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PRIVATE SANCTIONS

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ABSTRACT

We survey a representative sample of the U.S. population to understand stakeholders' desire to see their firms exit Russia after the invasion of Ukraine. 61% of respondents think that firms should exit Russia, regardless of the consequences. Only 37% think that leaving Russia is a purely business decision. If a firm does not conform with these desires, 66% of the respondents are willing to boycott it. This desire diminishes with the costs they face in boycotting. At $500, 43% would want to boycott. This propensity to boycott is high, even for participants who are told they have no impact, suggesting strong deontological concerns. Nevertheless, it is difficult to separate deontological and consequentialist motives to boycott, because subjects' beliefs about "impact" are highly correlated with their willingness to act "whatever the consequences". When we randomize beliefs about impact, we find a clear effect for shareholders, but not for the other stakeholders. We discuss what are the geopolitical and economic implications of a world where private corporations may discontinue profitable business relationships for moral or political reasons.

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1. Introduction

In February 2022, Western nations responded to Russia's military buildup and then its invasion of Ukraine by imposing severe sanctions.[1] The use of state sanctions by non-belligerent nations is not new. It dates back to at least 1936 when the League of Nations sanctioned Italy for its invasion of Ethiopia (Mulder, 2022). The novelty of the Ukrainian War is the presence of massive private sanctions (i.e., sanctions decided by private companies) in addition to what is required by state sanctions. More than 1,000 companies, employing over 1 million Russians, chose to exit from Russia in the few months following the beginning of the invasion (Sonnenfeld et al., 2022a).

What pushes firms to impose these sanctions? There are different theories. Some (e.g., Huang et al, 2022) see private sanctions as value-maximizing decisions aimed at protecting corporate reputation or minimizing the risk of incurring official sanctions (Beattie, 2022). Others (e.g., Pajuste and Toniolo, 2022) see them as CEOs' "woke-washing", where companies make the cheap decision to look morally virtuous. Understanding the causes of this swift reaction is important not just for firms' valuations, but for international political strategy as well. If private sanctions are an essential component of modern warfare, firms' motivations acquire geopolitical relevance. But to understand how firms will act, a natural first step is to ask what their stakeholders really want.

In this paper, we try to address this question through a survey of "hypothetical stakeholders". We survey a representative sample of the U.S. population, via an online firm (*Respondi*). The 3,000 respondents are randomly allocated to three different "stakeholder" treatments, where the respondent is supposed to think of herself as an employee, a customer, or a shareholder of a hypothetical firm exposed to Russia. The firm refuses to close its operations in Russia, and the survey asks how participants would react. Our findings are the following.

First of all, stakeholders want the companies they patronize to take a position. Only 37% of the respondents think that leaving Russia is a pure business decision, best resolved by weighing the economic costs and benefits. This is true whether the patron is a customer, an employee, or a shareholder. Only 30% say that only the government should impose sanctions. Stakeholders are largely in favor of firms sanctioning Russia: 61% think that "doing business in Russia is like being an accomplice of the war" and that a "company should sever its ties to Russia, whatever the

[1] https://www.piie.com/blogs/realtime-economic-issues-watch/russias-war-ukraine-sanctions-timeline.

consequences." Thus, only a minority of respondents would agree with the Milton Friedman adage that "the business of business is business".

Second, a majority of stakeholders are willing to punish companies that refuse to halt their Russian operations. We offer them the option to sell their stocks (if they are shareholders), quit their job (when employees), or boycott the product (as consumers). A majority are willing to do this, but their "willingness to punish" is strongly sensitive to the personal cost they pay (a variable we randomize). When punishing a company does not carry any personal cost, 66% of the respondents are willing to punish companies that do not exit Russia. If boycotting carries a cost of $100, 53% are still willing to boycott. When the cost is $500, the fraction of respondents who are willing to boycott drops to 43%. This sensitivity to cost is highly significant and suggests that participants trade off their moral obligation with their cost, a feature present in surveys of other hypothetical policy contexts (Landier and Thesmar, 2022 and forthcoming). That costs have an effect on attitudes suggests that answers to our hypotheticals are not pure virtue signaling – we return to this issue below.

The average propensity to punish and the sensitivity to cost are similar for all classes of stakeholders. While it means that prosocial preferences are consistent across contexts – a reassuring feature that we discuss in the paper – we note that it does *not* mean that the consequences for firms are the same (we discuss this in Section 5.1). If customers and employees are equally willing to endure a $500 cost to punish the company, the cost they will impose on the company is vastly different. To pay $500 to retain one reluctant employee is affordable, but to pay $500 to retain one customer can be extremely expensive if the company's annual margin per consumer is low. In the case of a gasoline company, which is our "customer" context, it implies lowering the prices to the average consumer by 76 cents per gallon, or 15% if the price per gallon is $5. This suggests that when customers apply pressure through market forces, profit-maximizing firms respond.

Third, to guide our analysis of the factors (besides costs) that impact an individual's decision to boycott a firm that does not exit Russia we set out a simple framework. In deciding to punish the firm for not pulling out of Russia, participants trade off three components: (1) a moral imperative or "deontological" component that arises from taking the moral action, independent of

consequences[2], (2) a dollar cost of acting, that we randomize across participants, and (3) the welfare impact of the moral action, that we partly randomize (some participants are told their action has no impact on the firm, others that it does).

We first focus on participants who were told their boycotting has no impact on the firm they target. For these, the motivation to act is purely deontological . Using our survey and some assumptions detailed in Section 3, we estimate this deontological motive to be worth about $250 for the average participants, with a standard deviation of $2,000. This range is estimated from the fraction of participants who refuse to punish even if the cost is zero. This group is a minority but significant. We then explore the cross-sectional determinants of the deontological motive. Not surprisingly, we find a statistically strong correlation between the size of the deontological motive inferred from the decision in absence of impact and explicitly stated deontological motives. For example, participants who claim to be willing to punish "even if no one else does it" have a deontological motive on average worth $1,000 instead of $250 for the sample average. A similar impact is observed for participants who answer that "the firm should exit Russia, no matter what".

For slightly over half of our sample, we explicitly mention that their punishing will negatively affect the company: selling shares will make the price drop, quitting the firm will disrupt it, and boycotting the product will mean one fewer customer. We randomize this treatment across participants, and find this "impact condition" alone has little effect on respondents' answers. The only exception is the shareholder condition: shareholders punish on average less, but punish more for impact. This could be consistent with several explanations we explore in the paper.

Our model suggests that impact should enter alone, but it should be interacted with some measure of prosocial attitude. When we do so, the interaction variable is positive and statistically significant at the conventional level, albeit our research design could be further improved to more sharply elicit consequentialist motives – for instance using quizzes as in Bonnefon et al. (2022).

When we combine proxies for deontological and consequentialist reasons to boycott, we are able to explain up to 24% of the cross-sectional variation in the willingness to boycott. It is difficult, however, to separate which fraction is due to the first motive and which fraction to the second, since the proxies for both are highly correlated.

[2] We refer to this as "deontological" as the main utility benefit of taking an action is to follow the rule, irrespective of consequences. In our framework and our data, we cannot distinguish between various non-consequentialist motives (true deontological motive, virtue signaling to oneself or others, Kantian maxim of "universal law"). So our use of the word "deontological" here is an abuse of language.

Finally, we find that the willingness to impose sanctions is very much related to moral values (as defined by Haidt, 2012) and to a lesser extent to socio-demographics. Participants with a high score on compassion and authority, and a low score on purity and loyalty, are much more willing to punish the "immoral" firm. This explains as much of the cross-sectional variance in answers as does the cost. Interestingly, the willingness to punish is also strongly affected by age: older generations are much more willing to punish the firm for not leaving Russia than younger ones. This stands in stark contrast with the commonly held view that the younger generation is politically more sensitive, albeit this difference might be explained by the specific topic, where older participants, who grew up during the cold war, might have a more negative view of Russia. Finally, even after controlling for these factors, liberals are more willing to impose sanctions than conservatives – but the additional explanatory power of political leanings is small.

One risk, intrinsic in any survey, is that respondents tell researchers what they want to hear, especially when no real cost is involved. We think this problem is limited for several reasons. First, the subjects exhibit a response that is highly correlated with their political position and with their level of empathy, thus it is unlikely that they respond randomly. Second, we find that respondents react to costs. Thus, while the average response might be tilted towards pleasing the interviewers and looking virtuous, the subjects seem to respond to hypothetical monetary incentives exactly as we would expect with real ones. Third, the average response is not tilted towards pleasing the interviewer in the first question of the survey (which we use only for robustness), where we ask about the willingness to sacrifice the premium Elon Musk offered for Twitter to preserve Twitter's independence. Only 32% of the respondents answered affirmatively. Fourth, in a similar context, Bauer et al (2022) show that hypothetical responses mimic real choices. Last but not least, at the end of each survey we asked respondents whether they want to donate 50 cents of the income they received to some relief effort in Ukraine: 18% of the respondents were willing to sacrifice 50c, or about 16% of their compensation to this goal. Most importantly, our results are substantially unchanged if we restrict our analysis to "sincere" participants, a set given by the union of those who do not want to punish (irrespective of whether they donate or not) and those who punish and donate to Ukraine.

On the positive side, this survey allows us to randomize on three important dimensions: nature of the relationship with the company, cost, and impact of the action. Thus, for these three dimensions, we can talk about causal effects, while all the others are simple correlations.

Given these significant caveats, our results have important implications for the strategy of sanctions. First of all, the popularity of sanctions depends on their cost. Participants are willing to sanction if they do not pay anything, but once the cost becomes tangible (even if hypothetical) this willingness decreases. Second, the willingness to pay for sanctions and the effects of boycotting on firms seem larger among consumers. This is not so much because consumers are more willing to punish, but rather because there are more consumers than workers or shareholders. As a result, it is very expensive for the firm to prevent customers from pushing back on its moral behavior, much more so than it is to compensate employees or shareholders. Finally, a big role in stakeholders' willingness to sanction is played by emotional empathy, which is unrelated to the consequences sanctions will have. Thus, the success of private sanctions as a strategy depends heavily on these aspects.

Our paper is related to a large body of literature that seeks to elicit the moral preferences of economic agents. The older work uses experiments, with a particular focus on fairness and reciprocity (see for instance Fehr and Gächter, 2000, Falk et al, 2018). A more recent literature moves from the lab to the field and uses surveys to measure moral preferences in specific economic contexts (see for instance Enke, 2019, Kuziemko et al, 2018, Stantcheva, 2020, among others). A large literature evaluates the willingness to pay for "fair trade" products using a combination of surveys and, more recently, experiments (see Hainmueller et al, 2015). These papers are mostly evaluating economic agents' preferences for taxation and voting patterns. A relevant exception is Bartling et al. (2015), who show ethical considerations lead to a segmented market with prices that depend upon the social impact of a good. We complement this literature by shifting the focus to firms' objectives, an issue particularly salient in the debate on modern capitalism (Hart and Zingales, 2017, 2022; Bebchuk et al, 2022).

Our paper is also a contribution to the literature on ESG investing and its governance. In the ESG literature, a few papers are using surveys with hypotheticals or lab experiments to analyze investor preferences (Bonnefon et al, 2022, Heeb et al, 2022). Others (Riedl and Smets, 2017, Bauer et al, 2021) directly survey real investors to elicit their preferences. These papers have in common that they ask investors to trade off investment returns against social responsibility (sometimes through an experimental design, sometimes directly) and find that investors are willing to give up some returns. While we are interested in such a tradeoff, our scope encompasses also other stakeholders (customers and employees) and we compare the moral preferences of these

stakeholders with those of investors (we find that their willingness to pay is similar). To our knowledge, the only other paper that compares willingness to pay across different stakeholders is Hirst et al. (2022): they compare customers, investors, and donors. They find that on average investors are willing to sacrifice between 1.76% and 2.53% out of a potential total return of 10% to advance a social goal. Yet, roughly a third of the investors are unwilling to forgo any amount to advance any of the four social goals the authors presented to them. Unlike us, they find that investors are willing to sacrifice less than donors and customers, raising the possibility that framing might play a role in how individuals answer.

Finally, our paper contributes to the emerging literature on what drives firms to exit Russia after the beginning of the invasion of Ukraine. In a different context, a precursor of these papers is Teoh et al (1999), who focused on the effect of shareholder pressure on corporate exit from South Africa: They find that shareholder divestment had no effect on firm values, both in the U.S. and in South Africa. In the context of the war in Ukraine, Huang et al. (2022) find that multinational firms that suspend or withdraw business from Russia have higher ESG scores and are more likely to be headquartered in a country with higher security concerns. Similarly, Choy et al (2022) find that firms with high ESG scores are more likely to exit Russia. In contrast, Ahmed et al. (2022), who analyze European firms belonging to the Stoxx 600 index, find that more highly rated ESG firms are not more likely to withdraw or suspend their operations in Russia. Pajuste and Toniolo (2022) document that the decision to exit Russia often follows a boycotting campaign on Twitter. Finally, Sonnenfeld et al (2022b) use stock return around exit announcements to claim companies' shareholders benefit from exiting Russia.

The rest of the paper proceeds as follows. Section 2 describes survey construction and provides a few preliminary statistics. Section 3 lays out the framework, where we connect prosocial action by stakeholders to deontological and consequentialist motives. Section 4 describes our main results about these two types of motives. Section 5 discusses the implications of our analysis on 1) which stakeholder exerts the most pressure on the firm, 2) the increasing segmentation of economics by moral value. Section 6 concludes.

2. Survey Presentation and Descriptive Statistics

2.1 The Nature of the Survey

We created our survey in Qualtrics and we administered it online through the survey company *Respondi* (https://www.respondi.com/EN/). *Respondi* offers the possibility of creating representative samples along multiple dimensions. We asked them to produce a sample of 3,000 Americans representative of the US population on the basis of political orientation and age. The survey was administered between May 10th and June 1st, 2022. The raw number of responses is 4,239. *Respondi* automatically excluded 1,324 respondents who failed the attention test that we designed and ended up with a final sample of 2,915 observations.

The questionnaire is reproduced in Appendix A. It was exempted from a formal IRB review (MIT Exempt ID E-4034). It is divided into four main parts. Part I focuses on a potential vote on Elon Musk's bid for Twitter. Since this is unrelated to the corporate response to Russia's invasion of Ukraine, we ignore it in this paper. Part II is the crucial one, where the individual reaction to a patronized company not exiting from Russia is analyzed under different circumstances. Part III asks a series of questions about moral and political values. In particular, we ask Haidt (2012)'s questions to identify the moral attitudes of our respondents along the six dimensions identified by Haidt (2012) (compassion, fairness, loyalty to the in-group, authority, sanctity, and freedom), as well as a self-assessment of political views (on the conservative-liberal axis). As previously documented by Haidt and others, political positioning very strongly correlates with moral values.[3] Finally, as a robustness check, Part IV offers to the subject the real possibility of donating $0.5 from their compensation to a Ukrainian relief fund. If a respondent agrees we withhold $0.5 from his compensation and donate to the Ukrainian Red Cross/Red Crescent.

Let us now zoom in on Part II, the core of our questionnaire. In this part, the key question of interest is whether participants are willing to "punish" a firm that does not exit from Russia – and how much they are willing to pay to do so.

There are three distinct layers of randomization in Part II. In our first layer of randomization, all subjects are randomly assigned to one of the three *stakeholder* conditions: shareholder, customer, and employee. In each of the three subsamples, questions are adapted to the situation. The type of punishment participants can exert depends on the kind of stakeholder they are. In the consumption treatment, the subject is asked whether she will stop buying gas from

[3] See a quick investigation of this in Figure 1. For ease of exposition, we group Haidt values in a single principal component. This is the first PC of the PCA of all 6 values, it explains 27% of the variance and contrasts loyalty, authority and sanctity with freedom, fairness and compassion. Participant scores along this PC (x-axis) correlate very strongly with self-positioning on a conservative-liberal scale (y-axis represents % liberals).

a gas station that belongs to a company that does not exit Russia. In the employment condition, the participant is asked whether she is willing to change employer (the firm's industry is not explicitly mentioned). In the shareholder condition, she is asked whether she is willing to sell shares of the company not exiting Russia (again, the industry is not mentioned).

The second randomization layer regards the *cost* of boycotting. Each subject in the survey is randomly allocated a cost of $0, $100, and $500 with equal probability. The amounts are the same across all conditions. Presentation depends on the context: a broker fee in the shareholder condition, a higher gasoline price in the customer condition, and an increased commuting cost in the employee condition. We formulate these questions in such a way that all other costs are implicitly held constant. For instance, "employees" are told they can quit easily as they have an alternative job offer: The only cost really is the small additional highway toll they will incur ($0, $100, or $500). "Customers" are told they just need to stop at another gas station on their way to work, where gas is slightly more expensive, yielding an extra cost of $0, $100, or $500 annually, but this will not affect their commuting time.

Finally, the third layer of randomization regards the *impact* that boycotting will have on the firm. In the shareholder treatment, we randomly allocate participants to three conditions, in which they are provided with one of the following statements: i) "the act of selling will have no effect on the stock price. Someone else will buy at market price" (probability 1/3); (ii) "the act of selling will reduce the stock price by 2%, because demand for the stock is low' (probability 1/3); (iii) "the act of selling will reduce the stock price by 5%, because demand for the stock is low (probability 1/3)." In the consumer and employee treatments, we randomly allocate subjects to two conditions: i) the company targeted by the boycott is not really affected by the boycotting ("it will only take your current employer Acme a couple of days to find a replacement" and "Acme will not be impacted at all by losing you as a customer: if you stop going there, someone else will become a regular patron of the gas station") (probability ½), ii) the company will be facing a cost ("it will take your current employer, Acme, several months to find a replacement, which will cause significant problems" and "Acme will be impacted by losing you as a customer: if you stop going there, no one else will replace you as a client") (probability ½).

Once all these dimensions have been randomized, we ask about participants' "willingness to punish", i.e., the willingness to sell stocks /switch gas stations/quit jobs. In the questionnaire, answers are allowed to be on a score from 1 to 5. Once participants have answered, we elicit their

motivation through a range of qualitative questions, which we will describe in more detail below. Some of these questions are related to deontological motivation (the company should pull out of Russia, no matter the consequences, or it is not the business of a company to engage in politics), consequentialist motivation (by pulling out of Russia, the company can help stop the war, or make it worse), and attribution of collective responsibility (all Russians are accomplices of the war). We also ask the participants questions about the social drivers of actions (if people follow you, does it make you more likely to punish; if other people punish, does it make you more likely to punish, etc.).

Table 1 reports the age, political leaning, and income distribution of the sample. The age and political affiliation distributions match the U.S. distributions by design.[4] Even if the income distribution was not a target in the sample construction, it is not far off the actual U.S. distribution. In particular, both the tail ends of the sample distribution closely match those of the U.S. population. By contrast, the sample is not matched by gender. It contains 69% males.

Table 2 contains the summary statistics of all the variables we use in our analysis. We split the Panel into two parts: Panel A describes the entire sample (all 2,915 participants), while Panel B focuses on participants who are in the "no impact" condition (50% of the customer and employee conditions, and 33% of the shareholder condition, as described above, hence 1,285 participants in total). Unsurprisingly, summary statistics are nearly identical in both panels, since allocation to the "no impact" condition is random. Haidt values are standardized to a mean of 0 and a standard deviation of one. We define willingness to punish as a score of 4 or 5 in response to our main question: This corresponds to 52% of the respondents in the overall sample. We define the other variables below.

2.2 *Summary statistics*

We start by presenting some key summary statistics on the attitudes of Americans vis-à-vis the role that companies doing business with Russia should play after Russia's invasion of Ukraine. In Table 3, we describe answers to a few key questions: concern about the war, willingness to punish, and key justifications.

[4] As a benchmark, we use the data from Barrios et al (2020), except for age. Since we based our sampling frame on age categories that differ from theirs, we use age tables from the U.S. Census for the age breakdown.

Going back to Table 3, we first analyze pure deontological motivations: motivations that arise from moral principles. We see that 76% of respondents are concerned about the war and 61% agree with the statement "Doing business in Russia is like being an accomplice of the war. The company should sever its ties to Russia, whatever the consequences." (This is labeled for short "cut ties with Russia, no matter what" in Table 3 and later.) Anticipating our statistical analysis, there is no difference across the three conditions or based on the level of income, but there is a large difference in age: only 58% of people below 30 agree with the statement that doing business in Russia is like being an accomplice to the war, while 76% of people above 70 agree with it.

In line with the deontological motivation to act, most respondents reject the rule that economics and morals should be separate realms. Only 37% of respondents agree with the statement that exiting Russia is "purely a business decision. Management should weigh the economic costs and benefits." ("Stopping business is a mere business decision" for short in Table 3.) The percentage in favor is slightly higher in the shareholder treatment, but the difference is not statistically significant at the 10% level (p-value 0.104). This percentage does not change when we limit the sample to the two upper quintiles of the income distribution, whose members are much more likely to own stocks. Interestingly, the percentage of people thinking that sanctions are purely a business decision declines with age, albeit the effect is not large: it is 39% among people below 30 and 35% among people above 70. As for the previous question, older people are much more likely to mix business and morals – we will return to this. Along the same lines, thirty percent of the respondents think that "it is not a company's role to decide what is right and what is wrong" and this task should be left to the government ("Imposing sanctions is a government decision" in Table 3). As expected, though the correlation is not mechanical, this percentage rises to 45% among people who think that sanctions are a "pure business decision". Overall, people tend to disagree with Milton Friedman's adage that "the business of business is business".

Respondents also feel that the company pulling out from Russia is going to have positive consequences. A good 45% think that by stopping business with Russia, a company can encourage the Kremlin to stop the war ("leads the Kremlin to stop the war" in Table 3). Symmetrically, very few respondents believe exiting Russia will have no impact on the war. Only 16% of the respondents agree with the statement that "whatever the company decides, it will not have a significant impact on the Russian economy, so exiting from Russia is useless" ("suspension useless because companies cannot impact Russian economy" in Table 3). People who believe exiting

Russia will have adverse consequences are a bit more numerous than people who believe in no impact: 25% think sanctions are counterproductive because they would lead "Putin to attack civilians" (in the questionnaire, "By stopping business with Russia, the company makes Putin angry and leads to harsher attacks on civilians"). Similarly, 35% think that sanctions have the collateral effect of hurting Russians who are not complicit.

In Figure 2, we graphically present the effect of various controls (all three randomized conditions, and a few observables) on the willingness to punish. The results of Figure 1 will be validated by our later regressions.

Let us start with the effects of randomized conditions. First, the willingness to boycott is slightly larger for customers than for employees or shareholders (the difference is significant). This is consistent with the idea that customers are prompt to boycott products that they deem immoral, and also somewhat consistent with the idea that shareholders view their relationship with the firm as more transactional. Second, willingness to punish is slightly higher, on average, in the "some impact" condition, consistent with consequentialist motives – but again the difference is not very big. In contrast, the willingness to boycott is greatly influenced by the cost: 66% of respondents are willing to boycott if the cost is zero, 55% if the cost is $100, and 43% if the cost is $500. The effect of the cost will turn out to be very strongly significant. The strong effect of cost and the subdued effect of impact suggests a mixed form of deontology and consequentialism– we will sketch such a framework in Section 3.

We also split the sample by measures of moral values. Liberals (answers 4 and 5 on a scale of conservatives vs. liberals) are much more willing to boycott than conservatives (answers 1 and 2 on the same scale): 66% to 47%. People who donate 50 cents to Ukraine at the end of the survey are much more willing to boycott than people who do not donate: 68% vs. 51%. Finally, people who are "concerned about the war" are much more willing to boycott than people who are not concerned: 63% vs 28%. All these effects, like the effect of cost, will turn out to be very strongly significant.

3. Economic Framework and Empirical Model

As the summary statistics presented above suggest, the decision to boycott is the result of many factors: the cost, the perceived probability that an individual's boycott will make a difference, and

the perception that a firm's exit from Russia will have positive and not negative consequences. To separate these effects we need a framework. In this section, we present one.

3.1 Economic Framework

A stakeholder (customer, employee, shareholder) has the choice between two alternatives. The first one is to do nothing. In such a case the status-quo utility is given by

$$U(\text{no action from i}) = u_i + \lambda_i(W_i + p_i^* \Delta W_i + q_i^* \Delta p_i \Delta W_i)$$

where u_i is the utility from material consumption in $ terms; W_i is some measure of social welfare that the individual cares about; λ_i measures how prosocial individual *i* is – how much she cares about social welfare; ΔW_i is the *perceived* change in individual *i*'s welfare if the Russian government is weakened; p_i^* is the *perceived* probability that the Russian government will be weakened, conditional on the company not pulling out; Δp_i is the *perceived* increase of this probability triggered by the pulling out of Russia of the company patronized by *i;* q_i^* is the *perceived* probability that the company will pull out of Russia, irrespective of what participant *i* chooses to do; $q_i{}^*$depends on the intensity of activism of all other stakeholders – for instance, there could be strategic substitutability or complementarities between stakeholders.

The perceived change in the social welfare related to a weakening of the Russian government may depend on the individual's value system. Some individuals might think that weakening Russia increases welfare. Others may think weakening the Russian government decreases welfare because it hurts innocent Russians, it may make the regime more violent, or it is an offense to Russian pride. For these people $\Delta W_i < 0$.

Note that ΔW_i contains both *beliefs* (a weaker government may be led to stop the war rather than intensify the conflict) and *preferences* driven by values (stopping the war is good, but insulting Russian identity could be bad). $q_i^*, p_i^*, \Delta p_i^*$ are beliefs – they may be right or wrong.

The alternative option stakeholders have is to protest actively. We consider here only exit options in Hirschman (1970)'s language: selling shares of the company, refusing to buy its product, or leaving a job at the company. We will refer collectively to these options as boycotting to distinguish these actions from the company's decision to exit the Russian market. The utility a stakeholder derives from boycotting is given by:

$$U(\text{exit}) = (u_i - c_i) + R_i + \lambda_i(W_i + p_i^* \Delta W_i + (q_i^* + \Delta q_i)\Delta p_i \Delta W_i)$$

where c_i is the cost of boycotting expressed in monetary terms; R_i is the non-consequentialist (deontological) benefit derived from boycotting; $\lambda_i(W_i + p_i^* \Delta W_i + (q_i^* + \Delta q_i)\Delta p_i \Delta W_i)$ is the consequentialist benefit from boycotting, and Δq_i is individual *i*'s perceived consequence that her boycotting has on the company's exit decision.[5] By punishing the firm, she can hope to increase the probability that the firm will pull out of Russia by Δq_i.

Note that we assume that the materialistic utility u_i– gross of the monetary cost of boycotting – is the same in both alternatives. In field data, this assumption might not hold to the extent that weakening Russia has general equilibrium effects. An advantage of our survey methodology is that we can make it hold by telling the respondents that the *only cost* of boycotting is c_i. This is the advantage of hypotheticals: External validity can be limited, but endogeneity can be controlled.

The utility difference obtained from boycotting is given by

$$\Delta U = [-c_i + R_i + \lambda_i . \Delta q_i (\Delta p_i \Delta W_i)].$$

This utility difference depends upon i) the individual *cost of boycotting* c_i; ii) the *perceived consequences of boycotting* on the company's exit decision Δq_i; and *the perceived impact of the company's exit* on social welfare, $\Delta p_i \Delta W_i$.

In the survey, we randomize the boycotting cost each individual faces. We assign the costs of \$0, \$100, or \$500 with equal probability. These amounts are the same across all three stakeholder conditions. Thus, we can measure $1/\lambda_i$ and ER_i.

We also randomize the perceived consequences that boycotting has on the company (Δq_i). We tell part of the sample (more precisely, 1,630 participants) that boycotting imposes some costs on the company (selling shares makes stock price drop, the leaving employee is hard to replace, and new customers are hard to find). To the other part of the sample (more precisely, 1,285 participants), we say that their boycotting imposes no cost on the company (employees are easy to replace, etc.). As mentioned previously, the sub-samples are not of equal size, because the impact condition is 50% of customer and employee conditions, but only 33% of the shareholder condition, which has three instead of two treatments (no impact + two intensities of impact; see Section 2 for a detailed description).

[5] This formulation of the consequentialist benefit as the product of the impact on social welfare and the prosocial parameter λ_i is based on Broccardo et al. (2022).

Finally, we ask participants several questions to elicit the perceived impact that the company's exit from Russia will have on social welfare (remember that these questions are asked after the respondent has made her boycotting decision). For example, to elicit their perception of impact Δp_i we ask how much they agree with the statement "Whatever the company decides, it will not have a significant impact on the Russian economy, so exiting from Russia is useless." We also try to elicit the combination of $\Delta p_i \Delta W_i$ by asking whether participants agree with the statement "By stopping business with Russia, the company makes Putin angry and leads to harsher attacks on civilians." This statement implies both that $\Delta W_i < 0$ and that $\Delta p_i > 0$.

This model nests consequentialist and non-consequentialist motives for boycotting. For instance, participants may not care at all ($\lambda_i = 0$) about the consequences of their boycotting, but they may derive some personal utility from "doing the right thing" ($R_i > 0$). This is sometimes identified with the warm-glow effect discussed in the altruism literature (Andreoni, 1990). We call it the deontological motive. Conversely, participants can be pure consequentialists, with $R_i = 0, \lambda_i > 0$ (as, for instance, in Broccardo et al, 2022). The model is also flexible enough to separate the reasons people do not boycott: because they do not believe that the boycotting will be effective, because they believe that a company's exiting is ineffective, or because they do not value the final outcome (that Russia leaves Ukraine).

3.2 Empirical Model – the deontological motive for punishing

We assume that $R_i = R + \varepsilon_i$, where R is the common mean and ε_i is an idiosyncratic component. Individuals will boycott when $\Delta U > 0$ or

$$R + \varepsilon_i - c_i + \lambda_i . \Delta q_i (\Delta p_i \Delta W_i) > 0.$$

In what follows and for the sake of transparency, we will run linear probability models, so we implicitly assume that ε_i follows a uniform distribution with range [-κ/2,+ κ /2] (hence a c.d.f. $F(\varepsilon_i) = {(\varepsilon_i + \kappa/2)}/{\kappa}$). In this case,

$$Prob(punish_i | c_i, \lambda_i, \Delta q_i, \Delta p_i, \Delta W_i) = \frac{1}{2} + \frac{1}{\kappa}(R - c_i + \lambda_i . \Delta q_i (\Delta p_i \Delta W_i)). \quad (1)$$

We thus linearly regress "willingness to punish" (a dummy equal to 1 if the answer to that question is 4 or 5, as opposed to 1,2,3) on the cost, the impact, and a series of (endogenous) observables

designed to capture λ_i or R_i. We focus on linear regressions for transparency and ease of interpretation only.

Note that Equation (1) also tells us that, provided c_i is expressed in dollars, one can recover the average "deontological motive" *R* by running a simple linear regression. Assume, as we do in the following section, that $\Delta q_i = 0$ (we tell participants they have no impact). Then, we regress the decision to punish on cost c_i and a constant. We obtain the following coefficients:

$Prob(punish_i | c_i, \lambda_i = 0) = a + b.c_i$

Then, these regression coefficients (the constant *a* and the slope *b*) give us a way to identify the deontological motive R. Under the uniform assumption of Equation (1), we have:

$$R = \frac{a-1/2}{b} \quad . \qquad (2)$$

The intuition of this formula is the following. Take the sample of participants who have no impact and face no cost. If the fraction of these participants who punish (which is equal to a) is great than ½, it means that the average deontological motive is positive. This comes from the embedded assumption that the distribution of ε_i is symmetric which is, in our setting, an identifying assumption. Of course, if $a > 1/2$, a bigger sensitivity of punishment to cost means a tighter distribution of R_i around its mean *R*, and, therefore, a large fraction of willing punishers may just arise from a small positive *R*.

We conduct our analysis using the linear probability model (and thus the assumption that heterogeneity is uniformly distributed), but a more standard logistic approach yields estimates that are similar both qualitatively and quantitatively. The linear probability model has the advantage of being slightly more transparent and easier to interpret.

4. Main Results

4.1 Deontological motive

The third term of (1) is very difficult to measure. For this reason, to measure the average deontological motive R we start by restricting our attention to the people who have been told that their boycotting has no consequences for the company (Δq_i is zero). These are one-third of the respondents in the shareholder treatment (who are told that their selling "will have no effect on the stock price"), half of the respondents in the consumer treatment (who are told that their company

"will not be impacted at all by losing you as a customer"), and half of the respondents in the employee treatment (who are told that their company will take "a couple of days to find a replacement").

The results for this sample are presented in Table 4, first pooled (column 1) and then by treatment group (columns II-IV). Not surprisingly, we find that the cost can significantly reduce an individual deontological motive. Increasing the cost by $100 reduces the percentage of people who want to boycott by 5 percentage points. Comparing results from all columns, it also appears that the sensitivity to the cost is the same for all types of stakeholders (coefficients differ slightly, but not in a statistically significant manner). Put differently, the distribution of deontological motives is independent of context (same mean R, same s.d. σ).

Under a strict interpretation of the model, we can estimate R, the average deontological motive value associated with boycotting a company. We use formula (2). The constant is .62 in Table 4, column (1). In dollar terms, the coefficient on cost (in 100s of $) is -0.05. Thus, according to this estimation, the dollar value of the deontological motive is given by ((.62-0.5)/.05) = $240. Note that such an estimate is not very sensitive to the assumption on heterogeneity. For instance, assuming ε_i is logistic, we can use a similar formula: logit constant/logit sensitivity to cost. This leads to .507/.198=2.6, or $260.

This is an average value of the deontological motive. The fact that cost can explain only 4% of the cross-sectional variation in responses means that there is a lot of heterogeneity in the magnitude of the deontological motive. We can quantify it. In Equation (1), the sensitivity to cost measures how concentrated the distribution is (it gives $\frac{1}{\sigma}$). Under the uniform assumption, this leads to an estimate in the dispersion of deontological motives of $100/.05= $2000. This suggests a very large fraction of individuals with a *negative* deontological motive: still under the uniform assumption, (2000/2-240)/2000 = 38% of the participants have a *lower* utility if the company pulls out of Russia (even if it costs them nothing). This number corresponds exactly to the fraction of people who are not willing to punish conditional on zero cost – and therefore does not depend on the distributional assumption.

We have enough variables in our survey to try to understand the cross-sectional drivers of the deontological motive. One possible source of variation is that people who feel more strongly about the injustice of the Russian invasion are likely to experience a stronger deontological motive. To explore this possibility, in Table 5 we use the same sample of people who are told that there is

no consequence of their boycotting and insert a proxy for the deontological argument for sanctions as an explanatory variable. We obtained this proxy by extracting the principal component of the answers to the following three questions: "Company should cut ties to Russia, whatever the consequence", (ii) "Sanctioning is a government decision", (iii) "Stopping business is a mere business decision." The (properly normalized) first principal component has a loading of +.55 on the first question, -.55 on the second, and -.63 on the third. It explains 51% of the variance. We interpret this combination of variables as a proxy for the perceived moral obligation of a company to exit Russia: Participants who score higher on this variable tend to think that the right behavior for a firm is to withdraw from Russia, not to maximize profits.[6]

In Table 5, we see that the proxy for deontological motives is positively correlated with the willingness to boycott. This correlation is statistically different from zero at the 1% level (we show in Figure 3 that this relationship is non-parametrically linear). The explanatory power of the regression rises to 24%. The sensitivity is large too. If the deontological motive is one unit greater (approximately one s.d.), the probability of boycotting increases by 18 percentage points. In other words, an individual with one unit greater deontological motive is willing to boycott even if the cost is (0.18/0.05)x$100 = $360 higher (so their average deontological motive is 150% larger than average). Of course, it is difficult to make a causal interpretation of this coefficient, since the deontological variable summarizes ex-post justifications of the answer to our main question, so the correlation is partly mechanical.

Another way to identify boycotting's moral motivations is to look at the effects other people's decisions have on an individual's willingness to boycott. In the questionnaire we ask "Suppose that most other people are not punishing <a company who is not exiting from Russia>, does it make you less likely to punish?". Individuals who disagree with this sentence (i.e., respond 1 or 2) are people who in following their moral principles (in this subsample punishment has no consequence on the firm) are not affected by social pressure to conform. They are also likely to be more certain morally – they do not take a cue from the behavior of others. Table 6 reproduces the basic specification in Table 4, with, instead of the deontological PC, the addition of a dummy variable equal to one if the answer to the above question is "Yes" – we then standardized this variable (its sample s.d. is 0.40). Ceteris paribus, people "willing to punish, even if others don't"

[6] Using equal weights rather than PC weights gives a similar result. Also, using the first question only (which is the only one that clearly frames the issue as a categorical imperative) gives similar results.

are more willing to boycott (t =7). They behave as if their deontological motive to boycott is on average $100x(.15/.05)/.40=$750 (about 300% larger than average). The R-squared of this specification is 15%, so significantly above the one in Table 4, but below the one in Table 5.

Table 7 tries to dig deeper into the moral values that determine the sense of morality for certain choices and the willingness to boycott regardless of the consequences. In column 1, we regress the willingness to boycott in the absence of any cost borne by an individual on a measure of the six moral dimensions identified by Haidt (2012). Some results are fairly intuitive. Compassionate people are more likely to boycott, while people loyal to those who are in the same group are less so. Fairness and freedom are pretty orthogonal to the boycotting decision. Somewhat more surprisingly, people who defer to legitimate authority and have respect for tradition are more likely to boycott: This probably reflects the idea that retaliating against Russia is a bipartisan consensus in the US. Similarly, people who regard the body as a temple that can be desecrated by immoral activities (sanctity) are less willing to boycott. Together Haidt's moral values raise the R-squared from 4% to 9%.

In column 2, we ran the same regression as in column 1 with the addition of a dummy for Liberals. The dummy has a coefficient that is significantly different from zero, yet the explanatory power of the regression increases only from 9% to 10%. That political leanings have a statistically significant impact on top of the impact of moral values is partly a surprise, as moral values very strongly correlate with self-positioning on a political scale (Haidt (2012) and others show that progressive positioning correlates positively with fairness and compassion, negatively with authority, loyalty and sanctity; freedom is typically orthogonal to politics).[7] In comparing column 2 with column 1, we see that willingness to punish and values are not exactly aligned with political opinions (pro-authority people are in favor of exiting Russia).

In column 3, we add some demographic variables to column 2. There is no gender difference in the willingness to boycott. Yet, there is an important age difference, which is contrary to expectations. Older people are much more willing to boycott than younger people. This is true for the 45-64 years old vis-à-vis the people below forty-five, but it is also true for those above

[7] Since 2016 attitudes towards Russia have been highly associated to attitudes towards Trump. Thus, one might question to what extent the results are entirely driven by a Trump effect. Fortunately, we know that Haidt's (2012) values are predictive of political affiliation even in a pre-Trump era. Hence, we can think of the correlation with the Haidt's values as independent of the Trump effect, while the effect of political affiliation above and beyond the effects of Haidt's values as a Trump effect.

sixty-four vis-à-vis those between 45 and 64. One interpretation is that boycotting is community-driven and older people have a stronger sense of community. Another possible interpretation is that the political consciousness of younger generations may not be as strong as newspaper headlines would lead us to believe. A third one is that older people grew up during the Cold War and have a more negative view of Russia.

Richer people are marginally more likely to boycott. This is not surprising, since for richer people the cost of boycotting is less relevant in utility terms. This may also be related to the notion that compassionate behavior is a "luxury good", i.e., that the propensity to pay for moral behavior increases faster than income, as argued by Enke et al (2022).

Finally, we note that customers are slightly more likely to punish. Regressing "willingness to punish" on stakeholder conditions yields a t stat of 2.1 for the "customer condition"; customers are 3% more likely to punish amoral behavior than employees, and 4.7% more likely than shareholders.

4.2 Consequences of Boycotting

So far, we have only used the respondents assigned to the no-consequence condition. From now on we will use the whole sample to test whether stakeholders' willingness to punish is driven by a consequentialist motive (whether *impact* matters). Table 8 uses our basic specification (Table 4) in the whole sample, with the insertion among the explanatory variables of a dummy equal to one if the subject has been assigned to a condition where her boycotting has consequences.

As Table 8, column 1 shows, in the whole sample, the consequence dummy has a positive coefficient that is not significantly different from zero at conventional levels. When we split the sample by treatment, however, we see that the consequence dummy behaves very differently in the three treatments. It has a positive and highly statistically significant coefficient in the shareholder condition (a t stat of 2.9, which reduces multiple testing concerns). In the customer condition, the coefficient is positive but not statistically different from zero at conventional levels. In contrast, in the employee condition, the coefficient is negative, albeit not statistically different from zero.

Since the need to be realistic and adapt the question to the contingency forced us to frame the question differently in the three treatments, one possible explanation is that this difference might be due to the framing of the question. For example, the employee question talks about "significant

problems" caused by the employer's inability to find a replacement ("If you do this, it will take your current employer, Acme, several months to find a replacement, which will cause significant problems"). The question may imply that some of the pain of the participant quitting may be shared by co-workers, which may make her reluctant to do so. The lack of response to consequences in the customer condition is more puzzling. The question explicitly states that the firm "will be impacted by losing you as a customer: if you stop going there, no one else will replace you as a client", but it could be that participants perceive this effect as being too small to really motivate them (in the shareholder condition, the stock price drops by a few percentage points, probably enough of an impact that management would notice). This opens up an interesting discussion as to what kind of impact altruists would need to have to behave in a consequentialist manner. Intuitively, it depends on whether the impact is linear. If it is linear, the aggregation of small participants who care about their small impact will produce the optimal outcome. But if the impact is not linear, consequentialist altruists may under- or overproduce public good, as discussed in Broccardo et al., (2022).

The fact that shareholders care about consequences can be further tested. Indeed, in the shareholder condition, we suggested three potential consequences (no effect on stock prices, a 2% drop, and a 5% drop). Thus, in column 3 of Table 8, we create two consequence dummies, one for a price drop equal to 2% and another for a price drop equal to 5%. Including dummies separately shows that the effect of consequences is monotonic and increases in impact, a reassuring feature suggesting that more consequences matter more, at least from a shareholder perspective. While the first dummy is only significant at 6.5% (t stat of 1.7), the second dummy has a coefficient that is twice as large as the first one and strongly significant (t stat of 3.2).

4.3 Prosocial Effect

The model presented in (1) implies that impact should enter only multiplied by the degree of prosociality λ_i. While we do not have a direct measure of λ_i, we have a very good (albeit endogenous) experimental proxy: the willingness to donate part of the money earned to a Ukrainian cause. It is safe to assume that the 18% of respondents who were willing to donate 50 cents to a Ukrainian cause at the end of the survey are more prosocial than the ones who did not. Thus, we use the dummy variable donation equal to one if a respondent donated as a proxy for the degree of prosociality.

We thus ask whether more concerned participants are more sensitive to impact. We do this by regressing willingness to punish on cost, impact dummy as in Table 8, but also add (1) the propensity to donate (as a measure of λ_i) and its interaction with the "impact" dummy. We report the results for the entire sample as well as all separate conditions, in Table 9.

Unsurprisingly, the dummy variable donation has a positive and highly statistically significant coefficient (0.12, t-stat of 3.5) for the entire sample, and a slightly less strong coefficient in the three separate stakeholder scenarios. Interestingly, the interaction term comes in slightly significant, with a t stat of 2 in the shareholder condition, and 1.9 in the overall sample. This is salient as interaction terms rarely are significant in our survey – a small sample size probably reduces power. Note also that the consequence dummy has no effect directly, but only when interacted with the donation dummy, in all stakeholder conditions, exactly as predicted by our model.

4.4 *Impact of Companies Exiting from Russia*

So far we have not introduced any proxy for the impact that companies exiting from Russia might have on the Russian economy (term $\Delta p_i \Delta W_i$ in equation (1)). We define the perceived "Impact <u>of</u> the company on the war" (as opposed to the participant's "impact <u>on</u> the company") as the first PC of the PCA for different questions designed to elicit components of consequentialist motivation $\Delta p_i \Delta W_i$ (perceived impact of the company times size of this impact). These questions are (i) "By stopping business with Russia, the company can encourage the Kremlin to stop the war", (ii) "Whatever the company decides, it will not have a significant impact on the Russian economy, so exiting from Russia is useless", (iii) "Most Russians do not want this war, it would be unfair to hurt the company's consumers and employees for something they have not done" and (iv) "By stopping business with Russia, the company makes Putin angry and leads to harsher attacks on civilians". Question (i) is on positive consequences, (ii) is neutral, and (iii-iv) both describe negative consequences. The first PC of this PCA loads positively on (i) and negatively on all others. It explains 42% of the variance. We interpret this as participants' beliefs about the positive impact that a firm's exit will have on the war. Of course, this measure is not exogenous, unlike the "impact" treatment, since it could be a justification for the answer to the main question. We will bear this caveat in mind.

Equation (1) predicts that this term – provided it is a good measure of perceived firm consequence on the war -- should enter as an interaction term with the impact treatment in the

regression. We test this in Table 10 by regressing willingness to punish on the "impact treatment", "the belief in impact", and the interaction. Not surprisingly, the perception that exiting is impactful has a strong positive and statistically significant effect on the willingness to boycott. This is true in all specifications. The explanatory power of the regressions is above 20%. However, the interaction coefficient is insignificant, at odds with Equation (1).

4.5 Separating beliefs from values

One possible concern when we use responses to the survey, rather than randomized treatments, is that subjects might be unable to properly separate their moral intuition from their belief about impact. This fear is validated in Figure 4, where we plot a binscatter of the deontological motives for boycotting on the beliefs about the impact of boycotting. Deontological motive is the variable measuring the intensity with which participants consider that the firm must act, no matter the consequences. The impact of the firm on war is the participant's belief that the firm has a positive impact on the war. The two variables lie in a straight line, suggesting they are very strongly correlated. Thus, participants who think the firm should act no matter what also think the firm has an impact. They do not distinguish moral imperatives from consequentialist motives. This makes all the more valuable the evidence in section 4.2, where we use a randomized assignment of potential consequences.

4.6 Robustness

Do participants really mean what they say? One possible concern is that, in our survey, participants try to cater to the experimenter's wishes by pretending to be willing to punish and respond to cost. Although there is no smoking gun concerning this criticism of the survey, we can restrict our analysis to two subsamples for which this bias should be less of an issue. The first sample is made of the "sincere respondents": those who are not willing to punish, and those who claim to be willing to punish and do actually donate 50c out of their compensation to Ukraine (a large portion of their earnings in the survey). The second subsample is made of participants who claim to be "concerned about the situation in Ukraine" before we start the survey. As we show in Table 11, our main results are not affected by focusing on these subsamples. It looks as if participants are reasonably sincere, even though we cannot completely assuage concerns of external validity.

4.7 Consistency: Attitudes towards the Twitter Takeover

In this last paragraph, we offer additional evidence that respondents express a consistent opinion. Before our main survey, we ask a question unrelated to sanctions. We ask participants to imagine themselves as Twitter shareholders who have to vote for or against the acquisition bid by Elon Musk. If the takeover fails, we randomize the amount they stand to lose: $0, $250 and $500. We also randomize between two conditions: (1) their vote will have no impact or (2) they can expect their vote to have some impact. The exact formulation of the question is in the Appendix.

Only 32% of the respondents answered that they are willing to vote against Musk's bid. Thus, respondents do not seem to be very affected by the so-called experimenter effect that makes them say what they think the experimenter wants them to say.

In addition, we show in Figure 5 that there is a very strong correlation between the willingness to punish firms and the propensity to vote for the Twitter takeover. Participants who do not want to punish the firm at all are 85% likely to vote for the merger, compared to 60% for those who "strongly" agree with the idea of punishing. The t statistics of the linear regression is 9.7, highlighting the strong correlation between both answers, and the internal consistency of our respondents' answers.

5. Implications

In this section, we verbally outline what we think are the key implications of our analysis.

5.1 The most powerful stakeholders

Our study shows that, at least in the context of the war in Ukraine, participants are willing to pay some cost in order to punish what they view as non-moral behavior by firms. A large majority of them reject the Friedmanite view that exiting Russia is a "pure business decision"; the moral component also matters. While we find that the willingness to pay for punishment is similar across all types of stakeholders, this does not mean that all stakeholders exert the same pressure on the firm.

Keeping personal costs fixed, customers seem the ones most willing to punish firms for the wrong moral choices. If a firm needs to increase all the annual wages by $500 to retain employees, it would not bear large costs. By contrast, if it would have to discount the product sold during an

entire year by $500 to each customer, it could face enormous costs. Consider for example a gasoline retailer. The average American consumes 656 gallons per year. Thus, a discount of $500 is equivalent to roughly $0.75 per gallon, much more than the margin most pumps make in selling gasoline. Anticipating the large costs, companies are likely to cave, as discussed in Pajuste and Toniolo (2022).

5.2 Stakeholder-induced risk

The power of stakeholders makes firms less predictable in their behavior and introduces a new form of business risk that needs to be managed. Thus far, we have treated private sanctions as an unexpected event, not anticipated by Western companies and their Russian counterparts. Given the novelty of the private sanctions imposed on Russia, this is probably a realistic assumption. While most people would have expected some form of state sanctions following Russia's invasion of Ukraine, it is hard to imagine that they would have anticipated unprecedented private sanctions. In the future, however, this will not be the case. In this section, we discuss the possible implications of the diffusion of private sanctions.

Once we admit the possibility that a counterpart may interrupt a profitable economic relationship for non-economic reasons, it becomes important to predict when this breakdown is likely to occur and what countermeasures one should take. The results derived in the previous sections are useful in addressing the first question. A majority of stakeholders are willing to pay a price to induce the companies they work for, shop from, and invest in, to follow some principles. As our survey shows, however, this willingness to pay has two characteristics. First, stakeholders are not insensitive to the cost of the prosocial action: While boycotting Russia is relatively cheap, because Russia represents a small fraction of a company's total revenues, boycotting China, which represents a much larger share, is very expensive. Second, customers seem to have the greatest leverage on companies since they can impose large losses on their suppliers at a low personal cost.

The willingness to impose sanctions is also highly dependent upon the moral views of stakeholders. Empathic people appear much more willing to pay a cost to support Ukraine than non-empathic ones. While we suspect that the effect of empathy might be independent of the issue, we conjecture that the Liberal/Conservative divide might be (at least in part) context-specific. If the issue were the boycott of a firm producing abortion pills, only Conservatives would be interested in joining a boycott. However, Conservatives are more likely to think that "it is not a

company's role to decide what is right and what is wrong" and this task should be left to the government. They are also much more likely to think that sanctions are "purely a business decision. Management should weigh the economic costs and benefits." Thus, the current data suggest that ceteris paribus conservative stakeholders are less likely to boycott than liberal ones.

A boycott can succeed only if a large fraction of a group of stakeholders embraces it. In terms of stakeholder risk management, a diversity of opinions inside each group of stakeholders (some form of pluralism) would be optimal: In this case, whatever the firm decides, the fraction of unhappy stakeholders would not vary too much. Unfortunately, the trend (at least among employees) seems to be going exactly in the opposite direction (i.e., towards an increased political polarization of firms), as Fos et al. (2022) have recently documented.

5.3 Effects on Globalization

To manage stakeholder-induced risk, companies will need to refocus on the domestic market. As Germany and Italy discovered at their own expense there is a risk in sourcing energy (and other key resources) from autocratic countries, where the government can use that very supply as an economic weapon. This is not new: it has been true at least since Jacob and Esau. The success of the second globalization hinged on a mutual understanding that countries will restrain from using this economic power to avoid long-term retaliation. Not only is this tacit agreement now broken, the emergence of private sanctions has created an even bigger threat to globalization.

Imagine that Russia depended on a Swiss company to source a significant part of the beef consumption needs of its population. Russia could trust the Swiss government not to intervene, but can it trust the Swiss company not to impose any private sanction? It could try to insert in the contract very expensive breach clauses. Yet, if the workers of the company decide to boycott the company that supplies Russia with beef, it would be very difficult to enforce those clauses. In other words, the nationality of a company's stakeholders, customers, and employees will start to play a role in international trade, segmenting the market further.

5.4 The Risk of Domestic Market Segmentation

The problem above is not limited to international markets: It applies to domestic markets as well. One tool to manage stakeholder-induced risk would be to work with employees, suppliers, and investors that share your values. Consider, for example, Truth Social, the social media company

founded by President Trump. In choosing its suppliers Truth Social should factor in the risk of boycotts, which might be particularly expensive if they coincide with critical moments like electoral campaigns. For example, Truth Social should avoid buying cloud services from Amazon. Truth Social would be a very small part of Amazon's revenues. Thus, if Amazon consumers threatened a boycott of Amazon to force the Seattle company to cut off Truth Social, Amazon would be quick to comply. Being headquartered in Seattle (a democratic city) and controlled by Jeff Bezos (a democratic donor), Amazon is prone to be subjected to pressure from its stakeholders to distance itself from Truth Social, especially if Trump uses this social medium to spread some of his election fraud conspiracies.

As discussed above, Truth Social could protect itself against the risk of a boycott by contracting in advance some stiff penalties in case of a sudden interruption of the relationship. If the contractual penalty for interrupting the relationship is sufficiently high, even the most enthusiastic Liberal stakeholders would desist from boycotting. Yet, it is hard to imagine that Amazon is willing to enter into such an agreement. The potential profits from doing business with Truth Social are not large enough to justify the risk of having to pay a large penalty and the public embarrassment generated when it is revealed that Amazon granted such an expensive clause to Truth Social to defeat any possible boycott. Thus, it is optimal for Truth Social not to use Amazon Web Services, even if this were the cheapest solution.

As a result, and to continue with the Truth Social example, we should observe a segmentation of the market, with "conservative" cloud services and "liberal" ones. In the absence of economies of scale and large entry costs, this would not be a problem, because the two services will charge the same. If one had a higher price, it would attract more entrants and the law of one price would be restored. Yet, in the presence of significant entry costs or economies of scale (as is the case in the digital sector), this market segmentation would lead to two different prices for the same service, not unlike the market discrimination studied by Becker (1957).

One could consider this outcome a feature, not a bug. By voting with their feet, stakeholders can influence decision-making. Unfortunately, there is no guarantee that stakeholders' economic power is equally distributed in the population. If it is not, the ability to leverage economic power in this way will favor the more economically powerful constituencies at the expense of the others.

6. Conclusions

Neoclassical economics is based on the assumption that firms maximize profits. We provide survey evidence that a majority of Americans do not want the firms they invest in, shop from, and work for, to behave in this way. Limited deviations from value maximization are desired when firms can have a unique impact, as in the case of the sanctions against Russia for the purpose of ending the war.

We show that a very simple model that nests deontological reasons and consequentialist reasons to boycott a firm can explain 24% of the cross-sectional variations in the willingness to boycott. As boycotting becomes more diffuse, our model can be used as a benchmark to predict which firms will impose private sanctions and in what situations. The economics of private sanctions is becoming an important topic not only from a geopolitical point of view but also from a domestic point of view. The functioning of our democracy can be severely affected by it.

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Figures

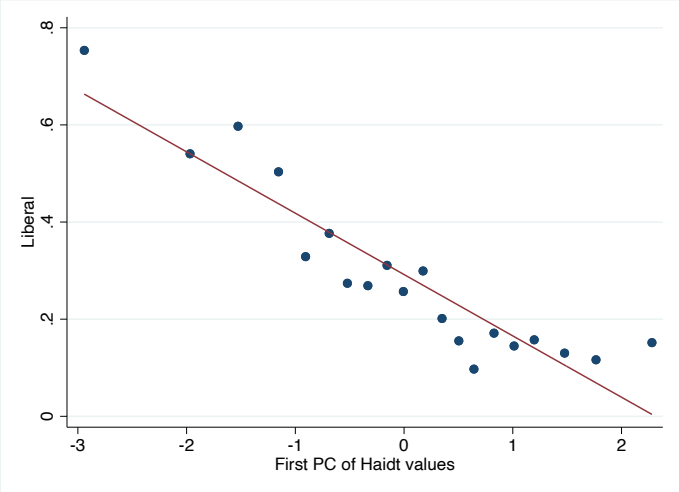

Figure 1: Haidt values and Political orientation

This graph plots the first principal component of Haidt values against political orientation, defined as dummy equal to 1 if the participant is either moderately or strongly liberal. The first PC of Haidt values is equal to:

$$\text{HaidtPC} = .61 \times \text{authority} + .52 \times \text{loyalty} + .56 \times \text{sanctity} + .09 \times \text{compassion} - .15 \times \text{fairness} + .00 \times \text{freedom}$$

and represents 27% of the variance of the 6 variables. Thus, this first PC represents strong adherence to conservative values as opposed to fairness, compassion and freedom. This Figure shows it strongly correlates with self-positioning on a political scale.

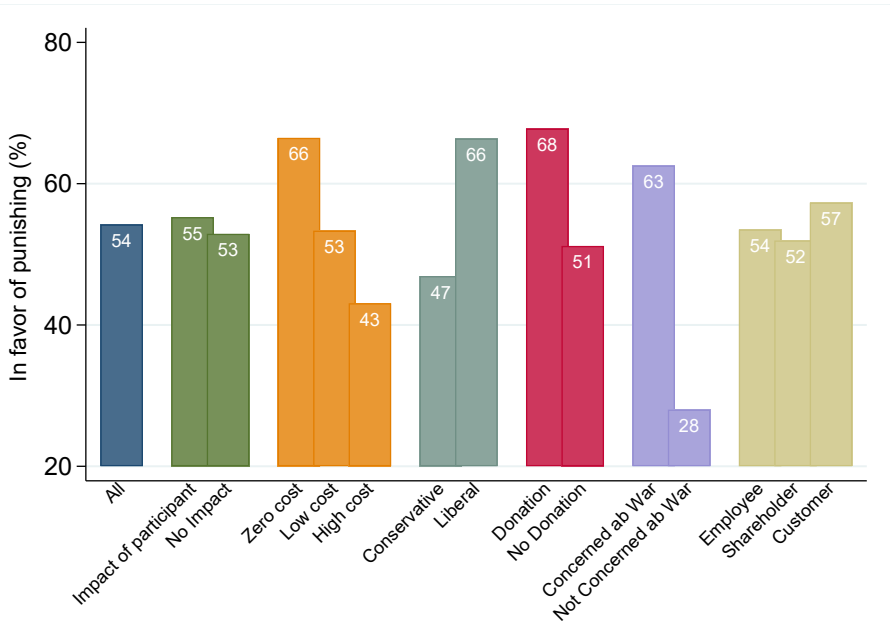

Figure 2: Willingness to punish

This graph represents the percentage of respondents willing to punish for categories of impact of the participant on the firm, cost of punishing, political orientation, decision to donate, concern about Ukrainian war, and condition assigned to respondent.

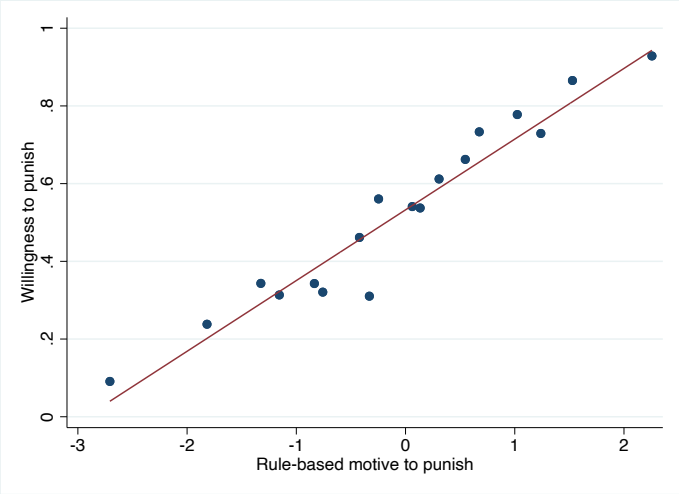

Figure 3: Rule-based motive to punish and willingness to punish

This graph plots the rule-based motive to punish (See description in Table 2) against willingness to punish. We focus here on the conditions where participants have no impact on the firm.

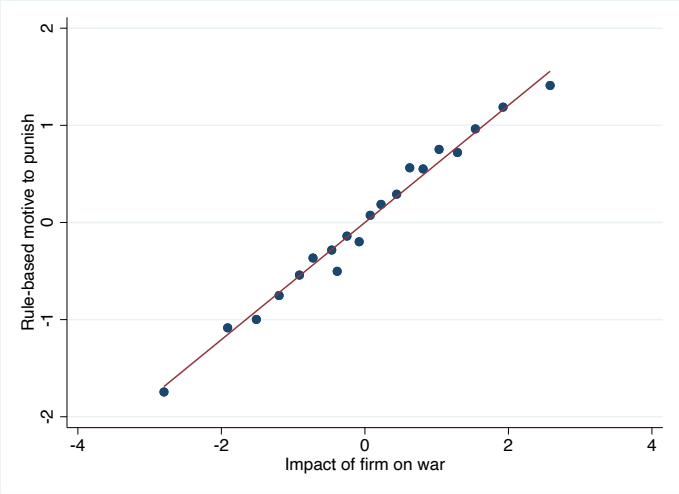

Figure 4: Belief in impact and Rule-based motive to punish

This graph plots the impact of the firm on the war against the Rule-based motive to punish (See Table 2 for description).

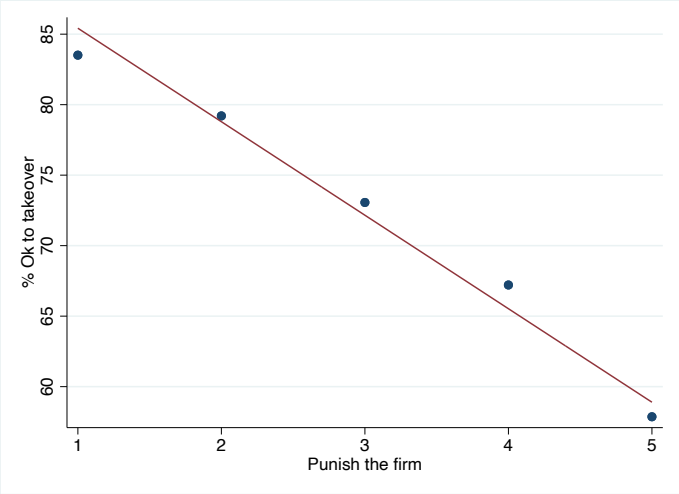

Figure 5: Correlation between Willingness to Punish and Approval of Twitter Takeover

This graph plots a binned scatter plot of average approval of Twitter Takeover (conditional on not abstaining) against the willingness to punish the hypothetical firm which is not pulling out of Russia.

Tables

Table 1: Sample rapresentativeness

	Sample	US population
Male	0.69	0.49
18-29 years old	0.23	0.24
30-44 years old	0.23	0.19
45-64 years old	0.33	0.25
65+ years old	0.21	0.16
$0-$19,999	0.14	0.13
$20,000-$39,999	0.20	0.16
$40,000-$59,999	0.20	0.21
$60,000-$109,999	0.28	0.20
$110,000+	0.18	0.31
Liberal	0.30	0.30
Conservative	0.27	0.26
Independent	0.43	0.42
Sincere respondents	0.36	
Concerned about war	0.74	

This table shows summary statistics of the sample alongside US representative statistics. National statistics on gender, and income brackets are from the IPUMS-CPS-ASEC dataset for March 2019 (Flood et al. 2020), while on age are from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2019. *Sincere respondents* corresponds to people that indicate either (i) to be not willing to punish the firm, or (ii) to be willing to punish and willing to donate. *Concerned about war* includes respondents with a score higher than 3 to the question "How would you describe your reaction to the war in Ukraine?"

Table 2: Summary Statistics

	Mean (1)	sd (2)	p25 (3)	p50 (4)	p75 (5)	No. (6)
Panel A: Entire sample						
Willingness to punish	0.54	0.50	0.00	1.00	1.00	2915
Cost ('00 $)	2.03	2.17	0.00	1.00	5.00	2915
Liberal	-0.00	1.00	-0.86	0.01	0.88	2915
Rule-Based Motive to Punish	0.00	1.24	-0.81	0.01	0.75	2915
Impact of the firm on the war	0.00	1.31	-0.81	-0.02	0.90	2915
Haidt moral values						
Authority	0.00	1.00	-1.11	-0.12	0.86	2915
Compassion	0.00	1.00	-1.04	0.03	1.09	2915
Loyalty	-0.00	1.00	-0.71	0.15	1.01	2915
Fairness	-0.00	1.00	-1.15	-0.37	0.40	2915
Freedom	0.00	1.00	-0.85	0.08	1.02	2915
Sanctity	0.00	1.00	-0.21	-0.21	0.64	2915
Social interactions						
Other people follow your action	0.48	0.50	0.00	0.00	1.00	1462
Willing to punish, even if others don't	0.00	1.00	-0.51	-0.51	-0.51	1453
Observations	2915					
Panel B: Participants who have no impact on the firm						
Willingness to punish	0.53	0.50	0.00	1.00	1.00	1285
Cost ('00 $)	1.96	2.16	0.00	1.00	5.00	1285
Liberal	0.02	0.99	-0.86	0.01	0.88	1285
Deontological motive	-0.02	1.25	-0.81	-0.03	0.75	1285
Impact of the firm on the war	-0.03	1.29	-0.82	-0.09	0.90	1285
Haidt moral values						
Authority	-0.04	1.00	-1.11	-0.12	0.86	1285
Compassion	0.00	0.99	-1.04	0.03	1.09	1285
Loyalty	-0.05	1.00	-0.71	0.15	1.01	1285
Fairness	0.01	0.99	-1.15	-0.37	0.40	1285
Freedom	0.00	1.00	-0.85	0.08	1.02	1285
Sanctity	-0.04	0.99	-1.05	-0.21	0.64	1285
Social interactions						
Other people follow your action	0.41	0.49	0.00	0.00	1.00	636
Willing to punish, even if others don't	0.03	1.02	-0.51	-0.51	-0.51	649
Observations	1285					

This table displays summary statistics of the entire sample (*Panel A*) and of the participants who have no impact on the firm (*Panel B*). *Willingness to punish* takes value 1 if the respondent reports a score higher than 3 in her willingness to either boycott, resign, or sell the stock of the firm. *Cost ('00 $)* is the cost implied by the act of punishing in hundreds of dollars. *Liberal* is a standardized variable for political orientation. *Deontological motive* is the negative first principal component of the questions (i) "Cutting ties to Russia, no matter what", (ii) "Stopping business is a mere business decision", and (iii) "Imposing sanctions is a government decision". *Impact of the participant on the firm* assumes values 0 if the participant by punishment has a negative effect either on firm's stock price, sales, or workforce. *Impact of the firm on the war* is computed as the negative first principal component of (i) "Stopping business hurts Russians that are not complicit", (ii) "Stopping business leads Putin to attack civilians", (iii) "Stopping business leads the Kremlin to stop the war", (iv) "Suspension of business is useless because companies cannot impact Russian economy". *Haidt values* are standardized. *Other people follow your action* takes value 1 if the respondent believes that her action would encourage other people to punish the firm. *Willing to punish, even if others don't* contains standardized values of a dummy equal to 1 if respondent declares that she is less likely to punish when most people are not punishing

Table 3: Statistics on respondents

	Respondents in favor (%)
Panel A: Decision to act/not act irrespective of consequences	
Cut ties with Russia, no matter what	61.26
Stopping business is a mere business decision	37.35
Imposing sanctions is a government decision	30.49
Panel B: Impact of firm on the war	
Stopping business hurts Russians that are not complicit	35.16
Stopping business leads Putin to attack civilians	24.69
Stopping business leads the Kremlin to stop the war	45.42
Suspension useless because companies cannot impact Russian economy	15.54
Panel C: Collective Responsibility	
All Russians are complicit	13.27
Panel D: Concern about war	
Concerned	75.88
Panel E: Donation	
Willing to donate	18.31

This table displays the percentage of respondents with score greater than 3 for the reported questions.

Table 4: Regression of willingness to punish on Cost

	Willingness to punish, without any impact			
	All	Shareholder	Customer	Employee
	(1)	(2)	(3)	(4)
Cost ('00 $)	-0.05***	-0.06***	-0.06***	-0.03***
	(0.01)	(0.01)	(0.01)	(0.01)
Constant	0.62***	0.58***	0.66***	0.62***
	(0.02)	(0.04)	(0.03)	(0.03)
Observations	1285	325	472	488
R^2	0.04	0.07	0.06	0.02

This table displays the results from regressing the willingness of punishing on cost of punishing in hundred dollars for (1) the entire sample, (2) shareholders, (3) customers, and (4) employees. The sample is restricted to the participants whose action has no impact on the firm. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Regression of willingness to punish on Cost and Deontological motive

	Willingness to punish, without any impact			
	All	Shareholder	Customer	Employee
	(1)	(2)	(3)	(4)
Cost ('00 $)	-0.04***	-0.05***	-0.04***	-0.03***
	(0.01)	(0.01)	(0.01)	(0.01)
Rule-Based Motive to Punish	0.18***	0.17***	0.19***	0.17***
	(0.01)	(0.02)	(0.02)	(0.02)
Constant	0.62***	0.57***	0.64***	0.62***
	(0.02)	(0.03)	(0.03)	(0.03)
Observations	1285	325	472	488
R^2	0.24	0.27	0.28	0.18

This table displays the results from regressing the willingness of punishing on cost in hundred dollars, and deontological motive for (1) the entire sample, (2) shareholders, (3) customers, and (4) employees. The sample is restricted to the participants whose action has no impact on the firm. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Regression of willingness to punish on Cost and Willing to punish, even if others don't

	Willingness to punish, without any impact			
	All	Shareholder	Customer	Employee
	(1)	(2)	(3)	(4)
Cost ('00 $)	-0.05***	-0.06***	-0.05***	-0.03**
	(0.01)	(0.02)	(0.01)	(0.01)
Willing to punish, even if others don't	0.15***	0.15***	0.19***	0.12***
	(0.02)	(0.03)	(0.03)	(0.03)
Constant	0.59***	0.57***	0.60***	0.58***
	(0.02)	(0.05)	(0.04)	(0.04)
Observations	649	170	232	247
R^2	0.15	0.18	0.21	0.08

This table displays the results from regressing the willingness of punishing on cost in hundred dollars, and on willing to act, even if not followed for (1) the entire sample, (2) shareholders, (3) customers, and (4) employees. The sample is restricted to the participants whose action has no impact on the firm. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Regression of willingness to punish on Cost, Haidt values and Political orientation

	Willingness to punish, without any impact		
	(1)	(2)	(3)
Cost ('00 $)	-0.05***	-0.05***	-0.05***
	(0.01)	(0.01)	(0.01)
Haidt moral values			
Authority	0.05***	0.06***	0.03**
	(0.01)	(0.02)	(0.02)
Compassion	0.09***	0.08***	0.08***
	(0.01)	(0.01)	(0.01)
Loyalty	-0.03**	-0.02*	-0.04**
	(0.01)	(0.01)	(0.01)
Fairness	-0.00	-0.02	0.00
	(0.01)	(0.01)	(0.02)
Freedom	-0.00	-0.00	0.00
	(0.01)	(0.01)	(0.01)
Sanctity	-0.05***	-0.04**	-0.03**
	(0.01)	(0.01)	(0.01)
Political orientation			
Liberal		0.06***	0.06***
		(0.02)	(0.02)
Gender			
Male			-0.05
			(0.03)
Age			
30-44			0.04
			(0.05)
45-64			0.14***
			(0.04)
65+			0.23***
			(0.04)
Income			
$20k-40k			0.03
			(0.05)
$40k-60k			0.04
			(0.05)
$60k-110k			0.09**
			(0.04)
> $100k			0.08*
			(0.05)
Observations	1285	1285	1285
R^2	0.09	0.10	0.13

Column (1) reports the results from regressing the willingness of punishing on dollar cost in hudred dollars, and Haidt values. Column (2) includes political orientation, and Column (3) controls for demographics. The sample is restricted to the participants whose action has no impact on the firm. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Regression of willingness to punish on Cost and Impact of the participant on the firm

	Willingness to punish				
	All	Shareholder		Customer	Employee
	(1)	(2)	(3)	(4)	(5)
Cost ('00 $)	-0.04***	-0.04***	-0.04***	-0.04***	-0.04***
	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Impact of the participant on the firm	0.03	0.10***		0.05	-0.03
	(0.02)	(0.03)		(0.03)	(0.03)
2% decrease in stock price			0.07*		
			(0.04)		
5% decrease in stock price			0.12***		
			(0.04)		
Constant	0.61***	0.54***	0.54***	0.63***	0.63***
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Observations	2915	991	991	956	968
R^2	0.03	0.04	0.04	0.04	0.03

This table displays the results from regressing the willingness of punishing on cost in hundred dollars, and on impact of the participant of the firm for (1) the entire sample, (2) shareholders, (4) customers, and (5) employees. In column (3), willingness to punish is regressed on cost, and on a different measure for the impact of the shareholder on the firm. Specifically, *2% (5%) decrease in stock price* captures the fact that by selling her stock, the shareholder causes a decrease of 2% (5%) in the stock price. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: Regression of willingness to punish on Cost, Donation and Impact of the participant on the firm

	Willingness to punish			
	All	Shareholder	Customer	Employee
	(1)	(2)	(3)	(4)
Cost ('00 $)	-0.04***	-0.04***	-0.04***	-0.04***
	(0.00)	(0.01)	(0.01)	(0.01)
Donation	0.12***	0.16**	0.11*	0.11*
	(0.04)	(0.07)	(0.06)	(0.06)
Impact of the participant on the firm	0.01	0.06*	0.05	-0.04
	(0.02)	(0.04)	(0.04)	(0.03)
Donation x Impact	0.09*	0.17**	-0.02	0.05
	(0.05)	(0.09)	(0.08)	(0.08)
Constant	0.59***	0.52***	0.61***	0.61***
	(0.02)	(0.03)	(0.03)	(0.03)
Observations	2915	991	956	968
R^2	0.05	0.09	0.04	0.04

This table displays the results from regressing the willingness of punishing on cost in hundred dollars, on a donation dummy, on impact of the participant of the firm, and on the interaction of the last two for (1) the entire sample, (2) shareholders, (3) customers, and (4) employees. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: Regression of Willingness to punish on Cost, and Impact

	Willingness to punish			
	All	Shareholder	Customer	Employee
	(1)	(2)	(3)	(4)
Cost ('00 $)	-0.04***	-0.04***	-0.04***	-0.03***
	(0.00)	(0.01)	(0.01)	(0.01)
Impact of the participant on the firm	0.02	0.08**	0.04	-0.04
	(0.02)	(0.03)	(0.03)	(0.03)
Impact of the firm on the war	0.16***	0.18***	0.16***	0.16***
	(0.01)	(0.02)	(0.02)	(0.02)
Impact of participant × Impact of firm	0.00	-0.00	0.00	0.02
	(0.01)	(0.02)	(0.02)	(0.02)
Constant	0.61***	0.55***	0.63***	0.62***
	(0.01)	(0.03)	(0.02)	(0.02)
Observations	2915	991	956	968
R^2	0.22	0.24	0.22	0.21

This table shows the results from regressing the willingness of punishing on cost in hundred dollars, impact of the participant of the firm, impact of the firm on the war, and on the interaction of the last two for (1) the entire sample, (2) shareholders, (3) customers, and (4) employees. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: Robustness checks

	Willingness to punish		
	All	Sincere	Concerned about war
	(1)	(2)	(3)
Panel A: Impact of the participant on the firm			
Cost ('00 $)	-0.04***	-0.04***	-0.04***
	(0.00)	(0.01)	(0.00)
Impact of the participant on the firm	0.03	0.05*	0.03
	(0.02)	(0.03)	(0.02)
Constant	0.61***	0.40***	0.69***
	(0.02)	(0.03)	(0.02)
Observations	2915	1051	2212
R^2	0.03	0.03	0.03
Panel B: Impact of Shareholder on the firm			
Cost ('00 $)	-0.04***	-0.04***	-0.04***
	(0.01)	(0.01)	(0.01)
Impact of the participant on the firm	0.10***	0.15***	0.08**
	(0.03)	(0.05)	(0.04)
Constant	0.54***	0.37***	0.64***
	(0.03)	(0.05)	(0.04)
Observations	991	354	727
R^2	0.04	0.06	0.04
Panel C: Deontological motives			
Cost ('00 $)	-0.04***	-0.03***	-0.04***
	(0.00)	(0.01)	(0.00)
Deontological motive	0.18***	0.18***	0.16***
	(0.01)	(0.01)	(0.01)
Constant	0.62***	0.46***	0.67***
	(0.01)	(0.02)	(0.01)
Observations	2915	1051	2212
R^2	0.22	0.29	0.19

Table 11: Robustness checks

	Willingness to punish		
	All	Sincere	Concerned about war
	(1)	(2)	(3)
Panel D: Values and demographics			
Cost ('00 $)	-0.04***	-0.03***	-0.04***
	(0.00)	(0.01)	(0.00)
Political orientation			
Liberal	0.07***	0.10***	0.05***
	(0.01)	(0.02)	(0.01)
Haidt moral values			
Authority	0.02*	0.01	-0.00
	(0.01)	(0.01)	(0.01)
Compassion	0.08***	0.08***	0.06***
	(0.01)	(0.01)	(0.01)
Loyalty	-0.02***	-0.04***	-0.02*
	(0.01)	(0.01)	(0.01)
Fairness	0.01	0.01	0.00
	(0.01)	(0.01)	(0.01)
Freedom	-0.00	-0.03***	-0.00
	(0.01)	(0.01)	(0.01)
Sanctity	-0.02**	-0.01	-0.02*
	(0.01)	(0.01)	(0.01)
Gender			
Male	-0.05***	-0.04	-0.06***
	(0.02)	(0.03)	(0.02)
Age			
30-44	0.06**	0.17***	0.10***
	(0.03)	(0.05)	(0.04)
45-64	0.18***	0.28***	0.22***
	(0.03)	(0.04)	(0.03)
65+	0.24***	0.36***	0.24***
	(0.03)	(0.05)	(0.03)
Income			
$40k-60k	0.01	-0.03	-0.01
	(0.03)	(0.05)	(0.04)
$60k-110k	0.07**	0.09*	0.05
	(0.03)	(0.05)	(0.03)
> $100k	0.08**	0.03	0.02
	(0.03)	(0.05)	(0.04)
Observations	2915	1051	2212
R^2	0.13	0.20	0.10

Panels A and B show the results from regressing the willingness to punish (wtp) on cost in hundred dollars, and impact of the participant on the firm, for the entire sample and for shareholders respectively. Panel C displays the results from regressing the wtp on cost in hundred dollars, and deontological motive. In Panel D, wtp is regressed on cost, poltical orientation, Haidt moral values, gender, age classes, and income classes. Column (1) considers the entire sample. Column (2) restricts the sample to sincere participants - i.e. people who either (a) are not willing to punish and do not donate or (b) are willing to punish and donate. Column (3) considers only participants who are concerned about Ukranian war. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix A: Questionnaire

Capitalism and Morals

Short description: We are interested in understanding the relation between morals and capitalism.

Consent form:

Purpose of research: The purpose of this research is to study your attitudes about several issues.

What you will do in this research: We will describe two separate hypothetical economic situations in which there is a moral dilemma. For each hypothetical situation, you will be asked to provide your opinion, and answer a series of questions designed to understand your motivation. This questionnaire will then be followed by socio-demographic questions. The survey is anonymous and your name will never be recorded.

Time required: It should take about 10 minutes to complete the study. You are free to spend as much time as you like up to 20 minutes.

Risks: There are no anticipated risks associated with participating in this study.

Do you give consent to take part in this survey?

- Yes
- No

[Transition page]

We start with the first hypothetical situation, which concerns the purchase of Twitter by Elon Musk

[End of transition page]

Are you familiar with Twitter?

- Not at all
- A little bit
- A fair amount
- A lot

Are you a Twitter user?

- No
- Yes, I just read, but I don't post
- Yes, I post less than once a week
- Yes, I post weekly
- Yes, I post daily

Please consider the following situation

Elon Musk has made an offer to buy Twitter, the well-known social network. He has offered to buy it at a premium over the market price.

In your retirement fund, you own a small number of Twitter stocks.

As a shareholder of Twitter, although a small one, you will get to vote to approve or reject the offer:

- if Musk's offer is rejected, you will not get the premium that he offers, and you will lose [randomize: $60/120/250]
- if Musk's offer succeeds, you will get the premium and Musk will run the company

[randomize:

The outcome of the shareholder vote is highly uncertain. So your vote could be decisive. (1/2 of the respondents; the other ½ does not see this sentence]

Do you vote in favor of the offer?

- I vote in favor
- I vote to reject the offer
- I abstain

[Transition page]

We now proceed to the second hypothetical situation, which concerns the behavior of firms since the beginning of the war in Ukraine.

[End if transition page]

General question

(1/2 of the sample here, other half at the end, I wrote it down)

On a scale of 1 (not concerned at all) to 5 (extremely concerned), how would you describe your reaction to the war in Ukraine?

Employee condition (prob=1/3)

You are an employee of Acme, which is a large multinational with significant operations in Russia. Since the invasion of Ukraine, Acme has decided not to withdraw from Russia.

You have an opportunity to quit your job and work for ABCorp, which is not at all involved with Russia.

- If you do this, it will take your current employer, Acme, several months to find a replacement, which will cause significant problems (p=1/2)
- If you do this, it will only take Acme a couple of days to find a replacement (p=1/2)

The job, the pay, and your career prospects at ABCorp, are the same as in your current position at Acme.

- [no additional information] (p=1/3)
- but driving to ABCorp involves taking the freeway. You calculate that the additional toll cost will be $100 (p=1/3)
- but driving to ABCorp involves taking the freeway. You calculate that the additional toll cost will be $500 (p=1/3)

On a scale of 1 to 5, how likely are you to resign from Acme and join ABCorp?

[for the 4 questions below, randomize: Questions A with =1/2, Questions B with p=1/2]

A. Do you think that your quitting would encourage other people to quit too ?
    - Yes
    - No

B. Suppose that most of your co-workers are not quitting, does it make you less likely to quit?
    - Yes
    - No

A. Suppose that your quitting would encourage [randomize: 5/10/20] more co-workers to quit. Does this make you more likely to quit?
    - Yes
    - No

B. Suppose that most of your co-workers are quitting anyway, does it make it more likely that you will quit? Yes/No
   If so, is it because (provide the most relevant reason, one answer only)

    - My action is more likely to have an impact
    - It feels good to join your co-workers
    - You think it is more likely to be the right thing to do
    - Other. Can you tell us the main reason in a few words? → add a box

On a scale from 1 (strongly disagree) to 5 (strongly agree), tell us your reaction to the following statements:

- Doing business in Russia is like being an accomplice of the war. The company should sever its ties to Russia, whatever the consequences
- All Russians, whoever they are, are complicit with the regime. They should be punished
- By stopping business with Russia, the company can encourage the Kremlin to stop the war
- Whatever the company decides, it will not have a significant impact on the Russian economy, so exiting from Russia is useless
- By stopping business with Russia, the company makes Putin angry and leads to harsher attacks on civilians
- Most Russians do not want this war, it would be unfair to hurt the company's consumers and employees for something they have not done
- Sanctions should be imposed by the government. It is not a company's role to decide what is right and what is wrong.
- Such a decision is purely a business decision. Management should weigh the economic costs and benefits

Shareholder condition (1/3)

Company Acme is a large multinational that has significant operations in Russia. This company is part of your portfolio of stocks.

Since the invasion of Ukraine, there are discussions about suspending, or even stopping, Acme's activity in Russia.

The top management of Acme has decided to stay in Russia. You are thinking of selling your stock holdings in Acme.

You know that

- selling will not be costly (1/3)
- selling will cost you extra fees of approximately $100 (1/3)
- selling will cost you extra fees of approximately $500 (1/3)

The very act of selling

- will have no effect on the stock price. Someone else will buy at market price (1/3)
- will reduce the stock price by 2%, because demand for the stock is low (1/3)
- will reduce the stock price by 5%, because demand for the stock is low (1/3)

On a scale of 1 to 5, indicate your willingness to sell the stock.

[for the 4 questions below, randomize: Questions A with =1/2, Questions B with p=1/2]

A. Do you think that your selling would encourage other people to also sell ?
    - Yes
    - No

B. Suppose that most other shareholders are not selling, do you make you less likely to sell?
    - Yes

- No

A. Suppose that your selling would encourage 5/10/20 more shareholders to sell. Does this make you more likely to sell?
    - Yes
    - No
B. Suppose that most of other shareholders are selling anyway, does it make it more likely that you will sell?
    - Yes
    - No

If so, is it because

- My action is more likely to have an impact
- It is good to join your fellow shareholders
- You think it is more likely to be the right thing to do
- Other. Can you tell us the main reason in a few words? → add a box

On a scale from 1 (strongly disagree) to 5 (strongly agree), tell us your reaction to the following statements:

- Doing business in Russia is like being an accomplice of the war. The company should sever its ties to Russia, whatever the consequences
- All Russians, whoever they are, are complicit with the regime. They should be punished
- By stopping business with Russia, the company can encourage the Kremlin to stop the war
- Whatever the company decides, it will not have a significant impact on the Russian economy, so exiting from Russia is useless
- By stopping business with Russia, the company makes Putin angry and leads to harsher attacks on civilians
- Most Russians do not want this war, it would be unfair to hurt the company's consumers and employees for something they have not done
- Sanctions should be imposed by the government. It is not a company's role to decide what is right and what is wrong
- Such a decision is purely a business decision. Management should weigh the economic costs and benefits

Customer condition (1/3)

Company Acme is a large gasoline distributor, which operates a gas station next to your favorite supermarket. So, you are a regular patron of Acme.

Acme also has significant operations in Russia. Since the invasion of Ukraine, there are discussions about suspending, or even stopping, Acme's activity in Russia.

Acme's management has decided to stay in Russia. You are considering whether or not to shop at another pump.

- Doing so would not impose any extra cost on you. There is a competing pump next door whose company has no operations in Russia. This competing pump sells gasoline at the same price. (p=1/3)
- Doing so would cost you an extra $100 this year. There is a nearby pump run by a company that has no operation in Russia, but gasoline there is slightly more expensive. (p=1/3)
- Doing so would cost you an extra $500 this year. There is a nearby pump run by a company that has no operation in Russia, but gasoline there is significantly more expensive. (p=1/3)

Besides, you expect that:

- Acme will not be impacted at all by losing you as a customer: if you stop going there, someone else will become a regular patron of the gas station.
- Acme will be impacted by losing you as a customer: if you stop going there, no one else will replace you as a client.

On a scale from 1 to 5, how likely are you to stop buying gas from Acme?

[for the 4 questions below, randomize: Questions A with =1/2, Questions B with p=1/2]

A. Do you think that stopping to buy gasoline from Acme would encourage other people to do the same?
    - Yes
    - No
B. Suppose that most other customers continue to buy gasoline from Acme, does this make you more likely to continue going?

- Yes
- No

A. Suppose that, if you stop buying from Acme, it encourages [randomize 5/10/20] more consumers to do the same. Does this make you more likely to stop going there?
    - Yes
    - No
B. Suppose that many other customers stop buying from Acme. Does it make you more likely to do the same?
    - Yes
    - No

If yes, what is the most relevant reason? (one answer only)

- My action is more likely to have an impact
- It is good to join other consumers
- You think it is more likely to be the right thing to do
- Other. Can you tell us the main reason in a few words? → add a box

On a scale from 1 (strongly disagree) to 5 (strongly agree), tell us your reaction to the following statements:

- Doing business in Russia is like being an accomplice of the war. The company should sever its ties to Russia, whatever the consequences
- All Russians, whoever they are, are complicit with the regime. They should be punished
- By stopping to do business with Russia, the company can encourage the Kremlin to stop the war
- Whatever the company decides, it will not have a significant impact on the Russian economy, so the suspension is useless
- By stopping business with Russia, the company may make Putin angry and lead to harsher attacks on civilians
- Most Russians do not want this war, it would be unfair to hurt the company's consumers and employees for something they have not done
- Sanctions should be imposed by the government. It is not a company's role to decide what is right and what is wrong.
- Such a decision is purely a business decision. Management should weigh the economic costs and benefits
- I believe in exemplarity. If I make a decision, it may encourage others to do the same

[ATTENTION QUESTION]

The board of directors of ACME, an oil company, has hired a new CEO. It sometimes happens that, when filling surveys, people do not pay much attention. If you see this please select both "strongly agree" and "strongly disagree", irrespective of the question asked. This new CEO argues that ACME should not do anything to reduce carbon emissions. On a scale of 1 (strongly disagree) to 5 (strongly agree), do you agree with this position?

[If they pay attention, they should select 1 AND 5]

Moral Values and World values

On a scale from 1(not at all) to 5(very strongly), indicate **how much you agree with the following statement** [randomize order]:

- I define myself as a competitive person.
- I see myself as "my own person."
- I prefer to be self-reliant rather than depend on others.

On a scale from 1(not at all) to 5(very strongly), how much do you agree with the following statement [randomize order]:

- **Compassion** for those who are suffering is the most crucial moral value
- Respect for **authority** is something children need to learn
- Some ideas should not be said publicly, on the grounds they are offensive or disgusting. **[freedom of expression 1]**
- People should be **loyal** to their family members, even when they have done something wrong
- I think all opinions should be expressed in the public sphere, as long as they do not incite to violence. **[freedom of expression 2]**
- I think it is morally wrong that rich children inherit a lot of money while poor children inherit nothing **[fairness]**
- There is too much hatred and harassment on social media. We need more government control. **[social media 1]**
- I would call some acts wrong on the grounds that they are unnatural **[purity]**
- Social media is a danger for democracy **[social media 2]**

- I think everyone should be free to do as they choose, so long as they don't infringe upon equal freedom of others **[freedom]**

How much confidence do you have in major companies? Please respond on a scale of 1 (none at all) to 5 (a great deal)

Now we would like to ask you your views on the following issues. How would you place your views on this scale. 1 means you agree completely with the statement on the left; 5 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.

- 1 (income should be more equal) 2 3 4 5 (there should be incentives for individual effort) **[inequality]**
- 1 (private ownership of business and industry should be increased) 2 3 4 5(Government ownership of business and industry should be increased) **[private ownership]**
- 1 (we live in a well-functioning democracy) 2 3 4 5(our democracy is dominated by rich people) **[democracy]**

[1/2 of the sample here, the other half as the very first question]

On a scale of 1 (not concerned at all) to 5 (extremely concerned), how would you describe your reaction to the war in Ukraine?

Socio-demographics

1. How would you rate your political opinion, on a scale from 1 (very conservative) to 5 (very liberal)

2. What is your gender?
    - Female
    - Male
    - Non binary

3. Which category best describes your highest level of education?
    - some high school or less
    - high school graduate

- some college
- 2-year college
- 4-year college
- post-graduate degree

4. What was your total household income this year?
   - less than $20,000
   - between $20,000 and $40,000
   - between $40,000 and $60,000
   - between $60,000 and $110,000
   - more than $110,000
   - prefer not to say

5. In which country was your father born?

6. In which country was your mother born?

7. [Optional] Which company do you work for?

8. Since the beginning of the war in Ukraine, did the company you work for decide to suspend or stop operations in Russia?
   - Yes
   - No
   - Not relevant

9. If so, do you support this decision? [only show this if answer to question 15 is yes]

Donation

Thank you for taking the survey.

If you wish, you can donate 50c out of your payment to the Ukraine Emergency Appeal of the Red Cross/Red Crescent, which will contribute to organize the support and emergency care for Ukrainians affected by the conflict. In this case, your compensation will be **XX-.50$**.

- I wish to donate 30c
- I prefer not to donate here