CESifo WORKING PAPERS

9456
2021

December 2021

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CESifo

Impressum:

CESifo Working Papers
ISSN 2364-1428 (electronic version)
Publisher and distributor: Munich Society for the Promotion of Economic Research - CESifo GmbH
The international platform of Ludwigs-Maximilians University's Center for Economic Studies and the ifo Institute
Poschingerstr. 5, 81679 Munich, Germany
Telephone +49 (0)89 2180-2740, Telefax +49 (0)89 2180-17845, email office@cesifo.de
Editor: Clemens Fuest
https://www.cesifo.org/en/wp
An electronic version of the paper may be downloaded
· from the SSRN website: www.SSRN.com
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CESifo *Working Paper No. 9456*

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Abstract

We investigate how moral considerations, background conditions and risk can trigger resistance to implement trading institutions. We provide survey results on moral opposition to trade on several goods and services like body organs, sex services, surrogate mothers, trade with developing nations, and trade with carbon emissions. Complementary experimental evidence allows identifying reasons for opposing trade going beyond pure moral considerations. We relate the opposition to trade in experimental and field contexts to an aversion to imposing risks on others. We then vary both background conditions and the riskiness from engaging in actual trade in the experiment. We show that distributional concerns primarily drive opposition to trade. Providing less information about individual background conditions and distributing gains from trade more equally alleviates opposition to trade.

JEL-Codes: C900, D630, I140.

Keywords: trade, morality, fairness, distribution, experiment.

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This version: November 2021
We are grateful to Bendik Østrem Svalastog for research assistance and to Alexander Cappelen, Claudia Schwirplies and Bertil Tungodden for helpful discussions and comments. Hauge and Kverndokk were funded by The Research Council of Norway under the program Klimaforsk when working on this project. Lange acknowledges support by the German Research Foundation (DFG) under Germany's Excellence Strategy, cluster EXC 2037 "Climate, Climatic Change, and Society" (project 390683824).

1. Introduction

At first glance, voluntary trade appears as something that should meet universal approval. If no one is obliged to trade, establishing a trade institution could only make all better off. Such a liberal view on people being free to pursue their own idea of a good life without interference from society has gained substantial momentum and motivated globalization ideas and the implementation of market based policy instruments, such as emission permit trading as means of environmental policy.

Nonetheless, specific trading institutions have been met with substantial skepticism and criticism. First, trade may be opposed for ethical reasons. Examples include organ trade, slavery, school admissions, and environmental goods (e.g., Roth, 2007). Second, markets may be viewed with skepticism as they may erode (crowd-out) otherwise existing prosocial motivation (e.g., Falk and Szech, 2013). Third, opponents of trade might be concerned with unfair background conditions or unfair distributions of the gains of trade (e.g., Sandel, 2012, 2013; Helpman et al., 2017). Fourth, extant inequalities within society may make some people hesitant to subscribe to trade institutions as those may implicitly accept the existing unfairness or may distribute the gains from trade in a way that even increases such inequalities (Konow and Schwettmann, 2016).

This paper addresses how moral considerations, background conditions, and risk can trigger resistance to implementing trading institutions. For this, we combine survey results on moral opposition to trade in diverse field contexts with experimental evidence that allows identifying reasons for opposing trade going beyond pure moral considerations. In the former, we consider opposition to trade in, among others, organs, sex services, or carbon permits to explore the determinants for individual opposition of allowing trade. We identify aversion to imposing risks on others as a major determinant for individual positions on allowing or opposing trade. Our experiment lends further insights into the role of risks before or after engaging in trade for potential opposition towards trade institutions. As trade institutions typically do not uniformly benefit all, our experiment further allows identifying to what extent distributional concerns affect the opposition to trade.

People may oppose trade institutions for paternalistic reasons, i.e., to limit the choices of others if those choices might lead to extreme risk-taking due to inequalities (e.g., Perri, 2000; Parker, 2004; Thaler and Sunstein, 2003). Relatedly, people may want to limit their own future choices

to prevent themselves from taking excessive risks (e.g., limiting the choices of one's future self). Additionally, at the time when trade institutions are decided upon, the actual individual background conditions and the individual prospects from trade may not be known. As such, the overall support for trade institutions may depend on individuals' information about their future (income) position and the given prospects from trade.

The guiding example for our experiment is the acceptance of organ trade, in particular kidneys. Trading kidneys is illegal worldwide, apart from in Iran, but black markets exist in some countries.[5] While it is obvious that persons with kidney issues would substantially benefit from a transplant, healthy donors also expose themselves to risk (e.g., Lentine and Patel, 2012). Currently, there is not a large income gap between donors and recipients in the US (Gill et al., 2012). Nevertheless, studies suggest that – at a given price – the poor would have larger incentives to donate and thus are more exposed to potential risks (Moniruzzaman, 2012; Parada-Contzen and Vásquez-Lavín, 2019).[6]

Typically, there is a trade-off between repugnance and efficiency. Becker and Elias (2007) point out potential benefits from marketability of organs, while Elias et al. (2015a, 2015b, 2017) investigate the role of information on attitudes towards financial payments for organ donations. Further, Albertsen (2020) discusses tradeoffs in providing incentives for becoming an organ donor and the (partly moral) acceptability of such a market institutions. If trade is allowed, the market price for organs relative to the income position of an individual determines both the willingness to donate and the access to a new organ. However, transaction mechanisms other than trade exist (see, e.g., Roth et al., 2004, and Ashlagi and Roth, 2001; Herr and Norman, 2016).

We explore the impact of income positions and riskiness of trade on the acceptance of trade institution within a lab experiment. In order to abstract from other potential ethical concerns, we reduce the setting to the payoff dimension only, and use a neutral framing within the experiment. However, organ trade inspires the set-up of the experiment. For this, we vary both the initial endowment of players (rich/poor) as well as their prospects from trade (healthy/sick).

[5] Kidney exchange is legal in many countries, but this does not involve any payment to the donors (see, e.g., Roth and Wang, 2020).
[6] A summary of existing incentive schemes is given in Emamaullee et al. (2020).

We vary people's information about their type to observe how risk embodied in the background conditions impact the willingness to accept trading institutions. In the extreme case, we have a complete veil of ignorance, i.e., no knowledge about the type. The intermediate case informs people about one dimension of their type, i.e., rich vs. poor or healthy vs. sick, respectively. Finally, the third information condition gives subjects complete information about their type. Varying the information allows observing if a player's attitude towards trading institutions depends on how much they know about their background conditions and potential gains from trade. It also allows investigating determinants of opposing trade as a commitment device to prevent oneself or others from exposing themselves to ("extreme") risk. Importantly, we can investigate reasons for a person's attitude towards implementing the trading institution, i.e., giving themselves and other the chance to trade, by comparing their vote on trade institution with their actual choice to trade or not.

Our survey of Amazon Mechanical Turk workers from the U.S. shows substantial moral opposition towards trade in diverse dimensions. Moral opposition to trade particularly applies to trade in body items, i.e., organs, which is opposed by 33% of participants, and sex services or imports of food from countries where a large proportion of the population suffers from hunger and malnutrition. On the other hand, much less opposition is found for trading CO_2, importing from developing countries, or allowing surrogate mothership. For all these dimensions, the individuals' attitudes towards imposing risks on others explains opposition to trade: those who are risk-averse on behalf of others are more likely to oppose trading institutions. This importance of risk attitudes gives another motivation for our experimental variations on the riskiness of trade.

In our experiment, a substantial share of respondents opposes trade, which again correlates with risk preferences. We find that the major reasons why individuals vote against trade are the riskiness involved in trade and the unfair distributions of gains from trade. Importantly, the opposition towards trade is partly self-serving. Specifically, we find a significantly smaller opposition to trade institutions when people are behind the veil of ignorance and do not know their income level, their (abstractly defined) health condition, and thus how trade affects the riskiness payoff.. Similarly, distributing gains from trade more evenly and benefiting the poor to a larger extent reduces the widespread opposition to trade.

Our paper is related to Elias et al. (2019) who study preferences for legalizing payments to kidney donors. They show that moral judgements matter, and that respondents were particularly

concerned about the fair allocation of kidneys. In particular, they find that personal views depend on whether recipients or a public agency makes payments. However, our paper differs from Elias et al. (2019) in several respects. First, we provide a survey and analysis on the opposition towards trading several goods related to human bodies, the environment and poverty. Second, we complement the survey with an experiment, which – while inspired by kidney trade – is framed neutrally to avoid repugnancy and to focus on two explicit reasons to oppose trade: risk and unfair distribution.

The paper is structured as follows: Section 2 reviews related literature. Section 3 discusses the experimental design, and Section 4 presents some theory and hypotheses. We report the results on both survey and experiment in Section 5, and provide a discussion based on policy preferences in Section 6, before a final section concludes.

2. Related Literature

Before discussing our specific research setting, we provide a brief review of reasons to oppose trade.

One reason is *repugnance* against transactions of certain goods (e.g., Fiske and Tetlock 1997; McGraw and Tetlock 2005; Roth 2007; Bénabou and Tirole 2011). *Repugnance* is defined as "aversion towards other individuals engage in it, even if the parties directly involved benefit from the trade" (Elias et al., 2017). Introducing repugnant goods into the market may violate traditional values or religious and moral norms. For example, if such a good is considered priceless or sacred, some argue that introducing the good into the market by setting a price may *reduce the value* of the good (see, e.g., Kelman, 1981; Fiske and Tetlock, 1997) or *reduce the quality* of the good (Titmuss, 1970).[7] A related argument is the potential *crowding out of intrinsic or moral motivation* within market settings (e.g., Frey and Oberholzer-Gee, 1997; Deci et al., 1999; Frey and Jegen, 2001; Bènabou and Tirole, 2003; Bolle and Otto, 2010; Cappelen et al., 2017). A large literature discusses whether the *market erodes moral values* (see, e.g., Sandel 2012; Falk and Szech, 2013; Bruni and Sugden, 2013; Storr and Choi, 2019; Ziegler et al., 2020; Bartling et al., 2021), yet does not give an unambiguous answer. Further, markets

[7] Titmuss (1970) uses the example of a blood market. However, del Pozo (1994) and Archard (2002) find no overwhelming support for a lower quality of blood when sold in the market.

may induce tradeoffs between benefits from trade and moral/ideal standards (e.g., Brekke et al., 2003; Eyckmans and Kverndokk, 2010).

A different motivation to oppose trade is perceived unfairness. For example, Rawls (1971) and Nozick (1974) focus on *unfair background* conditions: even if all parties materially gain from trade, the agreement they make is not necessarily just (e.g., Konow and Schwettmann, 2016) and can thus lead to opposition to trade agreements (Kverndokk, 1995). Similar fairness arguments apply to the *the transaction outcome* (e.g., Oosterbeek et al., 2004; Gampfer, 2014; Ciccone et al., 2020), whose perceived fairness also depends on the distribution of risks (e.g., Brock et al., 2013; Konow, 2000; Cappelen et al., 2013).

Opposing trade institutions also eliminates trade opportunities for others, and thus is *paternalistic* (e.g., Thaler and Sunstein, 2003). Ambuehl et al. (2021) provide experimental evidence for such behavior. Pedersen et al. (2014) and Krawczyk and Wozny (2017) show that individuals with self-control are more in favor of such strong paternalism. Restricting choices induces external effects on others. A growing literature considers the role of externalities for voluntary individual actions, mostly in the positive realm: there is substantial evidence of prosocial behavior (e.g., Bartling et al., 2015, 2019; Kirchler et al., 2016; Irlenbusch and Saxler, 2020), which also may lead to less trading volumes in markets with a negative externality (Sutter et al., 2019). Nevertheless, the externality in our context is more nuanced as denying others some trading options affects own and others' choice sets. By varying the riskiness of trade and the information on individual background conditions and potential benefits from trade, we provide novel evidence on the reasons for opposing trade institutions.

3. Experimental design

The experiment consisted of three parts; see Appendix for the experimental instructions. Part A elicited experimental measures on risk attitudes towards own payoff, the payoff of another randomly chosen participant, and a generosity measure based on a dictator game.[8]

[8] One of the three tasks was randomly chosen for payment. Risk attitudes are elicited based on the Eckel and Grossman (2002, 2008) ordered lottery choice task regarding the own payoff and the payoff of another randomly chosen participant, in random order. We do not use these risk measures in this paper but rather rely on risk measures made from survey responses in Part C. We additionally implemented a dictator game where subjects allocated 100 tokens between themselves and another participant. The results from the dictator game are used to define an indicator variable *GIVE* as a measure of generosity: it takes value one if the participant gives 50% or more tokens to the other participant and value zero otherwise.

Part B of the experiment concerns attitudes towards trade, and consists of several treatment conditions for which participants are divided into groups. Each group consisted of 8 people, of which two of each type (High income with SECURITY, High income without SECURITY, Low income with SECURITY and Low income without SECURITY). Within the experiment, these types were neutrally framed as A1, A0, B1 and B0, respectively. Inspired by the organ trade example, owning SECURITY corresponds to a person having healthy kidneys, while not owning SECURITY refers to a sick person in need of a kidney. Hence, A vs. B can be interpreted as rich vs. poor and A1 vs. A0, and B1 vs. B0 as healthy vs. sick. We use these descriptions throughout the rest of the paper.

In Stage 1 of Part B, all participants in each group vote on whether to allow trade. Then, in Stage 2, participants choose to buy or sell the item SECURITY if trading is allowed. The choice in Stage 1 of one randomly selected participant in each group then decides the implementation of the trade institution, i.e., whether or not the individual trading decisions take effect.

The treatments differ concerning the information subjects have about their individual type and the payoff consequences of trades. However, all treatments keep the payoff consequences fixed that arise without trading: high-income participants have an income of 150 tokens,[9] and low-income participants have an initial income of 50 tokens. Those with high income, who do not own the item SECURITY, face an 80% chance of losing 75 tokens, i.e., face a lottery of 150 tokens with 20% chance, and 75 tokens with 80% chance. Low income people without SECURITY have an 80% chance of losing 45 tokens. Table 1 illustrates the resulting lotteries for the payoffs.

	Initially own SECURITY	Initially do not own SECURITY
High income	150	80%: 75 20%: 150
Low income	50	80%: 5 20%: 50

Table 1: *Payoffs in the base case scenario without trading.*

Treatments: variations of information

[9] One token is worth 5 US cents.

In the first treatment dimension, we varied the information given about which characteristics participants had when they voted on the implementation of the trade institution. Importantly, the exact type was revealed *before* the actual individual trade decision was made.

- **FullInfo:** In this treatment, all subjects knew which type they were. Instructions told whether they had high or low income and either had or did not have the item SECURITY.
- **InfoHealth:** Participants knew whether they had SECURITY or not, but they did not know whether they had high or low income. They knew that there was a 50% probability that they had high and low income, respectively. As owning SECURITY was inspired by health, we name the treatment InfoHealth.
- **InfoIncome:** Participants knew whether they had high or low income, but they did not know whether they had SECURITY or not. However, they knew that there was a 50% probability that they had SECURITY. Therefore, as they received income information, we named the treatment InfoIncome.
- **NoInfo:** Here, participants did not know any of their characteristics, but they knew that there was a 25% probability of each of the four types. This treatment thus corresponds to deciding behind a veil of ignorance.

The payoff lotteries were the same in these four treatments; see Table 2 below. Subjects who have SECURITY can sell it, but only high-income people without security can afford to buy it. Subjects who buy SECURITY will pay a price of 15 tokens, and this will remove their risk of income loss. People who own SECURITY can choose to sell it at 15 tokens, but this adds a 20% probability of losing income. The potential loss is relatively higher for low-income people than for high-income people.

	Initially own SECURITY		Initially do not own SECURITY	
	Sell	Don't sell	Buy	Don't buy
High income	80%: 150 +15 =165 20%: 75 +15 = 90	150	150-15= 135	80%: 75 20%: 150
Low income	80%: 50+15 = 65 20%: 5+15 = 20	50		80%: 5 20%: 50

Table 2: *Payoffs in the base case scenario when trade is allowed.*

We note that the expected income of high-income people who own SECURITY is the same (150) regardless of whether they sell or not, while low-income people who own SECURITY gain in expected payoff if they sell (56 vs. 50 tokens). A high-income person who does not

own SECURITY gains in expected income when buying (135 vs. 90). Low-income people cannot afford to buy SECURITY, so their expected income is 14 regardless. Inspired by the anecdotal evidence on organ trade, we chose the parameters such that trade is particularly attractive for rich people not owning SECURITY and poor people owning the item.

Treatments: variation of payoffs

In the second treatment dimension, we varied the payoff consequence of trade when all participants knew which type they were (as in the FullInfo treatment). Finally, in two new treatments, we vary trade attractiveness only for low-income types who own SECURITY.

- **HighRisk**: While keeping the expected payoff identical to the base treatment, we increase the downside risk for low-income people who initially own and decide to sell SECURITY: they have an 80% probability that their income is 70 (55+15=70) and 20% probability that their income is 0 (-15+15=0).
- **LucTrade**: Trade is made more lucrative for low-income types who sell SECURITY as they receive a price of 40 instead of 15 tokens. Upon selling the item, they thus face a lottery of receiving an income of 90 (50+40) with 80% chance and 45 (5+40) with 20%. For the rich types, the price is as before (15 tokens).

A final treatment eliminates risks and implements the expected payoff consequences of the base treatment both without and with trade.

- **NoRisk:** The payoff consequences are given in Table 3.

	Initially own SECURITY		Initially do not own SECURITY	
	Sell	Don't sell/ No trade allowed	Buy	Don't buy/ No trade allowed
High income	135+15=150	150	150-15= 135	90
Low income	41+15=56	50		14

Table 3: *The payoffs in the risk-free treatment.*

The information variations are designed to investigate how knowledge about one's own benefits from trade relative to those of others affects opposition towards trade institutions. We designed HighRisk and LucTrade to investigate if changing the payoff consequences for one type impacts the attitudes towards trade institutions by the other three types. Comparing Treatment NoRisk

with the base treatment FullInfo allows us to differentiate (ex-ante) inequality aversion and risk aversion as reasons to oppose trade. We discuss the hypotheses in detail below.

Finally, Part C of the experiment exposes subjects to survey questions concerning risk preferences, moral opposition towards different types of trade and attitudes towards specific policies,[10] all described in detail below, as well as demographic background characteristics such as age, gender, state of residence, highest completed education and political orientation.

Data: coding of variables

Our main experimental treatments in Part B of the experiment involve the vote for or against allowing trade and the individual decision to trade, i.e., buy or sell the item SECURITY. For the former, we define a binary variable, *oppose_exp*, which equals 1 for participants who voted against allowing trade and otherwise 0. For the latter, we also define a binary variable (*trade*) for whether each person decides to trade, equals 1 if the participant chose to buy or sell the item, and otherwise 0.[11]

In Part C, we measured moral opposition towards trade along seven different dimensions, see Table 4. Survey answers were given on a scale from 1 to 5, where 1 represented that trade in the specific good or service was morally unacceptable and 5 represented that trade was morally acceptable. We define seven binary variables, one for each type of goods or service: *oppose_field*=1 for answering that trade is morally unacceptable (answer category 1) and *oppose_field*=0 otherwise (answer category 2-5) (with field = body, poor, surrogate, hunger, sex, cntrCO2, or firmCO2).

[10] Question formulations from the World Value Survey (https://www.worldvaluessurvey.org).
[11] Note that this variable is not defined for low-income types without the item SECURITY, as they could not afford to buy the item by construction.

Question: To what degree do you think it is morally acceptable or unacceptable to trade these goods/services for money?	**Variable names**
Goods produced in poor countries by people with very low income	oppose_poor
Human body parts (kidneys, etc)	oppose_body
To use surrogate mothers (a woman who becomes pregnant for the purpose of carrying the fetus to term for another person) to have children	oppose_surrogate
Food from countries where a large proportion of the population suffers from hunger and malnutrition	oppose_hunger
Sexual services	oppose_sex
Emission permissions for countries (for instance CO_2-permits)	oppose_cntrCO2
Emission permissions for firms (for instance CO_2-permits)	oppose_firmCO2

Table 4: Survey *questions regarding moral opposition towards trade*

We additionally surveyed the support for different policies, see Table 5. Answers were given on a scale from 1 to 5, where 1 corresponds to "I disagree completely" and 5 corresponds to "I agree completely". We create one dummy variable for agreeing to each policy (answering category 4 or 5).

Question: For each of the areas below, to what degree do you agree with the statements?	**Variable name**
The state should make people's incomes equal	policy_equality
Governments should tax the rich and subsidize the poor	policy_redistribute
People should receive state aid for unemployment	policy_unempl
The state should restrict the choices that people have in order to prevent them from taking extreme risks	policy_riskprevent

Table 5: *Survey questions regarding attitudes towards different policies.*

We use the survey responses in Part C to create several explanatory variables. Importantly, we use answers to "I am generally a person willing to take risk" and "I am generally a person who is willing to impose risk on others for my own benefit" as our measures of risk preferences. The former corresponds to the validated measure by Dohmen et al. (2011), while the second adjusts this for risky actions that affect other people. Both questions have answer categories from 1 to

5 where 1 represents “I disagree completely” and 5 “I agree completely”. We define the dummy variable *RISKAVme*=1 if the participant answers they disagree with the first statement (that is, they answer 1 or 2), and otherwise zero. Similarly, we define the variable *RISKAVothers*=1 if the participant disagrees (answer category 1 or 2) with the second statement.

We also use explanatory variables such as female, university education, and economics training. Additionally, we measure political orientation with the question “In political matters, people often talk about “liberal” or “conservative”. How would you place your views on this scale, generally speaking?”, where answers could be given on a scale from 1 (liberal) to 10 (conservative). Finally, we derive a dummy variable “conservative”, which takes the value 1 if the participant has answered 8 or higher.

Implementation of the experiment

The experiment was designed in SoSci Survey (https://www.soscisurvey.de/) and conducted on Amazon Mechanical Turk (MTurk) in December 2020. In total, there were 902 participants. Of these, 48 participants were dropped from our sample as they did not complete the survey (they left the survey before answering page 19, which contained our main outcome variable), giving us 854 participants in our analysis sample. From Part A, one of the three parts was randomly selected for payment in addition to the payments from Part B. On average, participants earned 6.70 USD, while the minimum amount earned was 0.25 USD and the maximum 15 USD. In addition, all participants earned a show-up fee of 0.75 USD. We limited the experiment to MTurk workers from the U.S. Our sample includes participants from all states. Most participants are from California, Florida, and New York; 8.8%, 8.6%, and 7.6% of the participants, respectively. Among the participants, 45% were female. On average, participants were 40 years old, 64% had a university-level education with a degree, while only 5.8% had no formal education or primary school. In addition, 52% of the participants study economics now or have studied economics before (see Table 6 below for the summary statistics). We included several control questions to check whether participants understood the instructions and to avoid robot answers during the experiment.

We present the summary statistics of all main explanatory variables in Table 6. Note that the socio-economic characteristics are balanced across treatments (with minor exemptions in the NoRisk treatment).

VARIABLES	(1) ALL mean (sd)	(2) FullInfo mean (sd)	(3) Info_Income mean (sd)	(4) Info_Health mean (sd)	(5) NoInfo mean (sd)	(6) HighRisk mean (sd)	(7) LucTrade mean (sd)	(8) NoRisk mean (sd)
age	40.04	38.76	40.49	41.89	36.27	39.78	39.46	41.89
	(11.73)	(10.52)	(11.61)	(12.47)	(10.09)	(10.61)	(11.95)	(13.36)
female	0.45	0.45	0.40	0.51	0.40	0.46	0.43	0.47
	(0.50)	(0.50)	(0.49)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
eduni	0.65	0.57	0.70	0.62	0.65	0.71	0.64	0.65
	(0.48)	(0.50)	(0.46)	(0.49)	(0.48)	(0.46)	(0.48)	(0.48)
econ	0.52	0.45	0.58	0.49	0.60	0.51	0.57	0.52
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
conservative	0.33	0.33	0.35	0.36	0.30	0.32	0.32	0.34
	(0.47)	(0.47)	(0.48)	(0.48)	(0.46)	(0.47)	(0.47)	(0.47)
RISKAVme	0.32	0.32	0.27	0.33	0.28	0.31	0.35	0.32
	(0.47)	(0.47)	(0.45)	(0.47)	(0.45)	(0.46)	(0.48)	(0.47)
RISKAVothers	0.53	0.54	0.47	0.57	0.38	0.55	0.55	0.55
	(0.50)	(0.50)	(0.50)	(0.50)	(0.49)	(0.50)	(0.50)	(0.50)
GIVE	0.54	0.57	0.47	0.57	0.65	0.52	0.51	0.55
	(0.50)	(0.50)	(0.50)	(0.50)	(0.48)	(0.50)	(0.50)	(0.50)

Table 6: *Summary statistics of explanatory variables.*

4. Hypotheses

Our experiment does not frame the good, as we want to concentrate on payoff-related rather than repugnant reasons for opposing trade institutions. Within the experiment, subjects may vote against trade if they do not like the possible consequences of trade for themselves or other participants. Nevertheless, agents that only care about their own payoff (lotteries) could always decide not to trade, although trade is allowed. They thus would be weakly in favor of allowing trade. Voting against allowing trade hence implies that subjects deny others their potential trade decisions.

The first reason for voting against allowing trade is increased inequality (Fehr and Schmidt, 1999; Bolton and Ockenfels, 2000; Charness and Rabin, 2002; Brock et al., 2013). Even though all participants individually can decide on buying or selling, the (rich) buyer gains more than the seller. Low-income types without SECURITY cannot afford to buy it. As a consequence, inequality (in expected terms) increases as a result of trade and, thus, poor types may vote against the trade institution if concerned about inequality.[12]

[12] This can be seen by concentrating on the expected values or equivalently on payoffs in the NoRisk treatment. Trade does not affect the (expected) payoffs of rich healthy and poor sick, while poor healthy gain 6, rich sick gain 45 (see Table 3). Therefore, rich healthy would be predicted to vote in favor of trade. This reduces inequality from their perspective within a Fehr-Schmidt (1999) framework, while the poor sick will go against it as inequality increases. Poor healthy people may vote against trade if they are concerned about disadvantageous inequality as

A second reason is risk. While our predictions do not change as long as the subjects are only concerned about expected income, risk-aversion with respect to own income or resulting inequality may affect subjects' attitudes towards trade. For example, as sellers expose themselves to income risk, a poor seller may end up with a payoff of 20 instead of 50 without trade. Thus, a poor healthy person may show more resistance to trade as both the own low income and the potentially increased inequality may matter more for risk-averse subjects relative to a risk-neutral assessment. Moreover, this logic may spill over to rich people: if the rich are concerned about risky actions with negative consequences, e.g., due to the potentially enlarged inequality, they may also be less inclined to allow trade. Thus anticipating that both inequality aversion and risk-aversion drive the opposition to trade, we expect the resistance towards trade to be lower in NoRisk than FullInfo.

We summarize these considerations as follows:

H1: A substantial fraction of subjects vote against trade.

H2: Voting against trading is more common among the poor than the rich due to inequality aversion, even in the no-risk treatment.

H3: When risk is involved, both rich and poor are more likely to vote against trade compared to the case with no risk.

If subjects are concerned with (potential) payoffs of other participants, the trade decision by the latter induces an externality on the former. Thus, subjects may vote against trade due to this externality effect. Such opposition to trade is inherently paternalistic as voting against trade restricts the opportunity sets of other people. Our treatments that change the payoff structure only for the poor healthy may therefore change the support for trade not only among the poor healthy, yet also among the rich types:[13] the lucrative trade treatment should increase the support for trade relative to the baseline treatment, while the high risk treatment can be expected to lower the acceptance rates.

the rich sick benefit more. There is a tradeoff for the rich sick: they materially benefit and move closer to the rich healthy, yet inequality against both poor types increase. However, within the Fehr-Schmidt model, benefits outweigh the increased inequality such that they can be expected to vote in favor of trade. Yet, even a rich healthy person may want to vote against trade in the risk treatments: they might want to deny the other rich healthy person to potentially become richer when trading (with 80% chance of high payoff plus the price).

[13] Related arguments are made by Brekke et al. (2003) who discuss tradeoffs between the ideal moral behavior and benefits from trade.

This discussion assumed that subjects had information on their characteristics. In our treatments, we vary this information. As such, subjects do not exactly know to what extent they and others benefit from implementing the trade institution. Additionally, perceptions of what is considered fair may depend on one's position (e.g., Konow, 2000; Lange et al., 2007, 2010; Brick and Visser, 2015). With no information (veil of ignorance), one may thus predict that people behave more morally than when they know their type. Schildberg-Hörisch (2010) finds that not only does risk aversion matter for the choices under the veil of ignorance, as Rawlsian maximin preferences are supported if social preferences for equality are sufficiently strong. Frignani and Ponti (2012) find that risk aversion is the driving factor under the veil of ignorance and not inequality aversion. One prediction may therefore be that the presence of risk and the possibility of increased inequality, as perceived from the perspective of the poor, induce more opposition to trade in the NoInfo treatment than partial or full information.

H4: Without information about the type (NoInfo), the opposition to trade increases relative to partial of full information.

So far, we have discussed potential reasons for opposing the trade institution. We now consider the actual decision to trade if trading is permitted. It is possible to vote in favor of trade yet choose not to trade oneself. By construction, this might be the case of poor sick, but also for poor healthy types. More interesting is the opposite case of voting against trade yet deciding to trade. Such behavior can naturally be motivated even through inequality-aversion: at the trade decision stage, subjects must take the decisions of others as given, while through opposing trade institutions in the voting stage, they would also affect the choices of the other subjects. For example, a poor healthy type in the NoRisk treatment may oppose the trade institution to avoid, increasing inequality, yet would decide to sell (and thus net gain 6) in Stage 2. Similarly, a rich person concerned about the poor healthy exposing themselves to downside risks, may vote against trade, yet trade herself in Stage 2 as she can no longer prevent the poor from making such a choice.

We note that in all information treatments, the final payoff lotteries are identical. In all consequentialist preference models, we would thus expect that these treatments do not differ in the actual trading patterns in Stage 2. However, the initial vote may spill over to the actual trade decision if preferences incorporate cognitive dissonance (Akerlof and Dickens, 1982; Mullainathan and Washington, 2009), such that participants desire some self-consistency.

5. Results

We first report the survey results on the moral opposition to trade in the diverse field contexts, before discussing the experimental results.

Opposition to trade for moral reasons

For investigating the moral opposition towards trade in the diverse field contexts, we pool observations across all experimental treatments. Figure 1 illustrates the opposition to trade across the diverse fields.

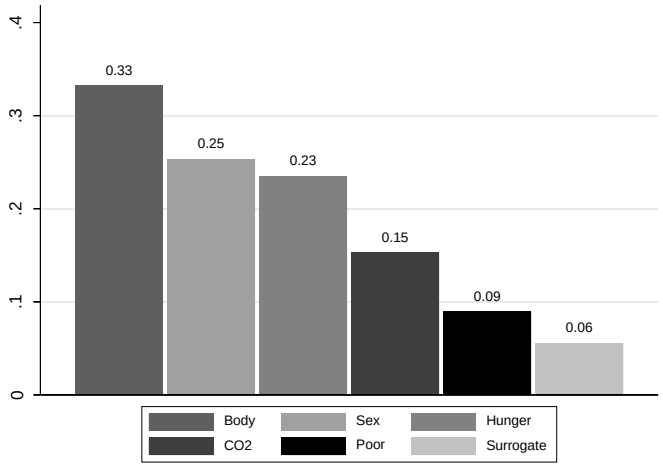

Figure 1: *Opposition to trade in diverse fields.*

We observe that 53% of participants deem trade in at least one field context as morally unacceptable. However, the opposition varies significantly across domains. For example, 33% of participants oppose trade with body items, 25% oppose trade with sexual services, and 23% oppose trading with countries with prevalent malnutrition problems. On the other hand, allowing for surrogates (6%) or trade with poor countries (9%) or carbon emissions (15%) is much less of a moral concern. For CO_2, there is no difference in opposition towards trade of carbon emissions between firms or countries. Because of this, we concentrate on firm trade of CO_2 in our later investigations (referred to as CO_2). While the difference between the opposition of sex trade and countries with malnutrition problems is not significant, all other differences are significant (33%>25%,23%>15%>9%>6%, $p<0.01$,Wilcoxon signed-rank).[14] We thus find that opposition to trade is not universal, but rather context-specific.

[14] Identical comparisons also result when the original trade opposition variable (coded 1 through 5) is used instead of the derived binary variable. Here, the difference between the domains sex and countries with malnutrition is also significant ($p=0.03$).

In the next step, we investigate which individual characteristics explain the decision to oppose trade in the respective dimensions. We regress the opposition to trade on several explanatory variables as described above. Importantly, we consider attitudes towards risks. According to the survey responses in Table 6, 32% of participants consider themselves as averse to taking risks on their own behalf, while 53% are averse to imposing risks on others.[15]

Table 7 reports the results from a series of ordinary linear probability model (OLS) that separately consider the opposition to trade in the respective fields.[16] The regressions show substantial explanatory power of risk aversion towards others across all dimensions of trade, except the surrogate dimension. The latter, however, received almost no opposition at all such that the power is low. Across all other dimensions, aversion towards imposing risk on others correlates positively with the opposition to allowing trade. We also note that having a university degree, studying economics, and being conservative tends to decrease the opposition to trading institutions. Perhaps not surprisingly, females are significantly more opposed to sex trade than males.[17]

[15] According to the complementary measure of risk attitudes from the Eckel & Grossman task, we code 54% of participants as risk-averse regarding their own payoff. In comparison, 57% characterize as risk-averse regarding the payoff of a matched participant. While these risk aversion measures correlate with those based on survey answers, we use the survey-based risk attitudes in our analysis, as the explanatory power of the survey-based risk attitudes is larger.

[16] The results are robust to using probit models. We opt for the linear probability model as it allows an easier interpretation of the coefficients.

[17] All results remain robust when controlling for the generosity GIVE measure derived from the giving 50% or more tokens to the other participant in the dictator game in part A of the experiment.

VARIABLES	(1) oppose body	(2) oppose sex	(3) oppose hunger	(4) oppose CO2	(5) oppose poor	(6) oppose surrogate
RISKAVme	-0.03	-0.01	0.03	-0.01	0.02	-0.00
	(-0.79)	(-0.32)	(0.81)	(-0.27)	(1.05)	(-0.13)
RISKAVothers	0.28***	0.17***	0.22***	0.11***	0.07***	0.03
	(7.75)	(5.10)	(6.72)	(4.02)	(3.12)	(1.58)
age	0.00*	0.00	-0.00	0.00	0.00	0.00
	(1.79)	(1.61)	(-0.33)	(0.95)	(0.54)	(0.47)
female	0.03	0.11***	0.04	-0.02	0.04**	0.02
	(1.09)	(3.77)	(1.32)	(-0.65)	(2.00)	(0.95)
uni	-0.09***	-0.03	-0.06*	-0.02	-0.02	-0.01
	(-2.77)	(-1.07)	(-1.81)	(-0.85)	(-1.06)	(-0.67)
econ	-0.07**	-0.04	-0.01	-0.09***	-0.04**	-0.00
	(-2.15)	(-1.37)	(-0.31)	(-3.26)	(-2.00)	(-0.10)
conservative	-0.05	0.05	-0.07**	-0.07**	-0.01	0.01
	(-1.49)	(1.57)	(-2.37)	(-2.52)	(-0.63)	(0.30)
Constant	0.19***	0.06	0.17***	0.14***	0.05	0.03
	(3.11)	(0.92)	(3.04)	(2.86)	(1.20)	(0.82)
Observations	840	836	842	840	837	841
R-squared	0.15	0.08	0.11	0.08	0.05	0.01

t-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7. *Explaining the opposition to trade across the respective dimensions. (OLS)*

Table 8 regresses the opposition to trade across all dimensions. For this, we consider the individual's opposition decisions in a long format. Columns (1)-(3) provide results from panel regressions with individual random effects to investigate differences in opposition across the different field contexts:

$$y_{it} = x_{it}\beta + z_i\delta + \alpha_i + \varepsilon_{it}$$

where t refers to the different policy fields and x_{it} is the corresponding dummy variable. Column (1) of Table 8 only controls for differences in opposition across the diverse contexts, column (2) includes sociodemographic characteristics, and column (3) additionally includes the individual risk attitudes. The results confirm the ranking of opposition to trade in the respective domains discussed above and the importance of risk attitudes in explaining the opposition.

We note, however, that *RISKAVme* and *RISKAVothers* are endogenous as they also depend on the sociodemographic characteristics: Columns (4) and (5) of Table 8 reveal that risk aversion both w.r.t. oneself, as well as others, is positively related to higher age and being female, while a negatively related to training in economics and being conservative. We control for this endogeneity in a 2SLS panel regression instrumenting *RISKAVothers* in the first stage by age and being conservative. Column (6) reports the results of the second stage. The effect of *RISKAVothers* as a driver for moral opposition to trade in the second stage is robust. In fact, the

regression shows a further strengthened effect of risk aversion in explaining attitudes towards trade institutions.

VARIABLES	(1) oppose	(2) oppose	(3) oppose	(4) RISKAVothers	(5) RISKAVme	(6) oppose
field_body	0.18***	0.18***	0.18***			0.18***
	(11.17)	(11.20)	(11.15)			(11.15)
field_sex	0.10***	0.10***	0.10***			0.10***
	(6.24)	(6.19)	(6.14)			(6.14)
field_hunger	0.08***	0.08***	0.08***			0.08***
	(5.10)	(5.19)	(5.21)			(5.21)
field_poor	-0.06***	-0.06***	-0.06***			-0.06***
	(-3.99)	(-3.92)	(-3.91)			(-3.92)
field_surrogate	-0.10***	-0.10***	-0.10***			-0.10***
	(-6.04)	(-5.98)	(-5.99)			(-5.99)
RISKAVme			0.00			
			(0.03)			
RISKAVothers			0.15***			0.24***
			(8.80)			(5.40)
age		0.00***	0.00	0.01***	0.00***	
		(3.97)	(1.54)	(8.12)	(3.63)	
female		0.05***	0.04**	0.08***	0.16***	0.03*
		(3.32)	(2.54)	(2.60)	(5.14)	(1.75)
uni		-0.06***	-0.04**	-0.12***	-0.05	-0.03
		(-3.57)	(-2.52)	(-3.45)	(-1.60)	(-1.63)
econ		-0.06***	-0.04***	-0.15***	-0.19***	-0.03
		(-4.05)	(-2.71)	(-4.69)	(-5.76)	(-1.54)
conservative		-0.06***	-0.02	-0.23***	-0.11***	
		(-3.61)	(-1.56)	(-6.91)	(-3.23)	
Constant	0.15***	0.12***	0.07**	0.29***	0.23***	0.04
	(11.78)	(3.68)	(2.34)	(4.65)	(3.67)	(1.13)
Observations	5,063	5,040	5,036	842	842	5,036
Number of CASE	847	843	842			842
R-squared				0.19	0.12	

z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 8. *Columns (1)-(3), individual random effects modles explaining opposition to trade across the respective dimensions (answers to diverse fields treated as panel). (4)-(5) OLS explaining attitudes towards risks. (6) gives result from 2SLS panel regression, with RISKAVothers instrumented in first stage by age. Baseline is opposition to trade of CO2 permits.*

Figure 2 also illustrates the importance of risk attitudes in explaining the opposition of trades across all dimensions by displaying the mean opposition in the different fields separated by *RISKAVothers*.

The stark effect of risk attitudes identified above supports our hypotheses H3 that people may oppose trade because they are concerned that implementing trade institutions might expose others to risk or risky behavior. Thus, the findings serve as additional motivation for our

experimental design, allowing us to investigate the importance of risks for attitudes towards trade explicitly.

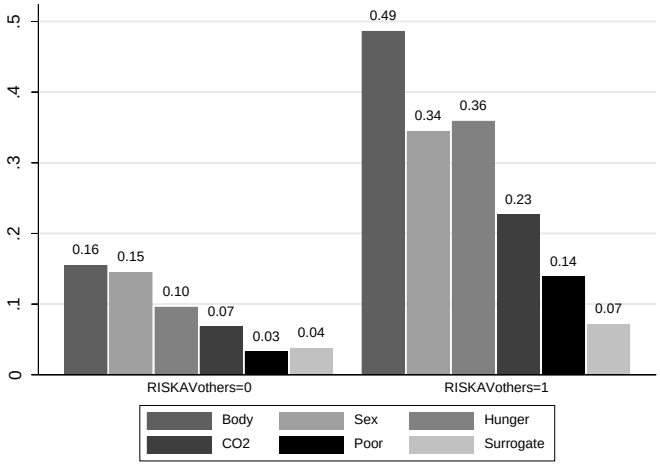

Figure 2: *Opposition to trade by RISKAVothers in the diverse fields*

Opposing trade institutions in the experiment

We now turn to study the opposition to implementing a trading institution in our laboratory experiment. Trade only has monetary consequences and may be less subject to direct moral considerations that govern opposition on, e.g., organ or sex trade.

We remind the reader that the decision to trade is an individual-level decision. Each group of 8 participants makes a vote, and a random draw decides which of the eight decisions to implement. That is, voting against implementing the trade institution restricts the choice set that the participant has, but also restricts the choice sets of other participants. Thus, when disregarding commitment problems for the player and concerns for choices made by others, opposing the trade institution can either leave their own utility unaffected or worse (in expectation) if they do not have any intentions to trade themselves.

	ALL	rich sick	rich healthy	poor sick	poor healthy	rich	poor	healthy	sick
FullInfo	0.24	0.07	0.29	0.33	0.28	0.18	0.30	0.28	0.20
HighRisk	0.23	0.17	0.26	0.26	0.26	0.21	0.26	0.26	0.21
LucTrade	0.16	0.13	0.19	0.22	0.10	0.16	0.16	0.14	0.17
NoRisk	0.20	0.12	0.20	0.21	0.27	0.16	0.24	0.23	0.17
NoInfo	0.12								
InfoIncome	0.15					0.13	0.17		
InfoHealth	0.26							0.30	0.21

Table 9**:** *Share of participants voting against allowing trade, by types and treatment.*

We report the shares of subjects opposing the trade institution in the respective treatments in Table 9. Across all participants, 24% voted against the trading institution in the FullInfo treatment. When keeping the same payoff structure, the opposition is not significantly different in InfoHealth (26%). However, the opposition is lower in the NoInfo treatment (12% vs. 24%, p=0.08, Mann-Whitney) and in InfoIncome (15% vs. 24%, p=0.09, Mann-Whitney). Making trade more lucrative for the poor and healthy in LucTrade, significantly reduces the general opposition (16% vs. 24%, p=0.06, Mann-Whitney). However, relative to the FullInfo treatment, variation in the risk dimension does not affect voting behavior. Thus, both comparing to HighRisk, making trade riskier for the poor healthy types, and when compared to NoRisk, getting rid of all risk, support for the trading institution is similar with 23% and 20% opposing trade, respectively. Overall, our results are thus in line with Hypothesis H1: even in the NoRisk treatment, we see substantial opposition towards implementing a trade institution. We thus observe that perceptions regarding unfair distributions of gain from trade partly drive the opposition towards trade, in line with preferences that incorporate inequality aversion. Neither varying the riskiness of trades for healthy poor in HighRisk nor for all subjects in NoRisk, affect the opposition relative to the FullInfo treatment. However, balancing the gains from trade more evenly between rich sick and poor healthy subjects in LucTrade increases overall support.

We do not find support for Hypothesis H4: lacking information about their specific characteristics tends to decrease overall opposition to trade, particularly for the InfoIncome and NoInfo treatments compared to FullInfo. In order to better understand the mechanisms behind opposition to trade, we now turn to a more detailed analysis on which types oppose trade allowing us to identify which background conditions matter for the opposition to trade.

Table 9 also reports the shares voting against trade by the information that they have on their type. The opposition to trade within the FullInfo treatment depends on the induced characteristics of participants, i.e. their background conditions. While for rich sick people, only

7% oppose trade, the opposition is significantly larger for all other characteristics, ranging from 28% (poor healthy, p=0.03, Mann-Whitney U test), 29% (rich healthy, p=0.02) to 33% (poor sick) (p<0.01, Mann-Whitney rank sum, always vs. 7%). That is, knowing that one is rich and could afford to buy the item to eliminate risks leads people to vote in favor of trade. A similar pattern occurs, however, in the NoRisk treatment (rich sick 12%, rich healthy 20%, poor sick 21%, poor healthy 27%), even though the differences are not significant. Again, rich sick types benefit most from trade, making them more favorably positioned to implementing trade. Comparing the voting decisions across FullInfo, NoRisk, HighRisk, i.e., all treatments with identical expected benefits and where subjects know about their types, we find evidence for Hypotheses H2: rich oppose trade less than the poor (p=0.03). Nevertheless, we find no support for Hypotheses H3 that risk reduces overall support, despite of the indication of this found in the survey. We interpret this result below and in Section 6, where we discuss policy preferences.

We now consider treatment effects for the different types. From Table 9, we see no treatment effect for rich sick types (7% vs. 12%, p=0.48). In contrast, opposition to trade is higher for the other three types when they know their type (NoInfo vs FullInfo, 29% vs. 12%, p=0.05 for rich healthy; 33% vs. 12%, p=0.02 for poor sick, 28% vs. 12%, p= 0.08 for poor healthy). The veil of ignorance thus makes all subjects behave similar to the rich sick type under full information, i.e., as the type who benefits most from the trade institution. This suggests that individuals behind the veil of ignorance focus on the largest potential individual gains from trade that they might experience, rather than focusing on potential behavioral motives that could lead to opposing trade institutions.

Partial information in InfoIncome does not have a similar effect on opposing trade relative to FullInfo. While rich types again behave similarly to rich sick types in FullInfo, the opposition to trade by poor types is much smaller than under FullInfo where both poor sick and poor healthy show very similar voting behavior. We can only speculate about the reasons: possibly, this is due to subjects not yet knowing their risk exposure without the trade institution even when informed about being rich or poor. They may thus be hesitant to vote against the trade to keep the option to get rid of the risk – possibly indicating a failure to induct backwards. In contrast, the opposition among healthy and sick types towards trade in InfoHealth is very similar to the FullInfo case.

We finally have a closer look at the treatments that change the payoff structure for the poor healthy types, leaving all participants fully informed about their type (NoRisk, HighRisk,

LucTrade). If participants were only concerned with their own potential benefits from trade, modifying the payoffs for poor healthy types should not make any difference for the support of trading institutions by all other types. Indeed, when trading is more lucrative for poor healthy types, opposition among the poor healthy types is lower (28% vs. 10%, p=0.07), while leaving the vote by other types unaffected. Moreover, when trade is riskier for poor healthy types does not affect the average vote for trade nor the voting patterns by any of the specific types.[18] In our lab setting, the riskiness of trade for the poor thus appears not to be a major driver for opposing trade institutions. Given the ubiquitous opposition to trade found in the survey and its connection to risk attitudes, it is surprising that the increase in downside risk for poor healthy types does not trigger a larger negative response to the experimental trade institution by other types. However, the same risk-aversion measure we used in the survey again drives the general opposition to trade, as reported in Table 10**.** The table reports results from OLS regressions (Columns (1)-(4)) relating the opposition to trade to sociodemographic characteristics, with different explanatory variables included. Noting that explanatory variables drive *RISKAVothers* and *GIVE* , we also show results from 2SLS that instrument for attitudes towards risks (Columns (5)-(8)) and generosity (Columns (7)-(8)).

It is noteworthy that the effects of explanatory variables on opposing trade in the experiment are largely consistent with opposing trade institutions across the diverse domains outside the lab, as discussed above (see Table 8). In particular, the aversion to imposing risks on others solicited by the survey measure again induces a larger opposition to trade in the experiment even though varying the riskiness of trade in the experimental treatments did not have any effect.[19] In line with this interpretation, we observe at the individual level that the opposition to trade in the field contexts is highly correlated with opposition to trade institutions in the experiment. For example, 32% of individuals who oppose trade in more than two field contexts vote against trade in the experiment, while the share is 18% among those who oppose trading in at most two field dimensions. As such, the experimental measures for opposing trade institutions has external validity.

[18] Yet, there are some differences in reaction to different payoff structures conditional on risk-preferences. Relative to the FullInfo treatment, rich sick types who are hesitant to impose risk on others increase their opposition to trade in the high risk and the lucrative trade treatment (p=0.02, ranksum). For poor sick type the opposite tendency occurs (p=0.04, ranksum). In contrast, no treatment effect occurs for non-risk-averse types. However, we do not want to overinterpret these results as they are prone to multiple hypotheses testing.

[19] We note that *GIVE*, i.e., the measure of generosity based on dictator giving >=50%, on a first look also appears to explain the opposition to trade. However, this effect is not stable when properly controlling for endogeneities in the 2SLS (in Columns (7) and (8) of Table 10).

VARIABLES	(1) oppose exp	(2) oppose exp	(3) oppose exp	(4) oppose exp	(5) oppose exp	(6) oppose exp	(7) oppose exp	(8) oppose exp
InfoIncome	-0.09*	-0.09	-0.09*			-0.08		-0.08
	(-1.72)	(-1.61)	(-1.71)			(-1.36)		(-1.22)
InfoHealth	0.02	0.01	0.01			0.01		0.01
	(0.31)	(0.23)	(0.19)			(0.18)		(0.15)
NoInfo	-0.12*	-0.11	-0.10			-0.08		-0.07
	(-1.77)	(-1.59)	(-1.37)			(-1.13)		(-0.88)
HighRisk	-0.01	-0.02	-0.02			-0.02		-0.02
	(-0.18)	(-0.33)	(-0.46)			(-0.42)		(-0.46)
LucTrade	-0.08*	-0.08*	-0.09*			-0.09*		-0.09*
	(-1.85)	(-1.75)	(-1.95)			(-1.94)		(-1.65)
NoRisk	-0.04	-0.05	-0.05			-0.05		-0.05
	(-0.92)	(-1.10)	(-1.16)			(-1.04)		(-1.05)
RISKAVothers			0.08**	0.07**	0.28***	0.28***	0.29*	0.30**
			(2.54)	(2.08)	(3.16)	(3.18)	(1.90)	(1.97)
RISKAVme				0.03				
				(1.04)				
GIVE			-0.08***				-0.05	-0.08
			(-3.03)				(-0.11)	(-0.18)
age		0.00**	0.00**	0.00*				
		(2.42)	(1.98)	(1.65)				
female		0.05*	0.05*	0.05*	0.03	0.03	0.04	0.03
		(1.94)	(1.90)	(1.65)	(1.18)	(1.07)	(1.07)	(1.03)
uni		0.01	0.01	0.02	0.04	0.04	0.04	0.04
		(0.37)	(0.46)	(0.64)	(1.26)	(1.31)	(1.03)	(1.08)
econ		-0.04	-0.02	-0.03	-0.00	0.00	0.00	0.01
		(-1.39)	(-0.78)	(-0.98)	(-0.11)	(0.05)	(0.03)	(0.18)
conservative		-0.07**	-0.05*	-0.05				
		(-2.32)	(-1.72)	(-1.55)				
Constant	0.24***	0.14**	0.15**	0.07	0.02	0.05	0.03	0.08
	(7.64)	(2.32)	(2.42)	(1.31)	(0.25)	(0.74)	(0.20)	(0.46)
Observations	854	843	842	842	842	842	842	842
R-squared	0.01	0.03	0.05	0.03				

t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 10: *OLS regressions explaining the opposition to trade within the experiment. (5)-(8) give results from 2SLS, RISKAVothers and GIVE (only in (7) and (8)) is instrumented by age and conservative.*

Final trade decision.

We first note that actual trading correlates positively and significantly with the initial vote to allow the trading institution. Across all treatments and types, 71% of those who favor of trade institutions do trade. In comparison, only 29% of those who voted against the trade institution traded (excluding poor sick types who cannot trade by definition). We compare the actual trading decision across the various information treatments as these implement identical payoff consequences and also have subjects fully informed about their type before they make their personal trade decision. Hence, the incentive to trade is identical at this stage such that any treatment differences in actual trade would conflict with consequentialist preferences. However,

suppose (some) participants desire to be consistent in their choices, e.g., not to trade after having opposed the trade institution in the voting stage. In that case, we may expect the different voting decisions to spill over to the actual decision to trade.

	All types	rich sick	rich healthy	poor sick	poor healthy
FullInfo	0.57	0.90	0.39		0.42
HighRisk	0.61	0.76	0.51		0.54
LucTrade	0.67	0.77	0.49		0.76
NoRisk	0.68	0.88	0.50		0.66
NoInfo	0.59	1.00	0.55		0.27
InfoIncome	0.60	0.75	0.63		0.43
InfoHealth	0.63	0.85	0.45		0.62
All treatments	0.63	0.83	0.49		0.68

Table 11**:** *Share of participants who trade, by type and treatment.*

Table 11 reveals that, for example, 62% of the poor and healthy types in the InfoHealth treatment trade (i.e., sell), while only 27% of the poor and healthy in the NoInfo treatment trade (p=0.07). In addition, 63% of the rich and healthy types in the InfoIncome treatment trade, while this fraction is 39% in the baseline treatment (p=0.08). While these differences are only marginally significant, they are all in line with the differences in the initial vote. Our results thus suggest that different information structures on types at the voting stage may not only affect the opposition in implementing a trading regime, it may also have an effect on the eventual decision to trade and thus has efficiency implications.

Across all treatments, rich sick (83%) trade significantly more than both rich healthy (49%) and the poor healthy (57%) (p=0.00 for both). The large number of rich sick who trade is consistent with a desire to eliminate risk. However, the large fraction of rich and healthy types who trade is surprising as it exposes them to risk (keeping the expected value the same).

Trading decisions are related to risk aversion as reported in Table 12**,** comparing Panels (a) and (b). As before, we use RISKAVothers as our measure of risk preferences,[20] and we see a higher propensity to trade among rich sick who are risk-averse, which is intuitive as they can get rid of the risk by trading. Conversely, there is a lower propensity to trade among the rich healthy

[20] We note that for consistency reasons, we show results separated by *RISKAVothers*. However, this variable is highly correlated with *RISKAVme*. Thus, the results are robust to the different risk aversion measure.

and the poor healthy who are risk-averse, which also is intuitive as trading would expose them to risk.

RISKAVothers=0	ALL	rich sick	rich healthy	poor healthy
FullInfo	0.61	0.79	0.39	0.65
HighRisk	0.65	0.60	0.69	0.67
LucTrade	0.72	0.69	0.64	0.79
NoRisk	0.65	1.00	0.63	0.33
NoInfo	0.71	0.88	0.64	0.67
InfoIncome	0.77	0.88	0.57	0.79
InfoHealth	0.80	1.00	0.56	0.91

Panel (a)

RISKAVothers=1	ALL	rich sick	rich healthy	poor healthy
FullInfo	0.54	1.00	0.39	0.26
HighRisk	0.57	0.90	0.38	0.43
LucTrade	0.63	0.82	0.41	0.75
NoRisk	0.45	1.00	0.00	0.20
NoInfo	0.48	0.67	0.60	0.25
InfoIncome	0.61	0.88	0.46	0.59
InfoHealth	0.51	0.79	0.38	0.30

Panel (b)

	poor healthy RISKAVothers=0	poor healthy RISKAVothers=1	p-value
FullInfo	0.65	0.26	0.02
HighRisk	0.67	0.43	0.14
LucTrade	0.79	0.75	0.76
NoRisk	0.33	0.20	0.22
NoInfo	0.67	0.25	0.64
InfoIncome	0.79	0.59	0.06
InfoHealth	0.91	0.30	0.01

Panel (c)

Table 12: *Share of participants who trade, separated by types and RISKAVothers (RISKAVothers=0 in Panel (a) and RISKAVothers=1 in Panel (b). Results from Mann-Whitney rank sum test for poor healthy types comparing by RISKAVothers (Panel (c)).*

One potential reason for opposing trade institutions was the concern for the poor taking excessive risk, i.e., poor healthy types in our experiment. In order to investigate this, Table 12, Panel (c) reports results from Mann-Whitney tests comparing poor healthy's trading decisions separated by risk attitudes. The risk-averse are less likely to trade in the treatments with the baseline payoff structure (i.e., all treatments apart from HighRisk and LucTrade). However, the gap in behavior is fully closed in the lucrative trade treatment. Paying the poor a larger price for selling the item thus makes this trade more attractive but may also alleviate concerns that the poor expose themselves to large downside risks.

6. Policy preferences and risk aversion

The previous sections identified substantial opposition both to a trade institution in the experimental lab setting and to trading various items where morality concerns exist in the survey questions. Interestingly, the aversion to imposing risk on others was highly correlated with this opposition to trade in the diverse domains.

In light of this, it was surprising that the riskiness of payoffs that varied in the experimental treatments did not generate any treatment effects. We thus finally discuss what policy preferences (see Table 5) are captured by the risk aversion measure to understand the underlying mechanisms better.

Overall, 66% support unemployment benefits, and 55% support redistribution policies, while support for income equality (36%) and restricting choice sets to prevent extreme risk-taking (25%) receive much less support. The differences in support (66%>55%>36%>25%) are highly significant (p=0.00, Wilcoxon sign rank).

Table 13 reports the results from OLS and 2SLS, showing how support for these policies correlates with the main explanatory variables used before. Columns (5)-(8) report the results from the second stage, where we again instrument *RISKAVothers* and *GIVE* by age and being conservative in the first stage. We note that the marginally significant effect of *GIVE* in explaining distributional policy support, does not survive when endogeneity of *GIVE* is controlled for in the 2SLS regressions in Columns (5)-(8). However, we again see that *RISKAVothers* significantly explains the position towards many of these policies: first, more risk averse agents are more in favor of unemployment benefits. Essentially, denying unemployment benefits would expose others to downside risks when losing their jobs such that the finding is consistent with risk aversion. However, this policy preference does not translate into a general preference for equality. This somewhat extreme policy goal of equal distribution is rather opposed more by risk-averse types.

VARIABLES	(1) Policy equality	(2) Policy unemploym	(3) Policy redistribute	(4) Policy riskprevent	(5) Policy equality	(6) Policy unemploym	(7) Policy redistribute	(8) Policy riskprevent
RISKAVothers	-0.19***	0.10***	-0.03	-0.22***	-0.35*	0.78**	0.81	-0.85**
	(-5.19)	(2.88)	(-0.85)	(-7.12)	(-1.81)	(2.39)	(1.44)	(-2.36)
GIVE	0.06*	0.04	0.07*	0.05*	-0.14	-1.26	-2.56	1.67
	(1.86)	(1.34)	(1.92)	(1.78)	(-0.25)	(-1.32)	(-1.56)	(1.58)
age	-0.00*	0.00	-0.00**	0.00				
	(-1.95)	(0.97)	(-2.15)	(0.72)				
female	0.08**	-0.01	0.04	0.06**	0.10**	0.01	0.12	0.02
	(2.39)	(-0.17)	(1.18)	(2.04)	(2.52)	(0.20)	(1.00)	(0.32)
uni	-0.01	0.03	0.01	0.04				
	(-0.23)	(0.80)	(0.24)	(1.45)				
econ	0.07*	-0.02	-0.01	0.11***	0.05	0.17	0.27	-0.07
	(1.96)	(-0.55)	(-0.16)	(3.51)	(0.62)	(1.35)	(1.25)	(-0.53)
conservative	0.04	-0.14***	-0.15***	0.12***				
	(1.21)	(-3.87)	(-3.89)	(3.75)				
Constant	0.46***	0.56***	0.69***	0.16***	0.55***	0.82**	1.30**	-0.16
	(6.79)	(8.31)	(9.75)	(2.74)	(2.93)	(2.53)	(2.37)	(-0.45)
Observations	841	842	841	842	841	842	841	842
R-squared	0.07	0.05	0.03	0.15	0.01			

t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 13: *Determinants of policy support. (1)-(4) report result from OLS, (5)-(8) from 2SLS where RISKAVothers and GIVE were instrumented by age and conservative.*

The sign for the support of risk prevention is surprising and puzzling. Subjects hesitant to impose risks on others are less likely to support policies that restrict choices to prevent people from taking risks. We can only speculate about the reasons: there is a crucial difference as *RISKAVothers* captures the hesitation to impose risks on other. In contrast, the policy would interfere with others' actions, i.e., prevent others from imposing the risk onto themselves. The previous section showed that *RISKAVothers* positively correlates with opposing the trade institution, restricting others' choice sets. Allowing for trade would enable poor healthy types to undertake risky actions and rich sick types to reduce their risk exposure. Thus, it is different from supporting a policy that prevents active risky choices.

We finally note that by opposing the trade institution in the experimental settings, people impose risks on rich sick types only as those can no longer get rid of their risks. Thus, if subjects deem the distribution of the gains from the trade institution unfair as it heavily favors rich sick types, this motive may dominate otherwise existing preferences for risk exposure. This interpretation is consistent with the finding that manipulating the riskiness of payoffs

does not change the opposition to trade. In contrast, a more even distribution of gains from trade, as in LucTrade, generates more support for the trade institution.

7. Conclusions

This paper considered motivations for opposing trade institutions. A substantial share of participants strongly oppose trade across several domains, most prominently opposing trade in body parts (i.e., organs), sex services, and food imports from countries with prevalent malnutrition problems. While this opposition reflects moral concern, the attitudes towards trade depend on the individuals' attitudes towards imposing risks on others. Risk-averse subjects are more likely to oppose trading institutions. We interpret this as morality being partly motivated by concerns that others may be induced to risky choices once trade is allowed.

Consistent with this interpretation, our experimental investigation shows a similar explanatory power of risk attitudes for the opposition of trade institutions, even though the abstract monetary payments strip the context of moral concerns regarding the traded item. Moreover, the individual opposition to trade in field contexts is highly correlated with opposition to a trade institution in the experiment, thereby indicating external validity of the experimental measures for opposing trade institutions.

Within the experiment, a substantial share of respondents opposes trade even though voting against trade limits individuals' choice options. The opposition thus has a paternalistic character. We find that the opposition is triggered through unfair distributions of gains from trade, yet does not respond to the riskiness of payoffs.

We find lower opposition to trade behind a veil of ignorance by varying the subjects' information on their specific type. That is, without knowing their income position, background risk, and potential gains from trade, less subjects vote against trade. Similarly, with more evenly distributed gains from trade, fewer subjects vote against trade.. Complementing explicit moral reasons, we thus find that distributional concerns are a major driver for opposing trade institutions.

Based on a similar subject pool of Amazon Mechanical Turk workers from the U.S., Elias et al. (2015a, 2015b, 2017) showed that informing subjects about the economic consequences of organ shortage reduces the opposition to payments for organs. Our study complements these findings by showing another mechanism that may generate more support for trading

institutions: first, policies targeting the distribution of gains from trade. Second, our results on the veil of ignorance suggest that – once people are unsure to what extent they or others may benefit from trade –they may be induced to put themselves more into the shoes of others (in particular of those who may benefit most). That is, opposing trade may pose a large downside risk to oneself.

Our experiment also shows that subjects exhibit behavior that is not consistent with consequentialist preference models. In treatments with identical payoff structures, final decisions to trade are affected by the initial vote on allowing for trade. Going beyond our experimental setting, the finding shows that policies that attempt to reduce the opposition to trade institutions may also affect the final demand for trade. We leave these procedural aspects for further research.

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Appendix: Experimental instructions

Introduction

Thank you for participating in this experiment! The results will be used in a research project. All participants in the experiment will be paid US $0.75 for participating. Additional earnings will depend on the choices you and other participants make in the experiment, and outcomes of lotteries. The expected average earnings is US $7.5. Please read the instructions carefully, as your choices determine your payment.

The currency used will be called tokens. One token is worth 5 cents (US $0.05). Upon conclusion of the experiment by all participants, you will be informed by email about how many tokens you have earned in total, and how much money you will be paid for participating.

The experiment consists of three parts: A, B, and C. Before each part starts you will receive instructions for that part. Your payment from the experiment will be the sum of what you earn in Part A and Part B. Part C is a short survey. There will be full anonymity in the experiment. The other participants will not learn your identity, what choices you make or how much you earn. At the bottom of some pages there is a control question to make sure that you are not a robot and that you have understood the instructions or that you pay attention to the questions. For some of these questions you need to answer correctly to continue with the experiment.

PART A

Part A consists of three (3) tasks. Only one of these tasks will be paid out. There is an equal chance for each of the three tasks to be paid out, and a random draw will decide which of the three tasks will be paid out. Your choices in Part A will not influence your payoffs in Part B.

[Control question]

Task 1 Information

In this task, your task is to choose one of six lotteries. You will receive the outcome of the lottery you choose. In each lottery, there are two possible outcomes, and both outcomes will occur with equal probability (50% probability). When you have selected your preferred lottery, a random draw will determine the outcome of the lottery. The six lotteries are

presented below. There is one row for each lottery. Your task is to select your preferred lottery. Example: If you pick a row specified as "56 -or- 56", you will receive 56 for sure. If you pick a row "4 - or- 140", the chance that you will receive 4 is the same as the chance that you will receive 140. The earnings are in tokens.

Please choose one of the six lotteries that will determine YOUR OWN EARNINGS in tokens

56 -or- 56
48 -or- 72
40 -or- 88
32 -or- 104
24 -or- 120
4 -or- 140

[Control question]

Task 2 Information

In this task, your task is to choose one of six lotteries on behalf of another participant. This other participant, who is randomly chosen, will receive the outcome of the lottery you choose. Similarly, you will receive the outcome of the lottery chosen by another participant. In each lottery, there are two possible outcomes, and both outcomes will occur with equal probability (50% probability). When you have selected your preferred lottery, a random draw will determine the outcome of the lottery.

Example: If you pick a row specified as "56 -or- 56", the other participant will receive 56 for sure. If you pick "4 -or- 140",

the chance that the other participant will receive 4 is the same as the chance that the other participant will receive 140. The earnings are in tokens.

Please choose one of the six lotteries that will determine the earnings of ANOTHER PARTICIPANT

56 -or- 56
48 -or- 72
40 -or- 88
32 -or- 104
24 -or- 120

4 -or- 140

Task 3

In this task, there are two roles: Person 1, and Person 2. Person 1 receives 100 tokens. Person 1 decides how many tokens to keep for herself, and how many tokens to give to Person 2. **All participants will make a choice as Person 1.**

You will be randomly assigned a partner among all the other participants for this task. The partner will not know who you are, and you will not know who your partner is. Your partner in Task 3 will not be the same person as your partner in the previous tasks.

A random draw will decide whether you are Person 1 or Person 2. If you are selected to be Person 1, your choice will determine both your own and your partner's earnings from Task 3. If you are selected to be Person 2, your earnings in Task 3 will be determined by the choice of your partner.

How many tokens do you want to give to Person 2? (0-100)

PART B

In Part B, you are in a group consisting of 8 people: yourself and 7 others. You are in the same group throughout Part B. There are four types of people in your group. They differ with respect to the initial income and if they own or do not own an item called Security whose properties will be explained later. Specifically, the four types are the following:

1. High income (150 tokens) own the item "SECURITY"

2. High income (150 tokens) do not own "SECURITY"

3. Low income (50 tokens) own the item "SECURITY"

4. Low income (50 tokens) do not own "SECURITY"

[Control question]

<u>BASE CASE (FullInfo)</u>

People, who do not own SECURITY, have a risk of losing some of their income.

- High income people have a 20% chance of having an income of 150 tokens, and an 80% chance of losing 75 tokens, giving a remaining income of 75 tokens.
- Low income people have a 20% chance of having an income of 50 tokens and an 80% chance of losing 45 tokens, giving a remaining income of 5 tokens.

	Initially own "SECURITY"	**Initially do not own "SECURITY"**
High income	150	80%: 75 20%: 150
Low income	50	80%: 5 20%: 50

RISK-FREE-ALL-KNOWING

People, who do not own SECURITY, will lose some of their income.

- High income people have an income of 150 tokens, and will lose 60 tokens, giving a remaining income of 90 tokens.
- Low income people have an income of 50 tokens, and will lose 36 tokens, giving a remaining income of 14 tokens.

The earnings of each of the four types are summarized in this table:

The options and possible outcomes **when trade is not possible** are summarized in this table:

	Initially own "SECURITY"	**Initially do not own "SECURITY"**
High income	150	90
Low income	50	14

Part B consists of two stages:

- Stage 1 – the Decision stage: In this stage your group decides on whether to allow for trade in the item SECURITY" in your group or not.
- Stage 2 – the Trade stage: In this stage you decide on whether you want to buy or sell the item.

BASE-CASE

If trade is allowed, people can buy or sell the item "SECURITY" at the price of 15 tokens. All people with SECURITY can sell it, but only high income people without SECURITY can buy it. **High income people who do not own SECURITY** can choose to buy it. People who buy SECURITY will pay the price of 15 tokens and this removes the risk of losing income.

- High income: will have an income after trading of 135 (150-15=135)

People who own SECURITY can choose to sell it. People who sell SECURITY will earn the price of 15 tokens, but this adds a risk of losing income; they then have a 20% probability of losing income.

- High income: an 80% chance of having an income after trading of 165 (150+15=165) a 20% chance of having an income after trading of 90 (75+15=90)
- Low income: an 80% chance of having an income after trading of 65 (50+15=65) a 20% chance of having an income after trading of 20 (5+15=20)

If trade is allowed, the earnings of each of the four types are summarized in this table

	Initially own "SECURITY"		**Initially do not own "SECURITY"**	
	Sell	Don't sell	Buy	Don't buy
High income	80%: 150 + 15 = 165 20%: 75 + 15 = 90	150	150 - 15 = 135	80%: 75 20%: 150
Low income	80%: 50 + 15 = 65 20%: 5 + 15 = 20	50		80%: 5 20%: 50

If trade is <u>not allowed</u>, the earnings of each of the four types will be as before

	Initially own "SECURITY"	**Initially do not own "SECURITY"**
High income	150	90
Low income	50	14

<u>ALL-KNOWING-LUCRATIVE TRADE</u>

If trade is allowed, people can buy or sell the item "SECURITY". All people with SECURITY can sell it, but only high income people without SECURITY can buy it.

High income people who do not own SECURITY can choose to buy it. People who buy SECURITY will pay the price of 15 tokens and this removes the risk of losing income.

- High income: will have an income after trading of 135 (150-15=135)

People who own SECURITY can choose to sell it. People who sell SECURITY will earn some tokens, but this adds a risk of losing income: they then have a 20% chance of losing income. Note that people with low income will earn more by selling than people with high income.

- High income: an 80% chance of having an income after trading of 165 (150+15=165) a 20% chance of having an income after trading of 90 (75+15=90)
- Low income: an 80% chance of having an income after trading of 65 (50+40=90) a 20% chance of having an income after trading of 45 (5+40=45)

If trade is allowed, the earnings of each of the four types are summarized in this table

	Initially own "SECURITY"		**Initially do not own "SECURITY"**	
	Sell	Don't sell	Buy	Don't buy
High income	80%: 150 + 15 = 165 20%: 75 + 15 = 90	150	150 - 15 = 135	80%: 75 20%: 150
Low income	80%: 50 + 40 = 90 20%: 5 + 40 = 45	50		80%: 5 20%: 50

If trade is not allowed, the earnings of each of the four types will be as before.

	Initially own "SECURITY"	**Initially do not own "SECURITY"**
High income	150	80%: 75 20%: 150
Low income	50	80%: 5 20%: 50

ALL-KNOWING-HIGH-RISK-REWARD

Trade allows people to buy or sell the item "SECURITY" at the price of 15 tokens. All people with SECURITY can sell it, but only high income people without SECURITY can buy it.

High income people who do not own SECURITY can choose to buy it. People who buy SECURITY will pay the price of 15 tokens and this removes the risk of losing income.

- High income: will have an income after trading of 135 (150-15=135)

People who own SECURITY can choose to sell it. People who sell SECURITY will earn the price of 15 tokens, but this adds a risk of losing income; they then have a 20% probability of losing income.

- High income: an 80% chance of having an income after trading of 165 (150+15=165) a 20% chance of having an income after trading of 90 (75+15=90)
- Low income: an 80% chance of having an income after trading of 70 (55+15=70) a 20% chance of having an income after trading of 0 (-15+15=0)

If trade is allowed, the earnings of each of the four types are summarized in this table

	Initially own "SECURITY"		**Initially do not own "SECURITY"**	
	Sell	Don't sell	Buy	Don't buy
High income	80%: 150 + 15 = 165 20%: 75 + 15 = 90	150	150 - 15 = 135	80%: 75 20%: 150
Low income	80%: 55 + 15 = 75 20%: -15 + 15 = 0	50		80%: 5 20%: 50

If trade is not allowed, the earnings of each of the four types will be as before

	Initially own "SECURITY"	**Initially do not own "SECURITY"**
High income	150	90
Low income	50	14

RISK-FREE-ALL-KNOWING

If trade is allowed, people can buy or sell the item "SECURITY" at the price of 15 tokens. All people with SECURITY can sell it, but only high income people without SECURITY can buy it.

High income people who do not own SECURITY can choose to buy it. People who buy SECURITY will pay the price of 15 tokens and this removes the loss of income.

- High income: will have an income after trading of 135 (150-15=135)

People who own SECURITY can choose to sell it. People who sell SECURITY will earn the price of 15 tokens, but this adds a loss of income.

- High income: will have an income after trading of 150 (135+15=150)
- Low income: will have an income after trading of 56 (41+15=56)

If trade is allowed, the earnings of each of the four types are summarized in this table.

	Initially own "SECURITY"		**Initially do not own "SECURITY"**	
	Trade	Don't trade	Trade	Don't trade
High income	135 + 15 = 150	150	150 - 15 = 135	90
Low income	41 + 15 = 56	50		14

If trade is not allowed, the earnings of each of the four types will be as before

	Initially own "SECURITY"	**Initially do not own "SECURITY"**
High income	150	90
Low income	50	14

[Control question]

Stage 1

Now all 8 members of your group will make a decision on whether trading in SECURITY should be allowed or not in your group. The computer will then select one of these 8 decisions, and enforce it in your group. The chance of being selected is equal for all group members.

[Control question]

(*Information given to all treatments)*

There will be exactly 2 participants of each characteristic in your group. All participants will face an equal chance of 25% of having the respective characteristics: high income and owning "SECURITY", low income and owning "SECURITY", high income without "SECURITY", low income without "SECURITY"

ALL-KNOWING

In your group there are exactly 2 people of each type. You will know whether you have high or low income and whether you have SECURITY or not when you decide on whether trading SECURITY is allowed or not in your group.

[Info: You have high/low income. You do not have/have SECURITY]

RICH-OR-POOR

There will be exactly 2 participants of each characteristic in your group. Participants get to know if they have high or low income. You and the other participants have a 50% probability of owning the item "SECURITY".

[Info: You have high/low income]

SECURE-NOT-SECURE

In your group there are exactly 2 people of each type. You will know whether you have SECURITY or not, but not whether you have high or low income when you decide on whether trading SECURITY is allowed or not in your group. All members of your group have a 50% chance of having high or low income.

[INFO: You do not have/have SECURITY]

Decision Stage

Make your decision: Allow trade / Do not allow trade

[Reminder of payoff tables are shown here]

Stage 2

You and the other 7 participants in your group will now be informed about whether you have high or low income, and whether you own or do not own the item “SECURITY”.

[Info You do not own the item “SECURITY”/ own the item "SECURITY" You have low/ high income]

[For the combination low income/do not own the item SECURITY the following text was shown:]

Since you do not own the item "SECURITY" and you have low income, you cannot trade. If the randomly selected dictator in your group has decided to allow trade, what decision will you make then?

Please note that this decision is binding and matters for your payoff if trade indeed was allowed. Sell /do not sell / buy / do not buy

[Reminder of payoff tables are shown here]

Now we want to ask you some questions about what you think other participants will do. You need to choose a number between 0 and 100. If you guess correctly, within a margin of 5+/- of the correct answer, you will earn 5 tokens

Out of 100 people with high income who own SECURITY, how many do you think will sell?

Out of 100 people with high income who do not own SECURITY, how many do you think will buy?

Out of 100 people with low income who own SECURITY, how many do you think will sell?

PART C

We finally want to ask you a few questions about your views on some issues and your background.

Survey

For each of the areas below, to what degree do you think it is morally acceptable or unacceptable to trade these goods/services for money? 1 means that you think trade in this good/service is morally unacceptable. 5 means that you think trade in this good/service is morally acceptable.

- Goods produced in poor countries by people with very low income
- To use surrogate mothers (a woman who becomes pregnant for the purpose of carrying the fetus to term for another person) to have children
- Food from countries where a large proportion of the population suffers from hunger and malnutrition
- Sexual services
- Emission permissions for countries (for instance CO_2-permits)
- Emission permissions for firms (for instance CO_2-permits)
- Human body parts (kidneys, etc)

For each of the areas below, to what degree do you agree with the statements? 1 means that you disagree completely … 5 means that you agree completely

- I am generally a person who is fully prepared to take risks

- I am generally a person who is willing to impose risks on other people for my own benefit
- The state should make people's incomes equal
- Governments should tax the rich and subsidize the poor
- Select 4 to prove that you are not a robot
- People should receive state aid for unemployment
- The state should restrict the choices that people have in order to prevent them from taking extreme risks

In political matters, people talk of "liberal" and "conservative." How would you place your views on this scale, generally speaking? Liberal (1) Conservative (10)
What is your age?
In which state do you reside?
What is your gender?
What is your highest completed education?
Are you currently studying economics, or have you previously studied economics or related subjects?