs. US	0.018 ^{**} (0.009)	0.091 ^{***} (0.015)	0.050 ^{***} (0.015)	-0.067 ^{***} (0.014)	0.004 (0.015)	0.014 (0.015)	-0.050 ^{***} (0.018)
C2: Stronger H1 Europe	-0.022 (0.021)	-0.029 (0.035)	-0.045 (0.035)	-0.004 (0.034)	-0.013 (0.037)	-0.020 (0.037)	-0.021 (0.042)

Notes: All entries are average marginal effects computed from Equation 1 using margins/linear combinations. Standard errors clustered at the participant level. Column (1) includes vignette fixed effects; scenario columns do not. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

et al., 2015; Becker and Elías, 2007). To analyze the role of high vs. low prices in the context of inequality, we introduce a vignette where the baseline kidney scenario for each subgroup is supplemented with a stated price. In one scenario, the price is set at \$15,000 and in the other at \$150,000. Following the literature studying the coercive effects of high prices, we hypothesize that a high price evokes higher repugnance than a low price in equality settings. A distinct concern emphasized in egalitarian philosophy is the role of exploitation: when parties are unequal, low prices may be seen as an unfair treatment of a disadvantaged seller. In line with this argument, we hypothesize that low prices evoke higher repugnance in the *inequality* group. Therefore, we analyze the following hypothesis:

T Prices *In line with the coercion argument in other literature, high prices evoke higher repugnance in equality settings. In line with an exploitation argument, low prices evoke higher repugnance in inequality settings.*

We first test this hypothesis by comparing prevention rates for the high-price vs. low-price scenario by treatment groups. The left panel of Figure 3 shows a striking pattern. In the two equality conditions, the low price does not affect the prevention rates. However, in the inequality group, the prevention rates are 21% higher for the low price scenario. The difference in prevention rates is 10.5 pp and highly significant ($p \approx 0.000$).

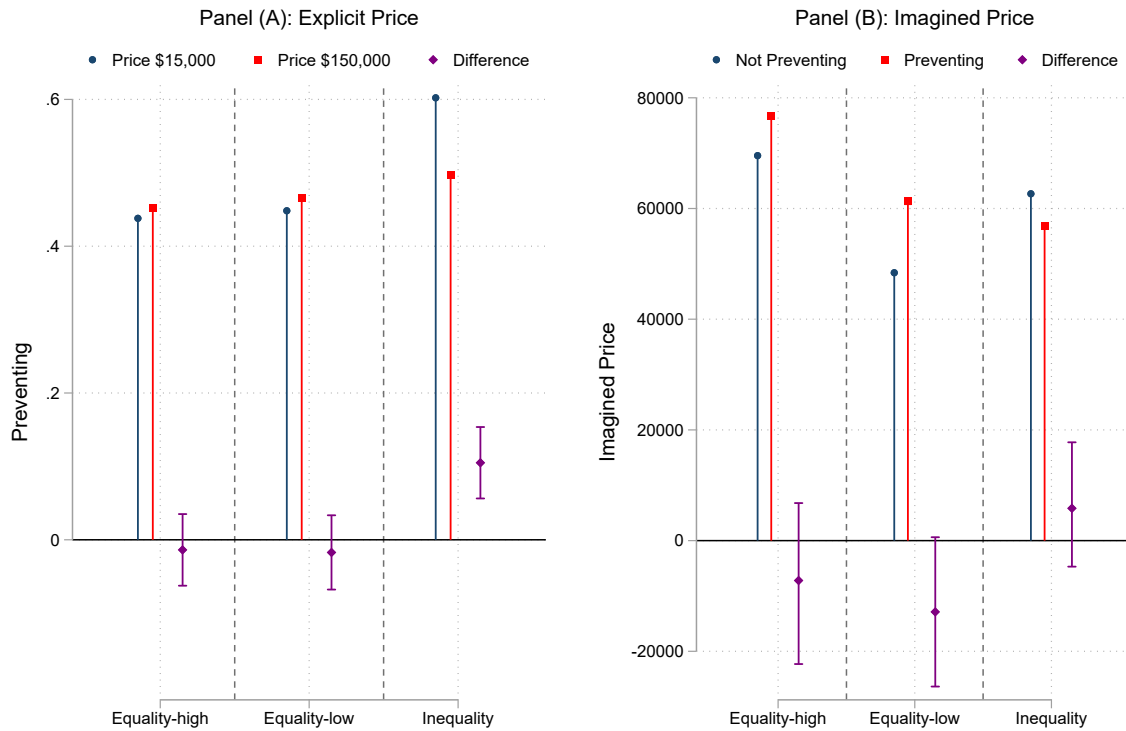
The right panel of Figure 3 provides additional evidence for this result. Before any contextual parameters of the initial vignettes were changed, we asked participants for their imagined price in the kidney scenario. Here, we show mean imagined prices by treatment group and banning decision which exactly mirrors the approach in which prices are explicitly fixed. Those who do not prevent in equality groups assume a lower agreed-upon price for the kidney transaction compared to those who prevent. In the *inequality* group, the opposite is the case. Although these differences have low statistical significance due to the high variance of imagined price responses, they exhibit a very similar pattern to that for explicitly stated prices.

We substantiate the claim that this pattern is consistent with exploitation concerns by investigating the exploitation dimension we include in the question battery on repugnance dimensions. More specifically, we ask respondents whether the kidney transaction exploits the seller. Respondents in *inequality* view the transaction as 10.4 percentage points of the full scale more exploitative than respondents in *equality-high* ($p \approx 0.000$). Moreover, this difference is fully driven by inequality. When comparing *equality-low* with *equality-high*, the corresponding difference in exploitation concerns is -0.4% ($p \approx 0.850$). That is, the

exploitative potential lies solely in the inequality between the transacting parties and not in the financial means of the seller.

This set of findings is particularly important as it adds nuance to the existing literature. Our results highlight that changing relational aspects of transactions (introducing inequality) can activate diametrically opposite repugnance channels (exploitation vs. coercion).

Figure 3: High vs. Low Prices



Notes: Panel (A) compares mean support for prevention in the low- and high-compensation kidney conditions, separately by income relationship (equality-high, inequality, equality-low). Panel (B) shows imagined prices across preventing and non-preventing respondents. 95% confidence intervals come from Welch t -tests.

Directionality We summarize results for our tertiary hypotheses in Figure C.1. All differences are oriented so that positive estimates on the inequality effect correspond to our (pre-registered) hypotheses.

The two left-most estimates refer to the directionality of inequality. As discussed above, we did not include a fourth treatment group with reversed inequality (high-income seller, low-income buyer), since we expected such a scenario to appear highly unrealistic. Empirically, opposite directionality inequality is usually not observed. For example, kidneys

usually do not flow from rich countries to poor countries on black markets. Low perceived realism would reduce the empirical relevance of that condition and could threaten internal validity. To support this claim and our experimental design, we hypothesize that respondents view opposite directionality inequality settings as unrealistic. We also hypothesize that such settings evoke weakly lower repugnance.

T Directionality (T1) Respondents consider scenarios in which inequality switches directionality (seller higher income) unrealistic. (T2) Moreover, evoked repugnance is weakly lower in such settings.

First, we test whether respondents view the *reversed-directionality* kidney scenario as less realistic by eliciting perceived realism in a side-by-side comparison with the baseline inequality scenario. This hypothesis is strongly supported. We rescale the realism item to lie between -0.5 and 0.5 , so that differences can be interpreted as a share of the full scale. Compared to reverse inequality, the baseline inequality scenario is on average rated more realistic by 26% of the full scale. 65% of respondents view baseline inequality as more realistic, 23% view both scenarios as equally realistic, and only 12% view *reversed-inequality* as more realistic.¹⁴ Beyond supporting the internal validity of our design choice, this result is substantively informative: it suggests that, in the kidney context, respondents are more likely to presume inequality running from a wealthier recipient to a poorer donor. This opens up scope for interventions that make giver–receiver similarity more salient as a way to increase public acceptance.

Participants were asked to justify their realism evaluations in open text fields. We use an LLM to categorize the types of arguments respondents made in support of the realism of the two scenarios. More information on the categorization can be found in Section D.2. The results are depicted in Figure A.4. First, the results reveal that three arguments are made most often on the realism of the scenarios. These are (i) the seller’s financial need, (ii) that the reversal of inequality is unrealistic, and (iii) whether the buyer could afford the kidney.

Next, we split the respondents into (a) a group that finds *inequality* more realistic and compare that to the remainder, that is, (b) those who find *reversed-inequality* similarly or more realistic. It is evident that the largest positive differences between the two groups lie in exactly the same three categories. That is, those who find the *reversed-inequality* scenario less realistic do so because they believe that the seller would not sell his kidney

¹⁴The realism question also strengthens internal validity in general. Overall, only 14% of respondents evaluate the *inequality* scenario on the negative side of the realism scale, suggesting that participants overwhelmingly view the scenario as a credible real-world setting.

without being in financial need. Similarly, they think that the income role reversal leads to a non-credible scenario or they simply believe the lower-income buyer could not afford the kidney in such a scenario. The largest negative difference in argument usage, that is, the arguments differentially most often used by those assuming equal or higher realism of *reversed-inequality* concern the urgent medical need. The second highest difference is in real-world prevalence of such scenarios. Both types of arguments go in the direction that this can happen to anyone lending both scenarios a similar degree of realism.

Second, we hypothesize that willingness to prevent the *reversed-directionality* scenario is lower (see Figure C.1). This hypothesis is not supported. The null result prompts two interpretations. One is that inequality increases repugnance largely independent of which side of the transaction is disadvantaged. Another is that respondents treat repugnance judgments as requiring consistency across closely related scenarios. This interpretation is natural as the two scenarios were shown side-by-side. Consistent with the latter, willingness to prevent is positively correlated across the two scenarios, with a correlation of 0.661.

Inequality-Top The two estimates to the right of Figure C.1 introduce a kidney scenario in which both parties are unequal but high in the income distribution: there is now a very rich buyer (\$1,000,000) and a high-income seller (\$100,000). We refer to this scenario as *inequality-top*. If inequality has a general bite in settings of repugnance, it should also play a role in the upper half of the income distribution. However, as the exploitative potential is lower when better-off parties transact, we assume the effect of inequality to be weaker than in the lower part of the income distribution. More specifically, we hypothesize that *inequality-top* increases repugnance relative to *equality-high* and, additionally, produces lower repugnance than the baseline *inequality* condition (high-income buyer, low-income seller). We hypothesize the following:

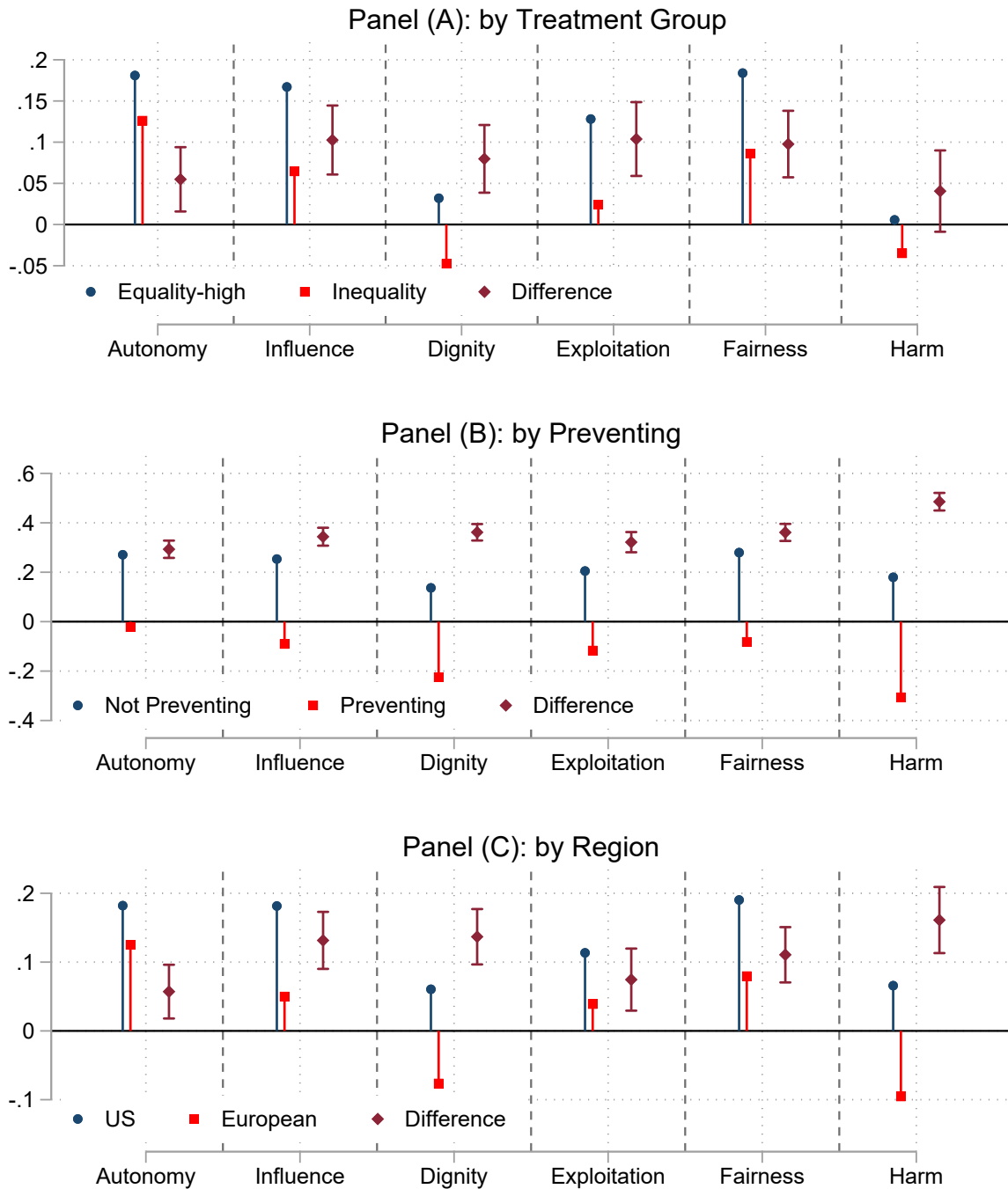
T Inequality-Top (*T3a*) *Inequality in the upper part of the income distribution evokes higher repugnance than equality settings, (T3b) but lower repugnance than inequality in the lower part of the income distribution.*

To evaluate these hypotheses, we use a bootstrap approach rather than the regression framework of Equation 1. The reason is that the *inequality-top* vignette was administered to all respondents as an additional kidney scenario, independent of treatment assignment; its prevention share must therefore be estimated by pooling across treatment groups. We draw 1,000 stratified bootstrap samples and compute two differences of interest: (i) *inequality-top* versus *equality-high* (T3a), and (ii) baseline *inequality* versus *inequality-top*

(T3b). The results are reported in Figure C.1. T3a is supported: the prevention share in *inequality-top* lies above that in *equality-high*, confirming that income asymmetries in the upper part of the income distribution also elevate repugnance. T3b, however, is not supported: the prevention share in *inequality-top* is very similar to that in baseline *inequality*. This suggests that income asymmetries in the upper half of the income distribution can matter for repugnance to a similar degree as asymmetries lower in the distribution, further strengthening the view that the effect of inequality is not driven purely by the fact that the seller has low income (S1).

Subgroup Treatment Effects We pre-registered heterogeneity tests of the inequality treatment effect (H1) across gender, age, income, religiosity, education, social and economic political ideology, and attitudes toward inequality and redistribution. The effect is broadly similar across most subgroups; full results, the underlying regression specification, and figure are reported in Appendix C.

Figure 4: Dimensions by Subgroups



Notes: Each panel reports mean ratings on repugnance dimensions (scale -0.5 to 0.5) by treatment condition, preventing decision, and sample, with 95% confidence intervals from Welch t -tests. Lower values indicate stronger concern on the corresponding dimension.

Dimensions To shed light on mechanisms, we analyze the battery of repugnance dimensions elicited for the kidney scenario. The items capture whether the transaction is perceived as respecting individual autonomy, involves undue influence, violates human dignity, exploits the seller, is fair to the seller, and would harm society in the long run. The exact wording of each item is given in Table 3. Responses are recorded on a 21-point Likert scale and rescaled to the interval $[-0.5, 0.5]$, so that differences have a straightforward interpretation as a share of the full scale. -0.5 stands for strongly agreeing with a negative assessment on the respective dimension (violating autonomy, exerting undue influence, ...) while 0.5 indicates strongly disagreeing with the respective negative statement.

Table 3: Repugnance Dimensions: Survey Wording

Dimension	Survey question
Autonomy	In your opinion, does this transaction respect or limit individual autonomy (i.e. self-determination)?
Influence	In your opinion, does this transaction allow Sam (seller) to make fully informed choices or does it exert undue influence?
Dignity	In your opinion, does this transaction promote or violate human dignity?
Exploitation	What do you think about the following statement: “this transaction exploits Sam (seller)”?
Fairness	In your opinion, is this transaction fair or unfair to Sam (seller)?
Harm	What do you think about the following statement: “allowing such transactions would harm society in the long run”?

Figure 4 presents three complementary views. Panel (A) compares mean ratings between the *equality-high* and *inequality* conditions. Panel (B) compares means by respondents’ prevention decision in the kidney vignette. Panel (C) compares U.S. and European respondents. Purple markers show differences with 95% confidence intervals based on Welch *t*-tests.

Panel (A) shows that all dimensions respond to the inequality manipulation. The largest shifts occur for exploitation, undue influence, and fairness. Point estimates for “Autonomy” and “Harm” are smaller, plausibly because the vignette explicitly states that both parties agree to the transaction. Notably, inequality also increases concern about violations of human dignity. Concerns about long-run societal harm also rise under inequality, but this effect is comparatively less pronounced.

Panel (B) illustrates that respondents who favor prevention view the transaction as more problematic on every dimension. The differences are large and highly statistically significant. The most pronounced gap concerns anticipated societal harm, where the difference approaches half of the full scale. As noted above, we included this item in place of the “fairness to the buyer” question in Elías et al. (2019), motivated by its likely relevance in our context. The results support this choice: societal harm expectations are the single most discriminating dimension between respondents who do and do not support prevention. This connects well with the argument that citizens, fearing a "slippery slope" into a future where organs flow 'from the poor to the rich', might be overly cautious in preventing repugnant transactions (Kanbur, 2001).

Panel (C) shows that European respondents evaluate the kidney transaction more critically across all dimensions. These stronger concerns held by Europeans are in line with their higher baseline repugnance attitudes towards kidney sales (see Table 1). The largest differences appear for anticipated societal harm and concerns about human dignity.

Open-Ended Repugnance To analyze the reasons for viewing kidney transactions as repugnant in an unrestricted way, we include an open-ended question for why respondents chose to prevent/not prevent their respective version of the kidney transaction. Following Ambuehl et al. (2015) and Elías et al. (2019), this allows us to understand the most prominent reasons respondents cite for preventing and for not preventing the kidney transaction. To do so, we separately categorize the 12 most prevalent reasons among respondents indicating willingness to prevent and those not willing to prevent. The exact categorization method is explained in Section D.3. The results are depicted in Figure A.5.

Overall, respondents who are willing to prevent most often cite exploitation as a critical dimension for their preventing decision. Importantly, there is a significant positive inequality treatment effect on mentioning exploitation concerns which is in line with the results from the pre-specified dimension battery. Coercion; illegality or crime; dignity and non-commodification; and missing medical oversight are the next most frequently mentioned arguments. Conversely, respondents who do not prevent the kidney transaction most often cite mutual consent, life-saving, bodily autonomy, the legality of regulation and societal non-interference as reasons for their decision.

4.5 Robustness

To support robustness of our results, we compute our main results (i) using Welch t -tests instead of a regression model, (ii) adding pre-treatment covariates to Equation 1,

(iii) estimating logit and (iv) probit models instead of a linear probability model, and (v) excluding respondents with frequent browser tab switches (≥ 3 times) while participating. The results are qualitatively and quantitatively highly robust to all robustness checks.

(i) The results from Welch t -tests are close to identical to the regression results (Table B.2). (ii) The results are also very similar when covariates are added (Table B.3). The effect comparing baseline repugnance across the European and U.S. samples is even higher and statistically more robust. Estimating (iii) logit and (iv) probit models delivers results virtually identical to the linear probability model supporting the validity of using the latter. Since the results are identical, we do not show the result tables. (v) Excluding presumably more inattentive browser tab switchers from our sample leaves the results qualitatively the same (Table B.4).

5 Conclusion

Repugnance constitutes a constraint on markets. When third-party opposition translates into legal bans, otherwise mutually beneficial transactions fail to occur. While economic research has made substantial progress in identifying contextual features that shape moral opposition, a central claim in philosophical and public debates has remained empirically untested: that financial inequality between transacting parties increases repugnance. This paper provides the first causal evidence on this link.

Across a broad set of classical repugnant transactions (kidney sales, prostitution, paid surrogate motherhood, loan sharking, and waste trade), we show that financial inequality between buyer and seller increases third-party willingness to prevent a transaction. The point estimate is positive in every domain we study, and the pooled effect is large and precisely estimated. The per-vignette estimates are individually significant for three of the five repugnant scenarios; for surrogate motherhood and waste trade, the direction is consistent with the hypothesis but the per-vignette confidence intervals do not exclude zero. The uniformity of sign across all five vignettes, together with the precise pooled estimate, supports the interpretation that the relational effect of inequality is a general feature of repugnant exchanges rather than an artifact of any single domain.

Importantly, the effect of inequality goes beyond a simple low income channel. When poor parties transact, there is a modest willingness to oppose the transaction; however, when the same poor seller transacts with a richer buyer, the repugnance rises substantially. This pattern supports egalitarian interpretations of repugnance that emphasize relational asymmetry rather than absolute deprivation.

We further document that repugnance is not only an individual moral judgment but

also a perceived social norm. Beliefs about others' willingness to prevent closely mirror own willingness to prevent, and these beliefs shift in response to inequality in the same direction as individual judgments. That is, inequality changes not only what individuals think, but also what they believe society will tolerate.

The inequality effect replicates in both a U.S. sample and a European sample drawn from selected European countries, increasing confidence in its generality. We do not interpret the descriptive differences in baseline opposition across the samples as cross-country effects, given the sample-construction limitations discussed in Section 2.

To shed light on mechanisms, we analyze a battery of repugnance dimensions for our kidney vignette. Inequality increases concern across all dimensions we study, with particularly strong effects for exploitation, undue influence, and fairness. By varying the agreed-upon price in additional vignettes, we further investigate the role of exploitation versus coercion in the context of (in)equality. In equality settings, high prices weakly increase repugnance, consistent with coercion concerns. However, under inequality, low prices substantially increase opposition, indicating that unequal exchanges are primarily viewed as exploitative. These results are novel and relevant: changing the relational context, here via introducing financial inequality, can activate repugnance mechanisms that work in opposing directions.

Taken together, our findings have direct implications for market design and policy. If repugnance depends not only on what is sold or who sells, but also on who sells to whom, then interventions that reduce socioeconomic asymmetries may face less resistance. In the context of kidney sales, for example, making giver–receiver similarity salient could raise public acceptance. Furthermore, market design can facilitate repugnant yet desirable markets by addressing concerns arising from expected inequality between transacting parties.

Several limitations and avenues for future research remain. Our study focuses on financial inequality. Other forms of asymmetry – such as race, gender, or citizenship – may interact with repugnance in distinct ways. Our two samples are not nationally representative, and the European sample comprises non-native English speakers responding in English; future work using nationally representative samples and native-language instruments could test cross-country variation directly. While we deliberately chose a moderate level of inequality to ensure realism and policy relevance, more extreme disparities could generate even stronger reactions. Finally, while vignette experiments are well suited to isolating causal mechanisms, future work could examine how inequality shapes repugnance in lab or field settings and political processes more directly.

Financial inequality has risen sharply in many Western societies and is increasingly

salient in public debate. Our results suggest that inequality matters not only for distributive outcomes but also for which markets societies are willing to tolerate at all. By empirically establishing inequality as a driver of repugnance, this paper highlights a previously unexplored channel through which inequality constrains economic exchange – and, ultimately, social welfare.

References

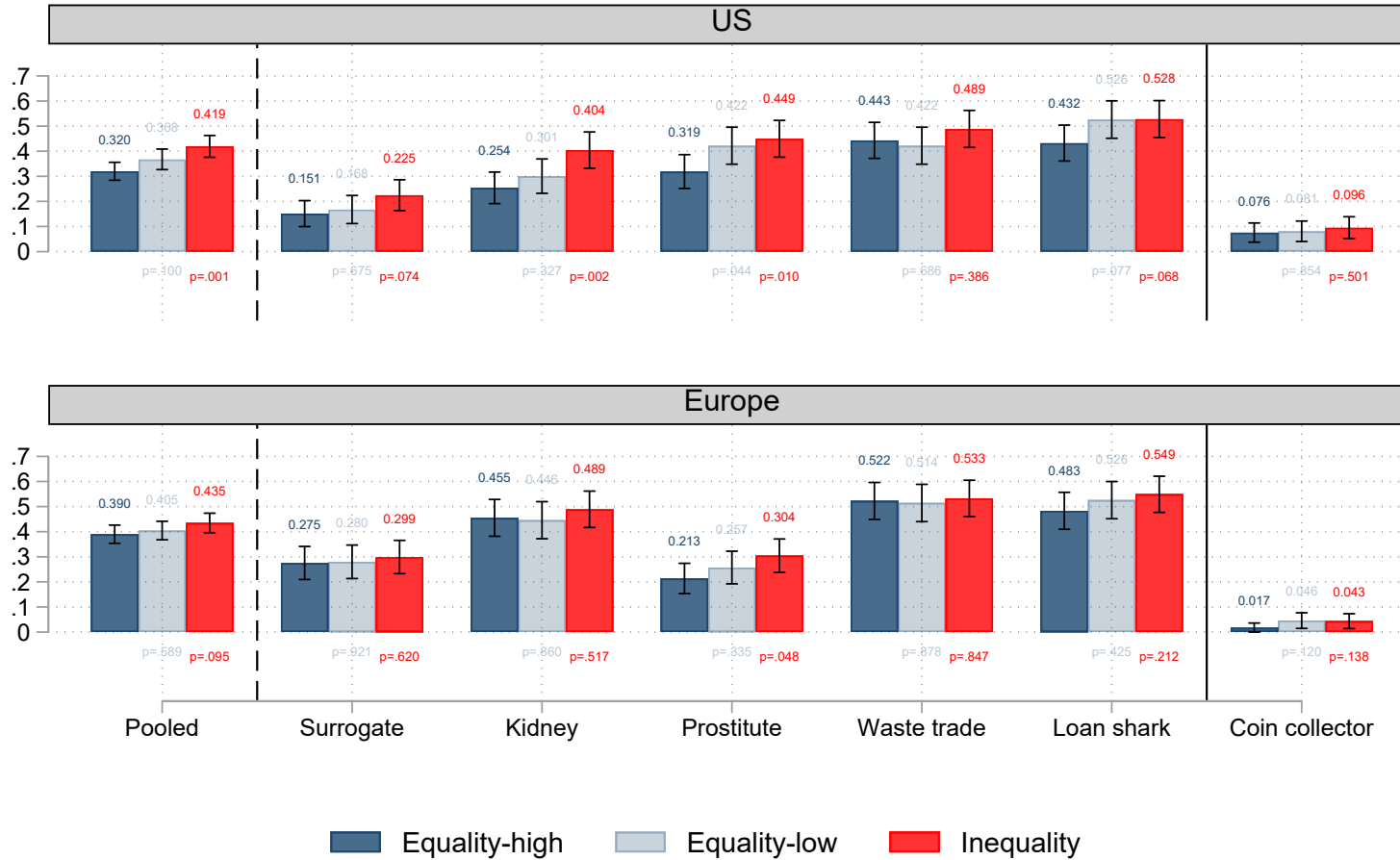
- Albertsen, A. (2025). Ending the organ trade: an ethical assessment of regulatory possibilities. *Monash Bioethics Review*, 43(1):150–165.
- Ambuehl, S. (2024). An experimental test of whether financial incentives constitute undue inducement in decision-making. *Nature Human Behaviour*, 8(5):835–845.
- Ambuehl, S., Niederle, M., and Roth, A. E. (2015). More Money, More Problems? Can High Pay be Coercive and Repugnant? *American Economic Review: Papers & Proceedings*, 105(5):357–360.
- Ambuehl, S. and Ockenfels, A. (2017). The Ethics of Incentivizing the Uninformed: A Vignette Study. *American Economic Review: Papers & Proceedings*, 107(5):91–95.
- Anderson, E. (1999). What Is the Point of Equality? *Ethics*, 109(2):287–337.
- Basel Institute of Governance (2021). Illegal waste trade: what’s driving this multi-billion dollar transnational crime and what could stop it?
- Becker, G. S. and Elías, J. J. (2007). Introducing Incentives in the Market for Live and Cadaveric Organ Donations. *Journal of Economic Perspectives*, 21(3):3–24.
- Bennett, C. (2023). In a surrogacy deal between a rich and poor woman, only one is acting as a free agent. *The Guardian*.
- Bicchieri, C. (2006). The rules we live by. *The Grammar of Society: The Nature and Dynamics of Social Norms*, Cambridge University Press, (10):1–54.
- Bicchieri, C. and Xiao, E. (2009). Do the right thing: but only if others do so. *Journal of Behavioral Decision Making*, 22(2):191–208.
- Cibelli, K. (2017). The effects of respondent commitment and feedback on response quality in online surveys. *University of Michigan*.
- Clapp, A. (2025). The Story You’ve Been Told About Recycling Is a Lie. *The New York Times*.
- Clemens, M. A. (2018). Testing for Repugnance in Economic Transactions: Evidence from Guest Work in the Gulf. *The Journal of Legal Studies*.
- Cunningham, S. and Shah, M. (2018). Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health. *The Review of Economic Studies*, 85(3):1683–1715.
- Danz, D., Vesterlund, L., and Wilson, A. J. (2022). Belief Elicitation and Behavioral Incentive Compatibility. *American Economic Review*, 112(9):2851–2883.
- Elias, J., Lacetera, N., and Macis, M. (2016). Efficiency-Morality Trade-Offs in Repugnant Transactions: A Choice Experiment. Technical Report w22632, National Bureau of Economic Research, Cambridge, MA.

- Elías, J. J., Lacetera, N., and Macis, M. (2015). Sacred Values? The Effect of Information on Attitudes toward Payments for Human Organs. *American Economic Review: Papers & Proceedings*, 105(5):361–365.
- Elías, J. J., Lacetera, N., and Macis, M. (2019). Paying for Kidneys? A Randomized Survey and Choice Experiment. *American Economic Review*, 109(8):2855–2888.
- Elías, J. J., Lacetera, N., Macis, M., and Salardi, P. (2017). Economic Development and the Regulation of Morally Contentious Activities. *American Economic Review: Papers & Proceedings*, 107(5):76–80.
- Feichtner, M., Stuck, J., Dhawan, A., Lennartz, C., and Müller, S. M. (2021). Structures of Inequality.
- Fiske, A. P. and Tetlock, P. E. (1997). Taboo Trade-offs: Reactions to Transactions That Transgress the Spheres of Justice. *Political Psychology*, 18(2):255–297.
- Grodeck, B., Xiao, E., and Xue, N. (2024). No Intention to Profit, yet Still Repugnant: Experimental Evidence for Outcome-Based Repugnance. *SSRN Electronic Journal*.
- Held, P., McCormick, F., Ojo, A., and Roberts, J. (2016). A Cost-Benefit Analysis of Government Compensation of Kidney Donors. *American Journal of Transplantation*, 16(3):877–885.
- Huesmann, K. and Wambach, A. (2025). When Money Shouldn't Buy. ZEW Discussion Paper 25-072, ZEW – Leibniz Centre for European Economic Research, Mannheim. Issue: 25-072.
- Kanbur, R. (2001). Obnoxious Markets. Working Paper WP 2001-08, Department of Applied Economics and Management, Cornell University, Ithaca, New York.
- Kessler, J. B. and Roth, A. E. (2014). Getting More Organs for Transplantation. *American Economic Review: Papers & Proceedings*, 104(5):425–430.
- Leider, S. and Roth, A. (2010). Kidneys for Sale: Who Disapproves, and Why? *American Journal of Transplantation*, 10(5):1221–1227.
- Leuker, C., Samartzidis, L., and Hertwig, R. (2021). What makes a market transaction morally repugnant? *Cognition*, 212:104644.
- Okumu, W. (2025). Black market booming as organ traffickers prey on world's poor. *The Times*. Journal Abbreviation: The Times.
- Persson, E. and Tinghög, G. (2024). Repugnant markets and preferences in public. *Journal of Behavioral and Experimental Economics*, 108:102153.
- Platt, L., Grenfell, P., Meiksin, R., Elmes, J., Sherman, S. G., Sanders, T., Mwangi, P., and Crago, A.-L. (2018). Associations between sex work laws and sex workers' health: A systematic review and meta-analysis of quantitative and qualitative studies. *PLOS Medicine*, 15(12):e1002680.

- Rawls, J. (1971). *A Theory of Justice*. Harvard University Press, Belknap Press, Cambridge, Massachusetts.
- Roth, A. E. (2007). Repugnance as a Constraint on Markets. *Journal of Economic Perspectives*.
- Roth, A. E. and Wang, S. W. (2020). Popular repugnance contrasts with legal bans on controversial markets. *Proceedings of the National Academy of Sciences*, 117(33):19792–19798.
- Sandel, M. J. (2012). *What money can't buy: the moral limits of markets*. Farrar, Straus and Giroux, New York, 1st ed edition. OCLC: ocn740628855.
- Satz, D. (2010). *Why some things should not be for sale: the moral limits of markets*. Oxford political philosophy. Oxford University Press, New York. OCLC: ocn148800439.
- Stüber, R. (2021). Why High Incentives Cause Repugnance: A Framed Field Experiment. *SSRN Electronic Journal*.
- Stüber, R. (2024). Why High Incentives Cause Repugnance: a Framed Field Experiment. *The Economic Journal*, 134(662):2580–2620.
- Tetlock, P. E. (2003). Thinking the unthinkable: sacred values and taboo cognitions. *Trends in Cognitive Sciences*, 7(7):320–324.
- Topol, S. A. (2025). They Answered an Ad for Surrogates, and Found Themselves in a Nightmare. *The New York Times Magazine*.
- United States Census Bureau (2024). Table A-4a. Selected Measures of Household Income Dispersion: 1967 to 2023. URL: <https://www.census.gov/data/tables/2024/demo/income-poverty/p60-282.html> (visited on 2026-03-30).

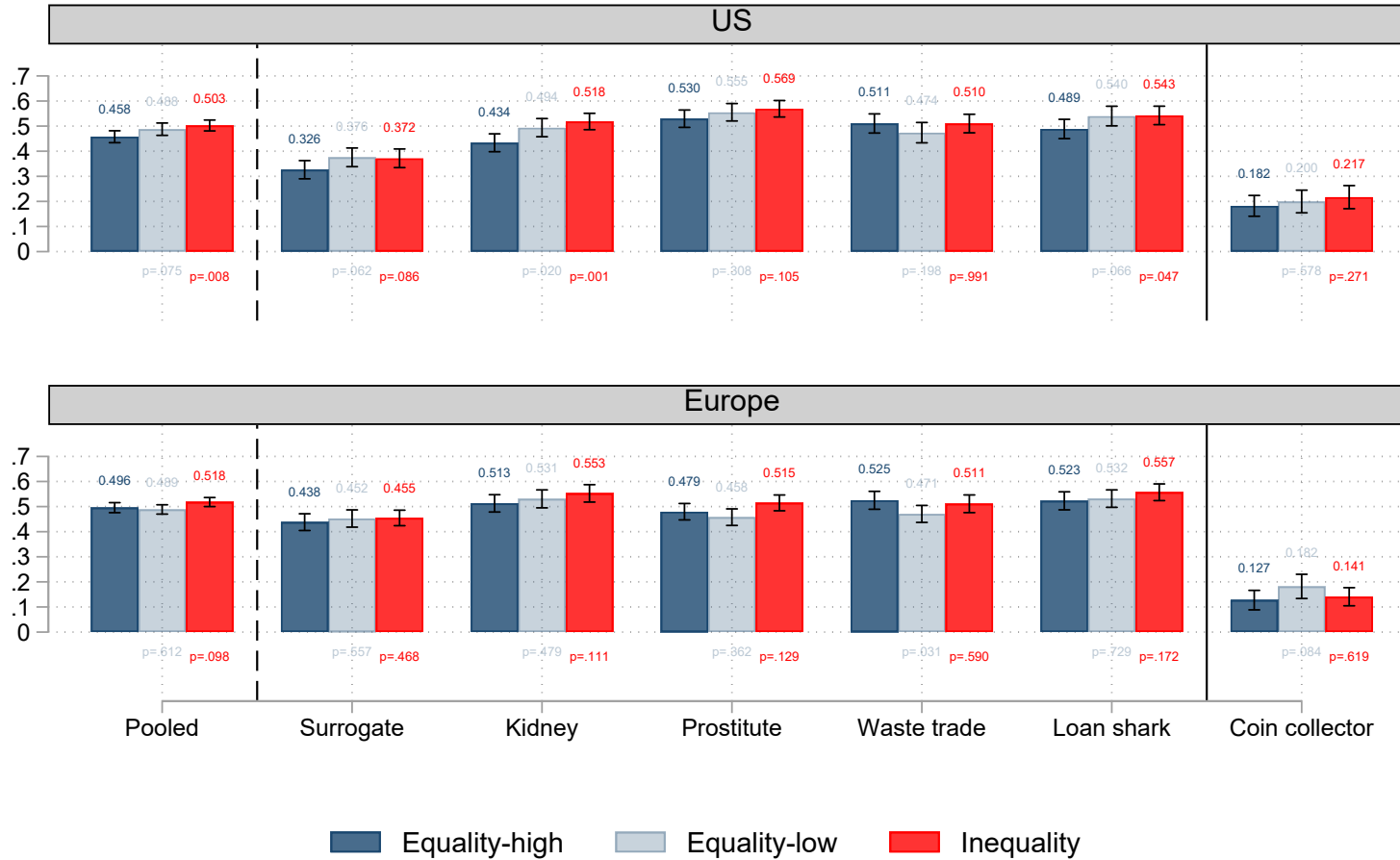
A Figures

Figure A.1: Baseline Willingness to Prevent Across Treatment Groups and Regions



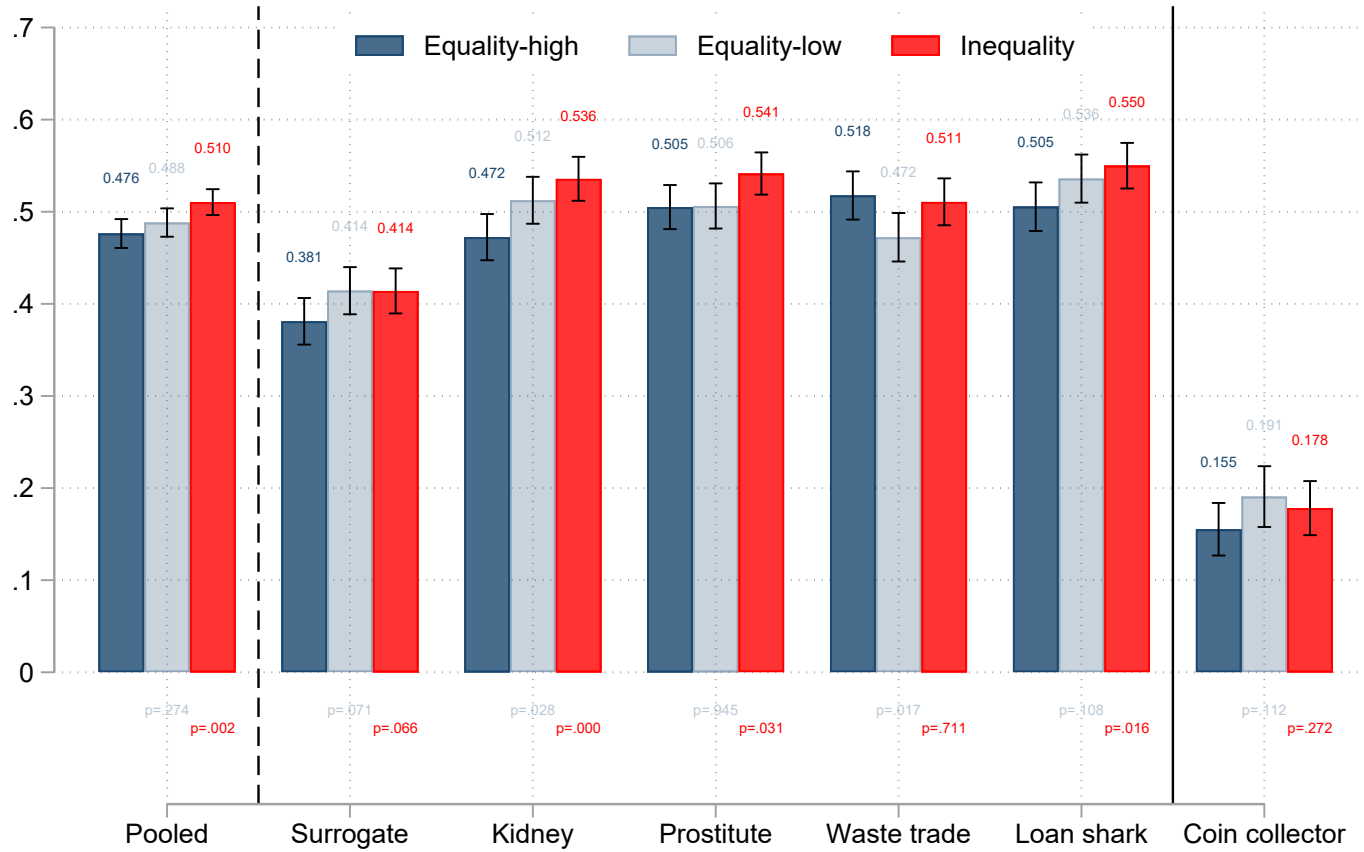
Notes: The figure plots mean support for prevention by vignette, income condition, and sample. Error bars are 95% confidence intervals. The “Pooled” column averages across the five repugnant vignettes: to account for within-respondent correlation, person-level means are first computed across vignettes, and the standard error is then taken across respondents. *p*-values are calculated using Welch *t*-tests comparing *equality-high* to each of the two other treatment groups. The neutral coin collection vignette is included to benchmark general “anti-market” sentiment.

Figure A.2: Repugnance Beliefs across Treatment Groups and Regions



Notes: The figure plots mean beliefs about prevention rates by vignette, income condition, and sample. Error bars are 95% confidence intervals. The “Pooled” column averages across the five repugnant vignettes: to account for within-respondent correlation, person-level means are first computed across vignettes, and the standard error is then taken across respondents. *p*-values are calculated using Welch *t*-tests comparing *equality-high* to each of the two other treatment groups. The neutral coin collection vignette is included to benchmark general “anti-market” sentiment. Figure A.3 shows the same figure pooling both samples.

Figure A.3: Repugnance Beliefs across Treatment Groups



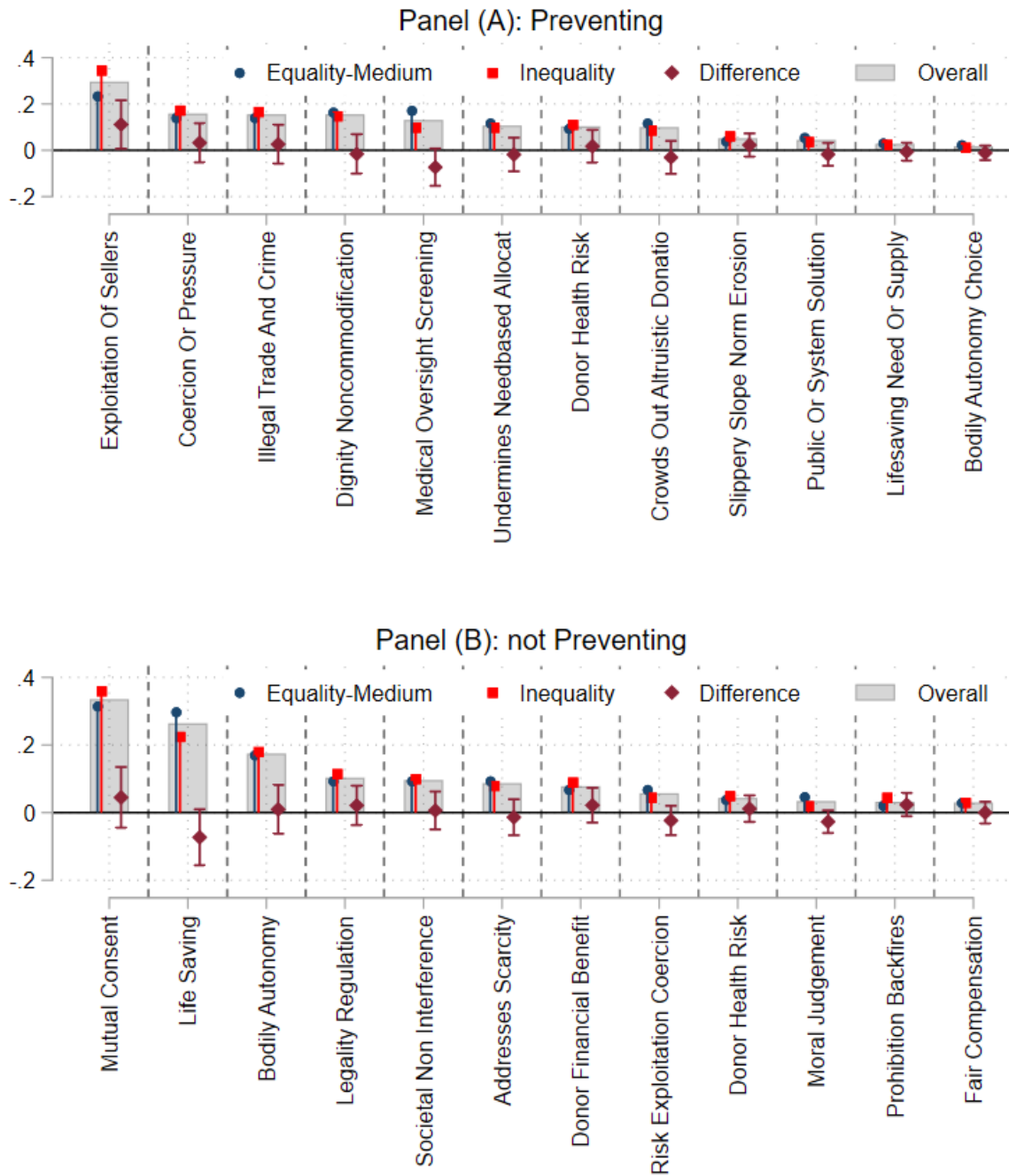
Notes: The figure plots mean beliefs about prevention rates by vignette and income condition, pooling the U.S. and European samples. Error bars are 95% confidence intervals. The “Pooled” column averages across the five repugnant vignettes: to account for within-respondent correlation, person-level means are first computed across vignettes, and the standard error is then taken across respondents. p -values are calculated using Welch t -tests comparing *equality-high* to each of the two other treatment groups. The neutral coin collection vignette is included to benchmark general “anti-market” sentiment.

Figure A.4: Open Text Realism Dimensions



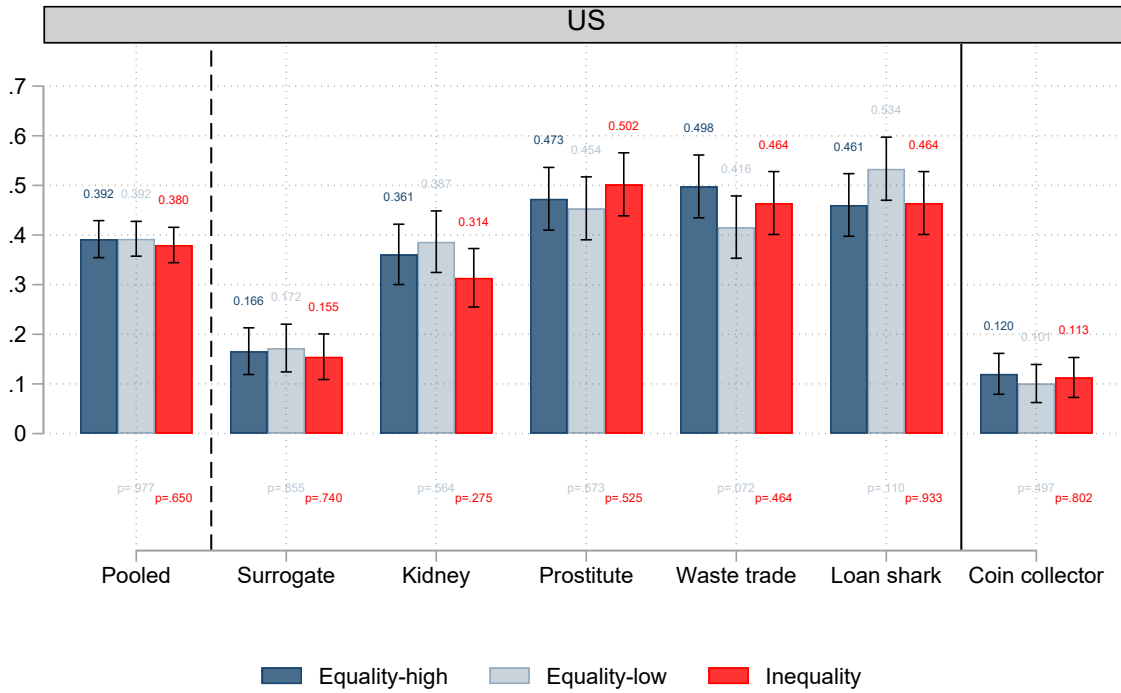
Notes: The figure shows the share of how often certain types of arguments in the open text question on the realism of *inequality* vs. *reversed-inequality* kidney scenario were made separated by respondents who view *inequality* as more realistic (blue) vs. those who view *reversed-inequality* as equally or more realistic (red). ChatGPT was prompted to assign dummies to the 12 most prevalent argument categories used to justify realism across both scenarios throughout the open text entries. Averages over the two groups are plotted in gray. Differences are plotted in purple. 95% confidence intervals are calculated using Welch *t*-tests.

Figure A.5: Reasons for Preventing or not Preventing the Kidney Transaction



Notes: The figure shows the share of how often certain types of arguments in the open text question on preventing the kidney transaction were made separated by respondents in the *equality-high* group (blue) and the *inequality* group (red). ChatGPT was prompted to assign dummies to the 12 most prevalent argument categories used to justify realism across both scenarios throughout the open text entries. Averages over the two groups are plotted in gray. Differences are plotted in purple. 95% confidence intervals are calculated using Welch *t*-tests.

Figure A.6: Pilot Results U.S. Sample



Notes: The figure plots results from the pilot study. It depicts mean support for prevention by vignette and income condition. Error bars are 95% confidence intervals. The “Pooled” column averages across the five repugnant vignettes: to account for within-respondent correlation, person-level means are first computed across vignettes, and the standard error is then taken across respondents. *p*-values are calculated using Welch *t*-tests comparing *equality-high* to each of the two other treatment groups. The neutral coin collection vignette is included to benchmark general “anti-market” sentiment.

B Tables

Table B.1: Covariate Balance

	Equality-high	Equality-low	Inequality	p-value
Age	39.30 (13.58)	40.06 (13.29)	40.36 (14.01)	0.566
Male	0.51 (0.50)	0.51 (0.50)	0.50 (0.50)	0.927
Religiosity intensity	0.91 (1.09)	0.90 (1.09)	1.09 (1.17)	0.064
Prefers redistribution	4.19 (1.77)	4.31 (1.70)	4.14 (1.73)	0.477
Views inequality as issue	4.56 (1.65)	4.67 (1.57)	4.61 (1.58)	0.648
Economic ideology	4.15 (1.84)	4.17 (1.84)	4.07 (1.82)	0.968
Social ideology	4.41 (1.90)	4.49 (1.88)	4.32 (1.94)	0.851
Income (ordinal category)	5.40 (2.97)	5.66 (2.94)	5.68 (2.98)	0.362
Education (ordinal category)	2.90 (1.29)	3.08 (1.34)	2.98 (1.39)	0.423
Employment				0.547
Employed full-time	57.2%	54.3%	51.9%	
Employed part-time	10.1%	13.8%	11.9%	
Self-employed	12.9%	9.6%	11.3%	
Student	8.3%	7.4%	7.7%	
Out of labor force	5.2%	7.2%	8.6%	
Out of work, or seeking work	5.5%	6.9%	6.6%	
Other	0.9%	0.8%	1.9%	
Religion				0.794
Atheist/Agnostic	40.5%	42.1%	39.0%	
Christian	46.8%	46.6%	47.8%	
Jewish	0.3%	0.6%	1.4%	
Muslim	2.9%	3.0%	3.6%	
Other	9.5%	7.7%	8.3%	
Country				0.495
Belgium	3.2%	2.2%	2.5%	
Finland	4.0%	4.1%	3.3%	
Germany	18.1%	21.2%	19.6%	
Netherlands	15.8%	10.5%	13.8%	
Other European	2.3%	5.5%	5.0%	
Sweden	6.9%	5.5%	6.6%	
United States	49.7%	51.0%	49.2%	

Notes: Entries are means with SD in parentheses; p-values are from OLS/ANOVA joint tests across treatment arms. Employment, religion and country p-values are from χ^2 tests of equality of distributions across treatment arms.

Table B.2: Robustness – Welch t-tests

	Pooled	Separate					Neutral
	All repugnant	Surrogate	Kidney	Prostitution	Waste trade	Loan shark	Coin collector
H1: Inequality	0.073 ^{***} (0.020)	0.050 (0.032)	0.095 ^{***} (0.036)	0.108 ^{***} (0.035)	0.029 (0.037)	0.081 ^{**} (0.037)	0.022 (0.017)
S1: More than Low Income	0.041 ^{**} (0.020)	0.038 (0.032)	0.074 ^{**} (0.037)	0.037 (0.036)	0.043 (0.038)	0.013 (0.038)	0.006 (0.019)
C1: Europe vs. US	0.042 ^{**} (0.016)	0.104 ^{***} (0.026)	0.145 ^{***} (0.029)	-0.137 ^{***} (0.028)	0.072 ^{**} (0.030)	0.025 (0.031)	-0.049 ^{***} (0.014)
C2: Stronger H1 Europe	-0.054 (0.040)	-0.050 (0.063)	-0.116 (0.072)	-0.040 (0.068)	-0.035 (0.074)	-0.030 (0.074)	0.007 (0.034)

Notes: Entries are mean differences. C1, H1, and S1 are based on Welch two-sample t-tests. C2 is a difference-in-differences contrast computed from the four relevant group means with an independent-samples variance formula and normal-approximation p-value. Standard errors are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B.3: Robustness – Equation 1 Using Covariates

	Pooled	Separate					Neutral
	All repugnant	Surrogate	Kidney	Prostitution	Waste trade	Loan shark	Coin collector
H1: Inequality	0.070 ^{***} (0.020)	0.045 (0.034)	0.093 ^{**} (0.038)	0.106 ^{***} (0.035)	0.033 (0.039)	0.075 [*] (0.040)	0.023 (0.020)
S1: More than Low Income	0.045 ^{**} (0.020)	0.027 (0.034)	0.086 ^{**} (0.039)	0.024 (0.035)	0.052 (0.038)	0.034 (0.040)	-0.001 (0.020)
C1: Europe vs. US	0.082 ^{***} (0.020)	0.156 ^{***} (0.038)	0.191 ^{***} (0.040)	-0.078 [*] (0.040)	0.090 ^{**} (0.044)	0.050 (0.045)	-0.039 ^{**} (0.019)
C2: Stronger H1 Europe	-0.035 (0.039)	0.007 (0.067)	-0.074 (0.075)	-0.003 (0.070)	-0.064 (0.077)	-0.039 (0.079)	0.030 (0.038)

Notes: All entries are average marginal effects computed from Equation 1 using margins/linear combinations. Standard errors clustered at the participant level. Column (1) includes vignette fixed effects; scenario columns do not. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B.4: Robustness – Excluding Browser Tab Switchers

	Pooled	Separate					Neutral
	All repugnant	Surrogate	Kidney	Prostitution	Waste trade	Loan shark	Coin collector
H1: Inequality	0.060 ^{***} (0.021)	0.029 (0.032)	0.089 ^{**} (0.038)	0.087 ^{**} (0.037)	0.011 (0.040)	0.084 ^{**} (0.040)	0.003 (0.016)
S1: More than Low Income	0.037 [*] (0.021)	0.013 (0.033)	0.060 (0.039)	0.039 (0.038)	0.036 (0.040)	0.034 (0.040)	-0.012 (0.018)
C1: Europe vs. US	0.061 ^{***} (0.017)	0.114 ^{***} (0.026)	0.177 ^{***} (0.031)	-0.123 ^{***} (0.030)	0.099 ^{***} (0.032)	0.039 (0.032)	-0.033 ^{**} (0.014)
C2: Stronger H1 Europe	-0.043 (0.041)	-0.030 (0.064)	-0.123 (0.075)	-0.025 (0.074)	-0.023 (0.079)	-0.012 (0.079)	0.030 (0.033)

Notes: All entries are average marginal effects computed from Equation 1 using margins/linear combinations. Standard errors clustered at the participant level. Column (1) includes vignette fixed effects; scenario columns do not. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C Subgroup Treatment Effects

For analyzing subgroup treatment effects, we run interacted regressions exchanging the sample region dummy with binary variables for various demographics in Equation 1:

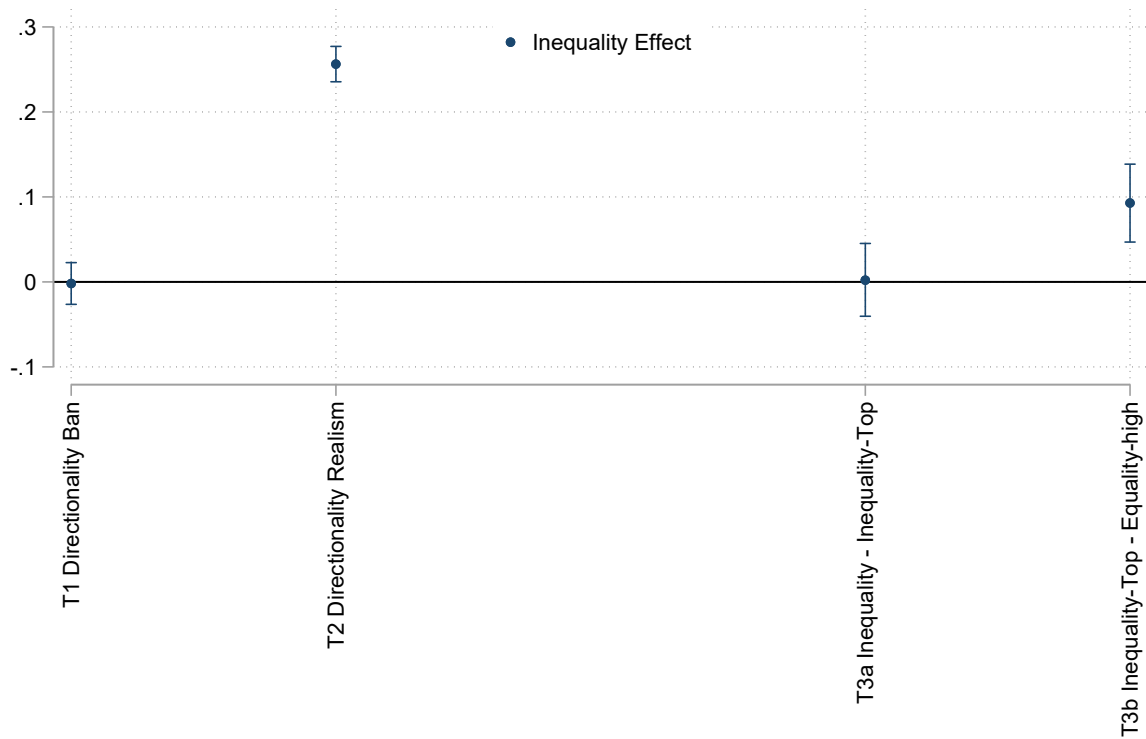
$$\begin{aligned}
 Y_{iv} = & \alpha + \beta_1 \mathbb{1}\{\text{Inequality}_i\} + \beta_2 \mathbb{1}\{\text{EqualityLow}_i\} \\
 & + \gamma \mathbb{1}\{\mathbf{D}_i\} \\
 & + \delta_1 \mathbb{1}\{\text{Inequality}_i\} \times \mathbb{1}\{\mathbf{D}_i\} + \delta_2 \mathbb{1}\{\text{EqualityLow}_i\} \times \mathbb{1}\{\mathbf{D}_i\} \\
 & + \lambda_v + \varepsilon_{iv}.
 \end{aligned} \tag{2}$$

Here, \mathbf{D}_i denotes indicators for age, gender, respondent income, religiosity, education, political orientation (social and economic), and attitudes toward inequality and redistribution. Precise definitions are provided in Appendix Section D.1.

T Subgroup Treatment Effects *The effect of financial inequality (H1) differs across subgroups of the population (gender, age, income, religiosity, education, social and economic political ideology, political views on inequality and redistribution).* As we assume egalitarian views to differ across subgroups of the population, we hypothesize that the effect of inequality also differs.

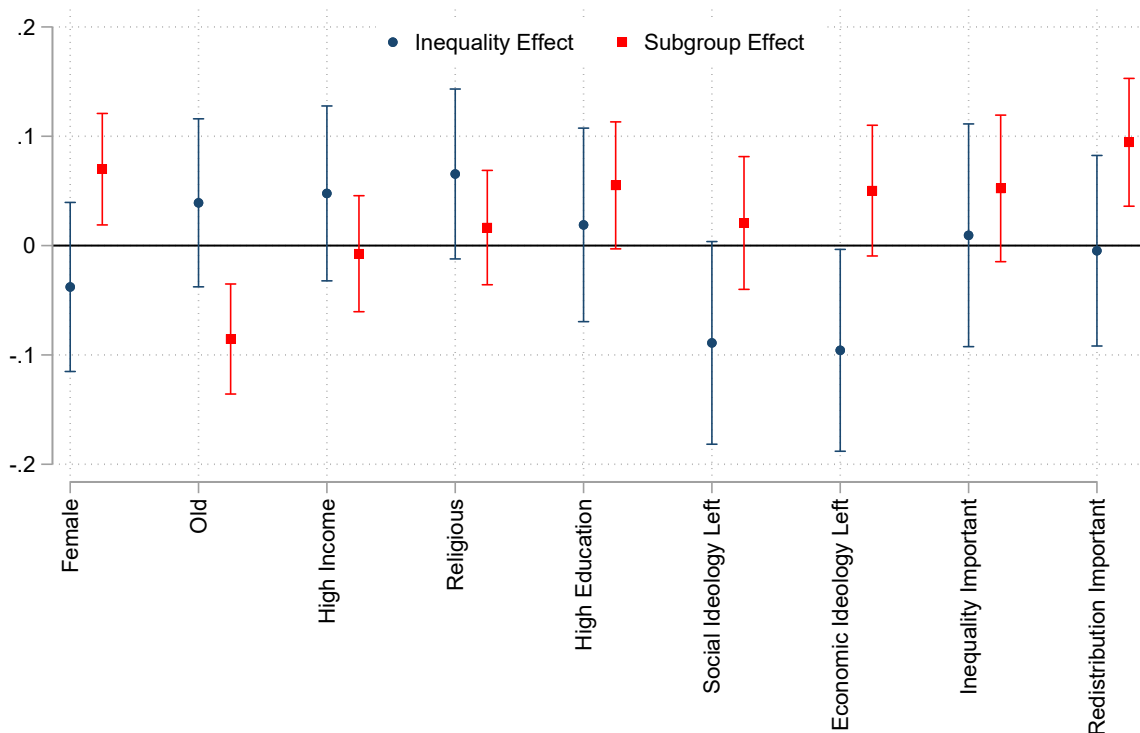
Figure C.2 reports the subgroup-specific inequality interaction $\hat{\delta}_1$ (blue). For context, we also plot the subgroup baseline difference $\hat{\gamma}$ (red). Female participants exhibit higher baseline prevention rates, but do not react significantly to the inequality treatment ($p \approx 0.337$). Older respondents are less likely to support prevention on average, while the inequality treatment interaction is imprecisely estimated ($p \approx 0.318$). The remaining subgroup effects are statistically insignificant and are reported for completeness. Baseline opposition differs only modestly by respondent income. High-income respondents show a stronger repugnance response to inequality. Religious respondents display higher baseline opposition and a positive inequality interaction. Highly educated respondents exhibit higher baseline opposition but little reaction to the inequality treatment. Finally, respondents who are politically left-leaning (on social or economic issues) show *smaller* inequality treatment effects. These differences are statistically meaningful ($p \approx 0.060$ and $p \approx 0.042$ for social and economic ideology, respectively). This is inconsistent with the hypothesis that more egalitarian respondents would react more strongly to income asymmetry. We also do not find stronger inequality responses among respondents who report that inequality is an important issue or who favor redistribution, although these groups tend to display higher baseline opposition.

Figure C.1: Other Hypotheses



Notes: The figure plots point estimates and 95% confidence intervals for pre-registered tertiary hypotheses. Positive inequality effect estimates (blue) correspond to the hypothesized direction. The corresponding analyses are explained in more detail in the text.

Figure C.2: Subgroup Analysis



Notes: The figure plots point estimates and 95% confidence intervals from Equation 2, estimated separately for each subgroup indicator $\mathbb{1}\{D_i\}$. Blue markers report the inequality–subgroup interaction $\hat{\delta}_1$: the differential effect of the inequality treatment for respondents in the subgroup relative to its complement. Under the pre-registered hypothesis that more egalitarian-leaning subgroups react more strongly, $\hat{\delta}_1 > 0$. Red markers report the subgroup baseline difference $\hat{\gamma}$: the average difference in willingness to prevent between the subgroup and its complement, holding the treatment fixed. Subgroup indicators are defined in Appendix Section D.1.

D Further Information

D.1 Variable Definitions

The variables used for the rightmost block of estimates in Figure C.1 are all binary variables. They are generated as follows: *Female* equals one if a person identifies as female including only respondents identifying as female or male. *Old* equals one if a participant’s age is above the sample median. *High Income* equals one if a person earns more than \$60,000 excluding those who indicated “Prefer not to answer”. *Religious* equals one if a participant is at least slightly religious excluding all those who answered “Don’t want to answer” to the respective question. *High Education* equals one if a participant indicated to hold a “Bachelors”, “Masters”, “Professional Degree”, or “Doctorate” and zero

for “Haven’t graduated high school”, “High school graduate”, or “GED”. *Social Ideology Left* and *Economic Ideology Left* equal one if a respondent identifies as left on the respective questions. We exclude participants indicating “Other”, “Don’t know/not political”, or “Moderate/middle-of-the-road” for the creation of this variable. *Inequality Important* and *Redistribution Important* equal one if respondents answered “Moderately agree” to “Strongly agree” and zero if they answered “Strongly disagree” to “Neutral” on the respective questions.

D.2 Open Text Realism

To categorize the arguments used for and against the realism of *reversed-inequality* and *inequality*, we reduced researcher degrees of freedom as far as possible. That is, we did not identify the most prevalent arguments ourselves but used ChatGPT instead. The exact prompt is provided below. The results are depicted in Figure A.4.

ChatGPT Prompt The following prompt was used to assess the argumentation categories for realism using GPT-5.2 Thinking.

Appended is an Excel file with an id and two open-text columns. The open text columns contain arguments on the realism of two different kidney-transaction scenarios. `directionality_realism_ot_1` refers to Scenario 1. `directionality_realism_ot_2` refers to Scenario 2.

Your task is to identify exactly the 12 most prevalent argumentation categories arguing for the realism of a scenario. For each category, provide a short label, a 2 sentence definition, and 2 short example quotes from 1 from 2.

Code every response using these 12 categories. Add 12 dummy variables to the dataset. Use informative variable names always starting with `''realism_''`. Code 1 if the category appears, else 0. Multiple categories may be 1. Empty/irrelevant responses get all zeros.

Export an `.xlsx` with the original data plus the new dummy columns, and add two sheets: Codebook and Comparison.

Rules: be conservative, do not infer respondent traits, use only what is explicitly in the text.

Categories and Definitions The following categories and respective definitions are formed:

Income Role Reversal Uses the relative income of buyer vs. seller (e.g., richer seller / poorer buyer) to argue the scenario is (un)realistic, often invoking that wealthier people tend to be buyers and poorer people tend to be sellers.

Seller Financial Need Cites the seller's financial need (or lack of need) as the reason selling a kidney is (un)realistic (e.g., desperation, low income, hardship).

Buyer Affordability Argues realism based on whether the buyer has sufficient resources to purchase the kidney (ability to pay, funds, affordability).

Price Amount Plausibility Focuses on whether the payment/price is plausible or fair (e.g., too high/low, standard/market price, proportion of payment).

Transplant System Alternatives References the legal/medical transplant system or alternatives to purchase (donation, donors, waiting lists, insurance), which changes plausibility of a private transaction.

Illegality Blackmarket Mentions that organ transactions are illegal, criminal, or happen via a black market, affecting realism.

Ethics Morality Justifies realism judgments by appealing to ethical or moral considerations (right/wrong, unethical, shouldn't).

Health Risk Surgery Highlights medical risks, surgery/operation concerns, or health consequences as affecting whether someone would buy/sell.

Relationship Trust Discusses whether buyer and seller are strangers vs. family/friends/known parties, and how trust/relationship affects plausibility.

Medical Urgency Need Cites the recipient's medical need (e.g., kidney failure, dialysis, life-saving urgency) as a driver of seeking a kidney.

Exploitation Coercion Frames the situation as exploiting or pressuring vulnerable/low-income people (taking advantage, coercion, forced selling).

Real-world Prevalence Appeals to how common or rare the situation is in real life (e.g., happens often/regularly, rare, country context).

D.3 Open Text Preventing Kidney

To analyze the reasons for why respondents prevent or don't prevent the kidney transaction, we let them answer in an open text field right after finishing all the vignettes, that is, before changing any other contextual parameters. We use ChatGPT to identify the 12 most prevalent argument categories among respondents who prevent and among those who do not prevent.

ChatGPT Prompt The following prompt was used to assess the argumentation categories for realism using GPT-5.2 Thinking. When letting ChatGPT identify the categories in the subgroup who prevents, we include the constraint to form two separate categories for coercion and exploitation to be able to disentangle these two channels as this is a relevant comparison in our study. Aside from that, we use the exact same prompt.

```
You are a senior qualitative researcher and content analyst.
```

```
GOAL
```

```
I will upload an Excel file (.xlsx) containing open-text responses about whether a kidney-transaction (someone selling a kidney to another person) should be BANNED or ALLOWED. Your job is to (1) inductively derive exactly 12 argument categories used across the responses, and (2) code every response using those categories.
```

```
INPUT (XLSX)
```

- I will provide an .xlsx file.
- Find the sheet that contains the open-text responses.
- Identify the column that contains the response text (e.g., "text", "response", "open_text", etc.).
- Identify an id column if present (e.g., "id", "response_id"). If none exists, create response_id as the row number starting at 1.
- Do not change the original sheet; create a NEW output .xlsx.

```
HARD CONSTRAINTS
```

- Since the experimental variation was in inequality, there cannot be a category equality/inequality.
- You have to include two separate categories exploitation (whether the transaction exploits the seller) and coercion (whether the seller is coerced into the transaction) since this is an important margin of

investigation for me.

- Produce EXACTLY 12 categories. No more, no less.
- Categories must be argument-types (reasons/justifications), not sentiment, tone, or writing style.
- Do NOT include a generic Other/Misc category among the 12.
- Categories should be mutually distinguishable with clear inclusion/exclusion rules.
- Multi-label coding is allowed: a response may have multiple categories.
- Code only what is explicitly stated or unambiguously implied; do not invent arguments.

WORK METHOD (do internally; do not output these steps)

- 1) Open-code arguments: break each response into atomic argument claims (one reason per claim).
- 2) Consolidate: merge/split themes until you have exactly 12 categories that are broadly used across the dataset.
- 3) Code: apply the final 12-category codebook consistently to every response.

OUTPUT (XLSX ONLY -- no JSON, no markdown tables, no summary stats)

Return ONE .xlsx file containing exactly TWO sheets:

SHEET 1: "Codebook"

Create a table with exactly 12 rows (one per category) and these columns:

- category_id (112)
- category_name (short, specific)
- definition (12 sentences)
- include_if (clear decision rules; concise but strict)
- exclude_if (clear decision rules; concise but strict)
- edge_cases (how to handle common confusions/overlaps)
- example_snippet_1 (<= 20 words; verbatim from dataset)
- example_snippet_2 (<= 20 words; verbatim from dataset)

SHEET 2: "Coded_Responses"

Create a row for every input response, with these columns:

- id
- original_text (verbatim, unchanged)
- 12 binary category columns whether the argument is present (1) or not (0)

CODING RULES

- Assign a category if the response contains at least one argument matching the category definition.
- Be consistent: the same argument type should map to the same category across the dataset.

DELIVERY

When you finish, return ONLY the generated .xlsx file with the two specified sheets.

Do not include any narrative explanation, summary statistics, or additional sheets.

Categories and Definitions: Preventing The following categories and respective definitions are formed:

Dignity Non-Commodification Argues that buying/selling kidneys is morally wrong or violates human dignity because organs should not be commodities.

Exploitation of Sellers Argues that the market transaction would take unfair advantage of vulnerable sellers (e.g., rich buyers exploiting poorer sellers).

Coercion or Pressure Argues that sellers may be pressured or forced (financial desperation, debt, family/criminal pressure), so consent is not truly voluntary.

Donor Health Risk Argues that kidney removal poses significant health risks to the seller/donor (surgery complications, long-term harm, reduced lifespan).

Medical Oversight Screening Argues that transplant safety requires medical regulation/oversight (screening, hospitals/doctors, disease risk, safe/regulated procedures).

Illegal Trade and Crime Argues that organ sales would create or fuel illegal markets and crime (trafficking, theft, kidnapping, violence, organized crime).

Undermines Need-Based Allocation Argues that paid transactions undermine fair allocation systems (waiting lists/medical priority) by letting payment bypass need-based rules.

Crowds Our Altruistic Donation Argues that kidneys should be donated as an altruistic/voluntary gift and that payment harms or replaces altruistic donation norms.

Life-Saving Need or Supply Argues from life-saving urgency/benefit – people need kidneys to survive, shortages exist, or enabling transfers could save lives/reduce waiting.

Bodily Autonomy Choice Argues that competent adults should be free to decide what to do with their bodies (including selling/donating) and society should not interfere.

Slippery Slope Norm Erosion Argues that allowing kidney sales sets a dangerous precedent or slippery slope toward broader commercialization/ethical erosion.

Public or System Solution Argues that society/government/healthcare systems should handle the problem (public support, taxes, programs) rather than private kidney sales.

Categories and Definitions: not Preventing The following categories and respective definitions are formed:

Life-Saving Medical Need Argues that the transplant is justified because it prevents death or addresses urgent, life-threatening illness.

Bodily Autonomy and Self-Ownership Justifies the decision based on ownership/control over one's body and the right to choose what to do with it.

Mutual Consent and Voluntary Agreement Frames the transaction as acceptable because both parties willingly agree and consent to the arrangement.

Societal non-Interference / Private Matter Argues that society/government should not intervene because the decision is a private matter between individuals.

Fair Compensation for Risk and Burden Justifies payment as deserved compensation for the donor's medical risk, pain, recovery time, or sacrifice.

Donor Financial Benefit / Win-Win Exchange Argues the transaction should be allowed because it improves the donor's financial situation or is mutually beneficial.

Addresses Organ Scarcity or Waiting Lists Justifies allowing (or discussing) the transaction by referencing organ shortages, long waiting lists, or speeding access to a kidney.

Legality, Regulation, and Safeguards Discusses whether the transaction should be legal/illegal or emphasizes regulation, contracts, screening, or formal safeguards.

Prohibition Backfires: Black Market Argues that banning the transaction would push it underground or that legal channels reduce black-market organ trading.

Risk of Exploitation or Coercion Raises concern about people being pressured, exploited, or forced into selling organs, including trafficking concerns.

Donor Health and Safety Risks Discusses medical safety of donating/selling a kidney – risks of surgery, complications, harm, or ability to live with one kidney.

Moral or Ethical Judgment Justifies the position by appealing to morality/ethics (e.g., ethical acceptability, moral concerns) as a key reason.

E Pilot

We ran a pre-registered pilot for our experiment on Prolific ($N = 718$) using only a U.S. sample and including only the inequality hypothesis (H1) as a main hypothesis¹⁵. The experiment was run in March, 2025. In the experiment, we found only null results for our main inequality hypothesis. For completeness, we depict the main results corresponding to Figure A.1 in Figure A.6. The vignette ordering from lowest to highest baseline repugnance in the U.S. is similar to the final experiment. However, the inequality treatment effect (H1) is not clearly evident. All p -values from corresponding Welch t -tests are far from conventional significance levels.


Since we were still convinced about our main inequality treatment mechanism, we assumed that the null result was driven by various reasons. Empirically, we hypothesized that low egalitarian views in the more libertarian U.S. population could explain the null result. This led us to substantially change the scope of our experiment. In particular, we changed our pre-registered hypotheses as well as the subject pool. Our main focus in addition to maintaining the inequality hypothesis (H1) shifted to U.S.-European differences in baseline repugnance (C1) and in the inequality treatment effect (C2). We assumed higher baseline repugnance as well as stronger treatment effects among Europeans.

Moreover, various reasons made participation in the first experiment tenuous which led us to substantially change the experimental design. (1) We dropped three previously included additional vignettes to reduce participation time for the experiment (dwarf tossing, paid jumping of queues of seats for congressional hearings and another neutral apple selling scenario). These choices were made based on keeping the most policy-relevant vignettes. (2) We reduced the number of questions in part II of the experiment, only keeping the questions of highest interest. In particular, we wanted to maintain the analysis of high-price vs. low-price and coercion vs. exploitation channels as well as analyzing repugnance for financial inequality in the upper half of the income distribution. (3) We substantially improved the experimental interface of the experiment to heighten participant engagement. (4) We substantially reduced the length of our introductory slides to decrease time spent on non-engaging explanatory slides. We ensured participants understood the incentivization for their belief guesses but we put the detailed bonus payment explanations behind a clickable button. (5) Most prominently, participants were told that those switching tabs might not earn the bonus; indeed, this reduced time spent in the experiment. (6) We increased the subject pool assuming lower effect sizes than expected before running the pilot. Note that after running the final experiment, the previously

¹⁵<https://osf.io/2vyng>

higher expected effect sizes materialized, making our results highly significant.

F Experiment Material



Consent Form

This is a research study run by the Department of Economics at the University of Mannheim, Germany. All data will be anonymized and used only for research.

This study includes a bonus payment.

Please complete this study in one sitting without switching tabs or browsers. Otherwise, we may not be able to pay you your bonus.

Do you **promise** to complete this study in one sitting and without clicking out of the browser window?

- I promise
- I cannot promise

Next

Study Instructions

This study

In this study, you will read descriptions of various situations. In each situation, a buyer and a seller are planning on engaging in an economic transaction such as selling a specific good or a service. These transactions may not be taking place in your country but they do take place in other countries.

The study has 2 parts.

- Part I: You will be shown various transaction scenarios and answer questions about them.
- Part II: One of the transaction scenarios will be shown to you again and you will answer more detailed questions about it.

How We Pay You

Your payment consists of two parts: A completion fee of \$3.15 (2.73EUR) and a bonus payment of up to \$2 (1.73EUR).

Some questions in this study relate to **personal opinions**, while some questions have **an actual correct answer**. Your bonus payment depends on how well you perform in the questions with correct answers. To maximize your bonus, you should try to answer these questions as accurately as possible. (Optional: Click [Here](#) to see how exactly the bonus is determined)

These instructions will always be available to you at the bottom via the "Instructions" button.

Instructions

Next

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There are 6 questions with correct answers. One of these will be randomly chosen by the computer to determine your bonus.

If your answer to the randomly chosen question is within 10% of the correct value, then you will earn the \$2 bonus

OK

Honesty Form

To ensure our research yields **meaningful insights**, we rely on high-quality data and accurate responses. We kindly ask that you **carefully review all the provided information** and answer each question **thoughtfully** and to the **best of your ability**.

Do you **agree** to be careful and provide your best answers?
Please be honest. Your answer will not affect your payment.

- Yes
- No
- I cannot promise

Next

Start 😊

It is important to us to ensure that you are paying attention to the questions. We do so with what is called an attention check. This is an attention check. In the question below is a list of countries. Please choose 'Russia' in this list.

Choose the country that was described in the instructions.

- USA
- Canada
- Mexico
- Austria
- Germany
- Switzerland
- Russia
- India

Instructions

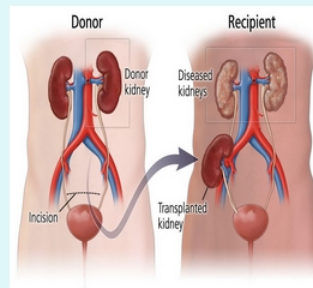
Next

Scenario 1/6

Please **read carefully** the following situation and **evaluate** it.

Background: Kidney transplant

Advances in surgery and medication make living kidney donation a successful treatment for end-stage kidney disease. In this process, an individual with two healthy kidneys undergoes surgical removal of one kidney. This kidney is then transplanted into the recipient, restoring kidney function. Individuals can live healthy and fulfilling lives with a single kidney. In the USA, more than 90,000 people are on the waiting list for a kidney donation.



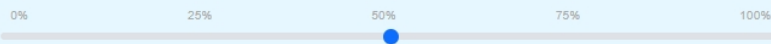
Scenario

Sam is a 40-year-old man. He lives in a medium-sized city and has a desk job at a logistics company. He earns \$34,000 annually. Bob is a 40-year-old man. He also lives in a medium-sized but different city. He is employed at a small firm where he earns \$101,800 annually. Due to final-stage kidney disease, Bob urgently needs a replacement kidney. Although he is on the waiting list for a kidney donation, his doctors tell him that he is not high enough on the list to receive a donation in time. Sam hears about Bob's situation through word of mouth. They come to the agreement that Sam will sell one of his kidneys to Bob at an agreed price.

In your opinion, should society prevent this transaction?

Yes No

What percentage of participants, do you believe, will answer "Yes" to the question above?



Instructions

Next

Scenario 2/6

Please **read carefully** the following situation and **evaluate** it.

Background: Coin Collecting

Collecting items like coins is a popular hobby enjoyed by people worldwide. Some of these items, though not initially valuable, can increase in worth over time due to collector interest. Online forums provide platforms for coin collectors to buy and sell coins and connect with others who share their passion.



Scenario

Samuel is a 40-year-old man who works at a regional company, earning an annual income of \$33,400. In addition to his job, he enjoys collecting coins as a hobby. One day, he decides to sell part of his coin collection and posts it on an online forum for coin enthusiasts. Brian is a 32-year-old man. He lives and works in a nearby city. His annual income is \$100,000 and Brian also collects coins. When Brian comes across Samuel's offer on the online platform, he finds it particularly interesting. After a brief exchange of messages, they agree that Samuel will sell his collection to Brian at the listed price.

In your opinion, should society prevent this transaction?

Yes No

What percentage of participants, do you believe, will answer "**Yes**" to the question above?



Instructions

Next

Scenario 3/6

Please **read carefully** the following situation and **evaluate** it.

Background: Loansharking

A loan shark is an individual who lends money at high interest rates, often accompanied by aggressive collection methods. Loansharking is characterized by exorbitant weekly interest rates, typically around 20%. Unlike traditional banks, which may take several days or weeks to process loans and often require proof of stable residency, loan sharks offer quick access to funds, making them particularly appealing to those facing urgent financial need.



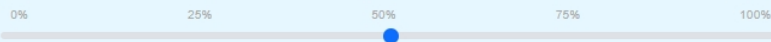
Scenario

Paul is a 45-year-old man. His annual income is \$33,600. Peter is a 30-year-old man. His income is \$101,000. Paul's son is diagnosed with a life-threatening tumor. While surgery offers a chance to save his life, it must be performed immediately. The only available surgeon capable of performing the procedure on short notice requires an upfront payment. After selling all the assets he can liquidate, Paul still falls \$100,000 short. Traditional banks, which offer yearly interest rates of 5%, are not an option due to their lengthy processing times. Paul and Peter come to the following agreement: Peter will lend Paul the remaining amount for one month at an interest rate of 25%.

In your opinion, should society prevent this transaction?

Yes No

What percentage of participants, do you believe, will answer "Yes" to the question above?



Instructions

Next

Scenario 4/6

Please **read carefully** the following situation and **evaluate** it.

Background: Waste Trade

The global waste trade involves the cross-border exchange of waste between nations for treatment, disposal, or recycling. Developing countries frequently import hazardous waste from more economically developed nations, raising ethical and environmental concerns. The United States ranks as one of the largest exporters of plastic waste globally.



Scenario

Country A is a medium-sized nation with an average annual income of \$33,900 per person. Country B is a medium-sized country with an average annual income of \$101,800 per person. Country A generates a substantial volume of consumer-product waste. Country B and Country A come to the following agreement: Country A will pay Country B to take some of its hazardous waste for disposal and recycling.

In your opinion, should society prevent this transaction?

Yes No

What percentage of participants, do you believe, will answer "Yes" to the question above?



Instructions

Next

Scenario 5/6

Please read carefully the following situation and evaluate it.

Background: Gestational Surrogacy

Gestational surrogacy is a medical solution for certain types of infertility. It enables a woman to have a biological child through another woman's pregnancy. In this process, doctors fertilize the intended mother's egg in a laboratory and implant the resulting embryo into a surrogate. The surrogate carries the baby under a legal agreement, ensuring the child is handed over to the intended mother after birth.



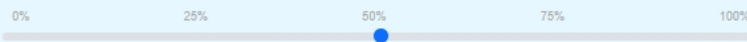
Scenario

Samantha is a 29-year-old single woman. She is employed at a firm close to where she lives. Her annual income is \$33,500. Beth is a 42-year-old single woman, and she lives in a city 500 miles away from Samantha. Her annual income is \$101,100. Beth wants to have a baby but she is infertile. She does not want to adopt because she wants to be the genetic mother of her child. She has already acquired donor sperm and is looking for a surrogate mother. Samantha and Beth meet on an online platform where they come to the following agreement: Beth will pay Samantha to be a surrogate mother for her child. This means Samantha will be pregnant with Beth's baby, and upon delivery, the baby will be given to Beth with all legal rights.

In your opinion, should society prevent this transaction?

Yes No

What percentage of participants, do you believe, will answer "Yes" to the question above?



Instructions

Next

Scenario 6/6

Please **read carefully** the following situation and **evaluate** it.

Background: Prostitution

Prostitution is the exchange of sexual services for money, goods, or other forms of compensation. It is a profession practiced worldwide, though its legality, regulation, and social perception vary greatly by country and culture.

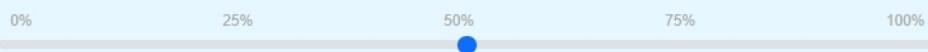
Scenario

Sarah is a 31-year-old woman. She lives in the countryside and works at a company in a nearby large city. She commutes to her job with her private car. Her annual income is \$33,200. Benjamin is a 45-year-old man. He lives and works in the city where Sarah works. His annual income is \$101,200. Although Benjamin and Sarah have never met, he has noticed her on several occasions in public spaces. While Benjamin is not interested in dating, he finds the idea of a one-time, no-strings-attached sexual encounter appealing. By chance, the two cross paths in a park and strike up a conversation. During their talk, they come to an agreement: Benjamin will pay Sarah to have sex with him in a safe, pre-arranged location of her choosing.

In your opinion, should society prevent this transaction?

Yes No

What percentage of participants, do you believe, will answer **"Yes"** to the question above?



Instructions

Next

Final scenario

Please **read carefully** the following situation and **evaluate** it.

In order to analyze your attitudes and opinions, data quality is very important. Often researchers have to employ the so called attention checks to ensure the quality of the data collected.



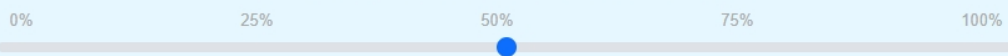
Scenario

We would thus like to know whether you are still paying attention and reading the text, rather than just checking one of the options and clicking "Next". If you are still paying attention, please in the first question below choose "Yes" and in the question below input exactly "73 percent" to continue.

In your opinion, should society prevent this transaction?

Yes No

What do you think: in which range is the proportion?



Instructions

Next

What do you think: in which range is the proportion?

0%


25%

50%

75%

100%

Your answer: 65%

Next: Part II 

Thank you for completing Part I. In the next part, you will answer more questions about the "Kidney transplant" scenario.

Instructions

Next

Part II. Reasons.

If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

In the "Kidney transaction" scenario, you said that you think the society **should not prevent** Sam from selling his kidney to Bob. Please write 1 or 2 sentences explaining why you think so.

Instruction Buttons

Instructions

Kidney transplant

Next

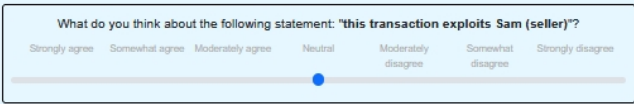
Part II. Moral dimensions (Page 1/5) 🗳️

Please answer the following questions about the "Kidney transplant" scenario. If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

Please answer the questions below by moving the sliders. Remember, in this scenario, Sam is the seller, Bob the buyer.

What do you think about the following statement: "this transaction exploits Sam (seller)"?

Strongly agree Somewhat agree Moderately agree Neutral Moderately disagree Somewhat disagree Strongly disagree



In your opinion, does this transaction respect or limit individual autonomy (i.e. self-determination)?

Greatly limits autonomy Somewhat limits autonomy Moderately limits autonomy Neutral Moderately respects autonomy Somewhat respects autonomy Greatly respects autonomy



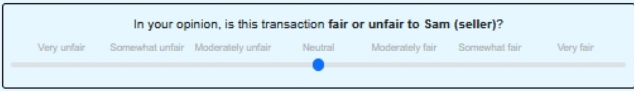
In your opinion, does this transaction allow Sam (seller) to make fully informed choices or does it exert undue influence?

Severe undue influence Somewhat undue influence Moderate undue influence Neutral Moderately informed choices Somewhat informed choices Fully informed choices



In your opinion, is this transaction fair or unfair to Sam (seller)?

Very unfair Somewhat unfair Moderately unfair Neutral Moderately fair Somewhat fair Very fair



In your opinion, does this transaction promote or violate human dignity?

Strongly violates dignity Somewhat violates dignity Moderately violates dignity Neutral Moderately promotes dignity Somewhat promotes dignity Strongly promotes dignity



What do you think about the following statement: "allowing such transactions would harm society in the long run"?

Strongly agree Somewhat agree Moderately agree Neutral Moderately disagree Somewhat disagree Strongly disagree



Instruction Buttons

Instructions

Kidney transplant.

Next.

Part II. Moral dimensions (Page 1/5) 🏛️

Please answer the following questions about the "Kidney transplant" scenario. If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

Please answer the questions below by moving the sliders. Remember, in this scenario, Sam is the seller, Bob the buyer.

What do you think about the following statement: "this transaction exploits Sam (seller)"?

Strongly agree Somewhat agree Moderately agree Neutral Moderately disagree Somewhat disagree **Strongly disagree**

In your opinion, does this transaction respect or limit individual autonomy (i.e. self-determination)?

Greatly limits autonomy Somewhat limits autonomy Moderately limits autonomy Neutral Moderately respects autonomy Somewhat respects autonomy Greatly respects autonomy

In your opinion, does this transaction allow Sam (seller) to make fully informed choices or does it exert undue influence?

Severe undue influence Somewhat undue influence Moderate undue influence Neutral Moderately informed choices **Somewhat Informed choices** Fully informed choices

In your opinion, is this transaction fair or unfair to Sam (seller)?

Very unfair Somewhat unfair **Moderately unfair** Neutral Moderately fair Somewhat fair Very fair

In your opinion, does this transaction promote or violate human dignity?

Strongly violates dignity Somewhat violates dignity Moderately violates dignity Neutral **Moderately promotes dignity** Somewhat promotes dignity Strongly promotes dignity

What do you think about the following statement: "allowing such transactions would harm society in the long run"?

Strongly agree Somewhat agree Moderately agree **Neutral** Moderately disagree Somewhat disagree Strongly disagree

Instruction Buttons

Instructions

Kidney transplant

Next

Part II. Imagined health and price (Page 2/5)

If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

In this scenario, what do you imagine the agreed-upon price to be (in dollars)?

In this scenario, how healthy do you imagine Sam (the seller of kidney) to be?

Very healthy Somewhat healthy Moderately healthy **Neutral** Moderately unhealthy Somewhat unhealthy Very unhealthy



Instruction Buttons

Instructions

Kidney transplant

Next

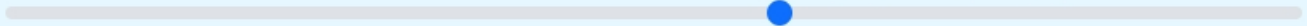
Part II. Imagined health and price (Page 2/5)

If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

In this scenario, what do you imagine the agreed-upon price to be (in dollars)?

In this scenario, how healthy do you imagine Sam (the seller of kidney) to be?

Very healthy Somewhat healthy Moderately healthy Neutral **Moderately unhealthy** Somewhat unhealthy Very unhealthy



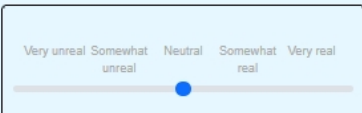
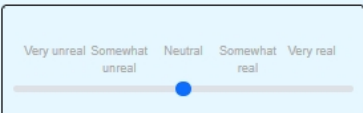
Instruction Buttons

Instructions

Kidney transplant

Next

If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

Bob buys Sam's kidney	
Scenarios	
Suppose that Sam (seller) makes 100.600\$ and Bob (buyer) makes 30.200\$	Suppose that Sam (seller) makes 30.400\$ and Bob (buyer) makes 100.700\$
In your opinion, should society prevent this transaction?	
<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
How realistic is this scenario?	
<p>Very unreal Somewhat unreal Neutral Somewhat real Very real</p> 	<p>Very unreal Somewhat unreal Neutral Somewhat real Very real</p> 
Why do you think the scenario is realistic/unrealistic?	
(Please write 1-2 sentences)	(Please write 1-2 sentences)
<input type="text"/>	<input type="text"/>

Instruction Buttons

Instructions

Kidney transplant

Next

Part II. Page 4/5

If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

Bob buys Sam's kidney

Scenario

Suppose that Bob (buyer) makes 1.000.000\$ and Sam (seller) makes 95.000\$

In your opinion, should society prevent this transaction?

Yes No

Instruction Buttons

Instructions

Kidney transplant

Next

If you want to review the "Kidney transplant" scenario, please click on the button at the bottom of the screen.

Bob buys Sam's kidney

Scenarios

Suppose that the agreed-upon price for the kidney is 15.000\$

Suppose that the agreed-upon price for the kidney is 150.000\$

In your opinion, should society prevent this transaction?

Yes No

Yes No

Instruction Buttons

Instructions

Kidney transplant

Next

Exit survey. Page 1/4. Politics

How liberal (left-wing) or conservative (right-wing) are you on **SOCIAL** issues?

- Very Liberal
- Liberal
- Slightly Liberal
- Moderate/middle-of-the-road
- Slightly Conservative
- Conservative
- Very Conservative
- Don't know/not political
- Libertarian
- Other

How liberal (left-wing) or conservative (right-wing) are you on **ECONOMIC** issues?

- Very Liberal
- Liberal
- Slightly Liberal
- Moderate/middle-of-the-road
- Slightly Conservative
- Conservative
- Very Conservative
- Don't know/not political
- Libertarian
- Other

Next

Exit survey. Page 2/4. Income inequality and redistribution

To what extent do you agree that **income inequality** is an important social issue?

- Strongly agree
- Somewhat agree
- Moderately agree
- Neutral
- Moderately disagree
- Somewhat disagree
- Strongly disagree
- Don't know

To what extent do you agree that **there should be more redistribution**?

- Strongly agree
- Somewhat agree
- Moderately agree
- Neutral
- Moderately disagree
- Somewhat disagree
- Strongly disagree
- Don't know

Next

Exit survey. Page 3/4. Religiosity

What is your religion?

- Atheist/Agnostic
- Christian
- Jewish
- Muslim
- Other

How religious are you?

- Very religious
- Somewhat religious
- Slightly religious
- Not religious at all
- Don't want to answer

Next

Exit survey. Page 4/4. Demographics

Age

20

Gender at birth

- Male
- Female
- Other/Prefer not to say

Education level

- Haven't graduated high school
- GED
- High school graduate
- Bachelors
- Masters
- Professional degree (JD, MD, MBA)
- Doctorate
- Other

Employment status

- Employed full-time
- Employed part-time
- Self-employed
- Out of work, or seeking work
- Student
- Out of labor force (e.g. retired or parent raising one or more children)
- Other

Approximately, what was your total household income in the last year, before taxes?

- \$0-\$10,000
- \$10,000-\$20,000
- \$20,000-\$30,000
- \$30,000-\$40,000
- \$40,000-\$50,000
- \$50,000-\$60,000
- \$50,000-\$75,000
- \$75,000-\$100,000
- \$100,000-\$150,000
- \$150,000-\$200,000
- \$200,000+
- Prefer not to answer

What is your country of origin/birth?

Germany

Next

Results

Thank you for finishing the study. You will receive your payment within a few days.

If you are not automatically directed to the completion page on Prolific, use the button below.

[Complete study](#)