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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. Our model is able to explain up to 24% of the cross-sectional variability in attitudes to boycotting. Nevertheless, it is difficult to separate deontological and consequentialist motives to boycott, because subjects' beliefs are highly correlated with values. When we randomize the beliefs we find a strong effect for shareholders, but not for the other stakeholders. We discuss what are the geopolitical and economic implications of a world where private corporations discontinue profitable business relationships for moral or political reasons.

Keywords: economic sanctions, business objectives of the firm, Ukranian invasion

JEL Classifications: F51, L21, G30

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Abstract

We survey a representative sample of the U.S. population to understand stakeholders' desire to see their firms leave Russia after the invasion of Ukraine. Only 37% of the respondents think that leaving Russia is a pure business decision, and only 30% think that sanctions are a pure matter for the government. If a firm does not conform to the desire to leave Russia, 66% of the respondents are willing to boycott it (exit). We randomize a (hypothetical) cost of exiting the firm. This cost has a strong effect on the stated propensity to exit. This sensitivity allows us to provide a natural $ equivalent of moral motivations for exiting. We try to distinguish deontological and impact-related motives to exit, by randomizing beliefs about the impact on the firm. We find a clear effect of impact for shareholders, but not for consumers and employees. Our results continue to hold on the subsample of participants who actually donate part of their survey compensation to Ukraine. In our survey, consumers emerge as the most powerful force to control the morality of firms. We discuss the geopolitical and economic implications of a world where private corporations can discontinue profitable business relationships for moral or political reasons.

* Fiona Paine and Giuditta Perinelli provided excellent research assistance. We are grateful to Emilia Garcia-Appendini for her detailed and insightful discussion of our paper. We also thank Agustin Hurtado, Kobi Kastiel, Louis Kaplow, Anete Pajuste, Lubos Pastor, the editor (Mortiz Schularick), and seminar participants at the Economic Policy Symposium on Geoeconomics, Harvard Law School, Hoover Institute, MIT, NYU, UCLA, and the University of Chicago for very useful comments. Finally, the paper also benefited from the help of the editor and the referees of the journal. Zingales acknowledges financial support from MIT Sloan and the Stigler Center at the University of Chicago.

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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 leave 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 understand what their stakeholders really want. Note that the step between stakeholders' desires and firms' actions is a complicated one, affected by many institutional features. Thus, it is not easy to infer stakeholders' actual preferences from firms' behavior. For this reason, we resort to a survey. Another key advantage of a survey is that we can randomize some of the treatments, allowing for a better causal inference.

Unfortunately, it is difficult to obtain a representative sample of actual stakeholders. Thus, we resort to a survey of "hypothetical stakeholders": 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. We ask participants whether they will stop patronizing a firm that refuses to close its operations in Russia after Russia's invasion of Ukraine. Thus, we start from the assumption that the value-maximizing decision is to stay in Russia and ask stakeholders whether they are willing to take any action to express their different values.

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

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We begin by looking at the general attitude stakeholders have vis-à-vis the separation between business decisions and moral decisions. 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. Liberals are much less likely to think that sanctions are purely government decisions or that they are purely business decisions. This effect is more pronounced among young (less than 60 years old) liberals.

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

Confronted with a company that refuses to halt its Russian operations, a majority of stakeholders are willing to exit this company. We offer them the option to sell their stocks (if they are shareholders), quit their job (when employees), or stop buying the product (as consumers). A majority are willing to do this, but their "willingness to exit" is strongly sensitive to the personal cost they pay (a variable we randomize). When exiting a company does not carry any personal cost, 66% of the respondents are willing to exit companies that do not divest from Russia. If exiting carries a cost of $100, 53% are still willing to exit. When the cost is $500, the fraction of respondents who are willing to exit drops to 43%. This sensitivity to cost 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 or catering to the experimenter's demand – we return to this issue below. Comparing the three conditions, we find that the level of willingness to exit is significantly lower for shareholders, consistent with the notion that shareholders have a more transactional relationship with the company than customers or employees.

Even if the sensitivity to the cost of different stakeholders were the same, the consequences for firms would not be (we discuss this in Section 5.2). If customers and employees are equally willing to endure a $500 cost to exit 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

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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 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 will respond.

To guide our analysis of the factors (besides costs) that impact an individual's decision to exit a firm that does not leave Russia, we set out a simple framework. In deciding to exit, participants trade off three components: (1) a dollar cost of acting, that we randomize across participants, (2) a moral imperative or "deontological" component that arises from taking the moral action, independent of consequences[2], and (3) the impact of the moral action, that we randomize (some participants are told their action has no impact on the firm, others that it does). The model makes useful clarifications. First, theoretically, agents insensitive to impact (pure deontological) could be sensitive to the personal cost of acting morally. Second, participants may care about their impact on the firm for two very different reasons: harming the firm out of pure negative reciprocity (Fehr and Gächter, 2000), and trying to change firm behavior to increase welfare (consequentialism, as for instance in Broccardo et al, 2022). Third, empirically, the cost sensitivity allows us to rescale estimates and obtain a $ equivalent of moral motivations.

In our analysis, we first focus on participants who were told their exiting 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 participant – i.e., the average participant has a willingness to pay to exit the firm equal to $250. 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 the absence of impact and explicitly stated deontological motives. For example, participants who claim to be willing to exit the firm "even if no one else does it" have a deontological motive on average worth $350 more than 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 exiting will negatively affect the company: selling shares will make the stock price drop, quitting the firm will disrupt it,

[2] We refer to this as "deontological" since 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.

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and boycotting the product will mean one fewer customer. We randomize this treatment across participants and find it has an effect on the willingness to exit only in the shareholder condition: shareholders exit the firm on average less, but exit the firm more for impact. This could be consistent with several explanations we explore in the paper. We can also use our estimate to provide a dollar estimate of the ”impact-related motive” of shareholders, and we find it to be of a slightly larger magnitude than the deontological motive.

Our model suggests that impact should not enter alone, but should be interacted with some measure of prosocial attitudes. When we do so, the interaction variable is positive and statistically significant, albeit not very strongly so. The size of our survey (some 3,000 participants) may make it difficult to detect interaction effects with enough accuracy. Overall, while there is some indication that stakeholders do not seem to exit only for deontological reasons, more analysis on this front should be done. Our questionnaire asks whether patrons want to “punish” firms that did not exit Russia, but it is silent on whether this punishment has any real effect. Thus the consequentialism we consider is only on the effectiveness of the punishment, not on the effect on Russia. Our research design could be improved to elicit consequentialist motives better.

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 exit the “immoral” firm. This explains as much of the cross-sectional variance in answers as does the cost. Interestingly, the willingness to exit is also strongly affected by age: older generations are much more willing to exit the firm that does not leave 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

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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 wanted 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 exit (irrespective of whether they donate or not) and those who exit 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 feasibility of sanctions depends upon their cost. For many firms leaving Russia was very expensive. For example, McDonald's took a $1.4bn accounting charge following its abrupt departure from Russia.[3] Not all of this charge is due to the abrupt departure, some would have occurred even if McDonald's had stayed in Russia, due to the deteriorated business prospects of the Russian market. Yet, to be conservative, let's assume that the entire $1.4bn cost could be attributed to the early exit. Can the moral cost borne by its stakeholders justify this decision in a simple cost-benefit analysis? The answer is surprisingly affirmative. McDonald's has 2 million people working under its logo worldwide (200K staff employees and 2m including all the people working in independent franchises under the McDonald's logo) and 70 million daily customers.[4] Even ignoring shareholders, the total willingness to pay to leave the Russian market exceeds $18bn, which is much larger than the cost of leaving.[5] The fact that the total valuation stakeholders attribute to leaving Russia exceeds the costs, however, does not necessarily mean that every firm

[3] https://www.bizjournals.com/chicago/news/2022/05/16/mcdonalds-to-get-out-of-russia-in-a-14-billion.html.
[4] https://www.zippia.com/advice/mcdonalds-statistics/.
[5] This is obtained by multiplying the average willingness to pay to exit a firm not leaving Russia by the number of world customers (70 million) and employees and franchisees (2 million).

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would leave Russia since the costs and benefits are differently distributed. Yet, it does mean that in a "Coasian" world, where transaction costs are zero, a firm in McDonald's situation would leave Russia.[6] Furthermore, the fact that customers, employees, and shareholders respond similarly to the same dollar cost implies that customers would be the most influential group since they tend to be the most numerous group of stakeholders.

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 mostly evaluate economic agents' preferences for taxation and voting patterns. A relevant exception is Bartling et al. (2015), who show that 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 (Broccardo et al., 2022; Hart and Zingales, 2017 and 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 use 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 also encompasses other stakeholders (customers and employees), and we compare the moral preferences of these stakeholders with those of investors. To our knowledge, the only other paper that compares willingness to pay across different stakeholders is Hirst et al. (2022): they compare the behavior of respondents when they purchase, invest and donate. 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

[6] In Sections 3.1 and 5.1, we discuss whether profit maximization by itself would lead to this outcome.

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of the four social goals the authors presented to them. Like us, they find that investors are willing to sacrifice less than customers.

Our paper is also related to the large literature on boycotts. Most of this literature focuses on the boycotts of firms by consumers (Friedman (1991) and Klein et al. (2004)) or on the divestment of shareholders (Teoh et al., (1999)). Some recent papers also study the boycott of firms by other firms (e.g., Koenig and Poncet (2022)). We study secondary boycotts, i.e., boycotts of firms that do not boycott Russia. The novelty of our paper is that it compares three different stakeholders and how their motivations differ. It also tries to elicit how much different stakeholders are willing to pay for their firms to do "the right thing." In so doing, we ignore the institutional characteristics that transform the willingness to pay of different stakeholders into a corporate decision (a question analyzed theoretically by Broccardo et al. (2022)). Thus, our results do not automatically translate into a prediction of how the stock price of a firm that announces its decision to leave Russia would react, a question analyzed empirically by Sonnenfeld et al. (2022b).

Several recent papers have also analyzed actual firms' decisions to leave Russia after the invasion of Ukraine. Pajuste and Toniolo (2022) find that the decision to leave Russia often follows a "canceling" campaign on Twitter. Huang et al. (2022) and Choy et al. (2022) find that firms with high ESG scores are more likely to leave Russia. In contrast, Ahmed et al. (2022), who analyze European firms, find that more highly rated ESG firms are not more likely to withdraw or suspend their operations in Russia. Fioretti et al. (2022) find that firms owned more by individual investors and with AGMs planned at the beginning of the invasion were more likely to leave Russia.
While these papers shed light on the possible determinants of the departure decision, they are moot on whether this decision was justified, in the sense that the total willingness to pay to leave was larger than the cost of leaving.

Finally, Boneva et al. (2022) surveyed German consumers for their willingness to pay more for fuel prices to increase pressure on Russia. More than two-thirds declare to be willing to pay more, with 58% willing to pay at least €10 cents more per liter (which corresponds on average to €100 per year) and 20% at least € 50 cents per liter (corresponding to 500 € per year). As we show in Section 4, these figures are remarkably similar to ours (a willingness to pay of about $250-300 on average).

The rest of our 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

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by stakeholders to deontological and impact-related motives. Section 4 describes our main results about these two types of motives. Section 5 discusses the implications of our analysis for 1) which stakeholders exert the most pressure on firms, and 2) the increasing segmentation of markets created by stakeholders' moral standings. 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 survey is short (it takes less than 10 minutes to fill in) and participants were compensated $3 for participation (out of which they were offered the option to donate 50c at the end of the survey – we will return to this).

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 leaving 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 (2012) and others, political positioning very strongly correlates with moral values (see Appendix B Figure A1). This is also the case in our sample. 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 their compensation and donate to the Ukrainian Red Cross/Red Crescent.

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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 "exit" a firm that continues to operate in 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, 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 exit participants can carry out depends on the kind of stakeholder they are. In the consumption treatment, the subject is asked whether they will stop buying gas from a gas station that belongs to a company that does not leave Russia. In the employment condition, the participant is asked whether they are willing to change employer (the firm's industry is not explicitly mentioned). In the shareholder condition, they are asked whether they are willing to sell shares of the company not leaving Russia (again, the industry is not mentioned).

The second randomization layer regards the *cost* of exiting. 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 is the small additional annual 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 exiting 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 exit is not really affected by the exiting ("it will only take your current employer Acme a couple of days to find a replacement" and "Acme will not be impacted

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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 exit", i.e., the willingness to sell stocks /switch gas stations/quit jobs. Participants are asked to answer on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). In the paper, we reduce this variable to a *dummy variable*, equal to one if the answer is 4 or 5, and 0 if it is 1, 2, or 3. This corresponds to 52% of the respondents in the overall sample. This cutoff point is somewhat arbitrary, but our results are not sensitive to its choice: our results are robust to including 3 in the "exit" category.

While we specify in the questionnaire the consequences that patrons' exit could have on firms, we do not discuss how these consequences would potentially change a firm's decision to leave Russia. Ideally, we would have had a fourth level of randomization here, but the sample size prevented us from doing so. We clarify the two motives related to impact in our model of Section 3.3: acting out of pure negative reciprocity (hurting a firm that has acted in a morally wrong way), and acting out of consequentialism (trying to ensure the firm acts so as to improve welfare).

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 exit; if other people exit, does it make you more likely to exit, etc.). We refer to these questions as the "motivation" questions or the "justification" questions.

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.[7] Even if the income

[7] 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.

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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. Panel A focuses on personal characteristics, which are self-reported. Panel B focuses on attitudes. Age is in years; Income is a categorical variable going from 1 (less than $20k) to 5 (more than $110k). All attitudes are dummies constructed like the "willingness to exit the firm" variable. Answers are on a 1-5 Likert scale, and we set the dummy to 1 when the respondent "agrees," i.e., answers 4 (somewhat agree) or 5 (fully agree).

2.2 *Attitudes towards the separation between business and morality*

We start by discussing 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. Panel B of Table 2 provides answers to a few key questions: concern about the war, willingness to exit, and key opinions about the reasons for and effects of leaving Russia.

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" from here on.) 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 leaving 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

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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 that this task should be left to the government ("Imposing sanctions is a government decision"). 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."

Table 3 proposes a first pass at a conditional analysis, using straight OLS. The LHS variables are four "justification answers," which are dummy variables as reported in Table 2 (equal to 1 if the answer on the Likert scale is 4 or 5). Columns (1) and (2) are about the separation of business and politics. Panel A focuses on age and politics as determinants (we propose a more fully-fledged analysis later). There is a strong correlation between the preference for separating business from morals and political affiliations. Liberals are much less likely to think that sanctions are purely government decisions or that withdrawing is a purely business decision. They are also much more likely to think that a company should sever its ties to Russia, whatever the consequences are (column 3). Older people (>=60) are much more likely to think that a company should sever its ties to Russia, whatever the consequences, but they are not more likely to think that business and morality should be separated after you control for political affiliation.

When we interact age with political affiliation, we see that older people tend to align with young liberals in the idea that business and politics should not be separate. In some questions, this is slightly truer for older conservatives, but the difference is not significant.

In Table 3, Panel B, we regress these questions on moral values. Not surprisingly, more compassionate people are less likely to think that sanctions are a purely business decision, while people who score high on authority, loyalty, and sanctity are much more likely to believe in the separation between business and morality. These results remain substantially unchanged when we control for political leanings (not reported here), consistent with the idea that the Moral Foundation Questionnaire leads to a more granular description of values.

2.3 *Beliefs about the impact of sanctions*

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Going back to Table 2, Panel B, respondents are more inclined to believe that a company leaving Russia can encourage the Kremlin to stop the war (45% answer either 4 or 5), rather than not (33% answer either 1 or 2). Yet, only 16% of the respondents think that "exiting from Russia is useless" (i.e., answer 4 or 5 to the question "whatever the company decides, it will not have a significant impact on the Russian economy").

The difference between the two groups is given by people (25%) who 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 Table 3, column (4), we explore the determinants of the belief that sanctions can help end the war (that they have consequences). People who score high in compassion, authority, and fairness, are more inclined to think that sanctions work. Left-leaning individuals are more likely to think that sanctions work. Finally, older people are more likely to believe that sanctions work, consistent with our earlier finding that old people and left-leaning people tend to be aligned on these ideas.

This said sanctions have a lot of direct and indirect consequences. A deontological agent may be thinking about indirect consequences such as, for instance, the deterrence effect of sanctions. They may think Russia needs to be stopped, no matter the consequences, by all means possible, not necessarily because this will sway Putin but because a world with tough sanctions, public and private, could reduce the probability of future wars. More generally, people may be consequentialists without knowing it, or, alternatively, justify deontological behavior based on impact. This deeper distinction between true deontology and consequentialism is an interesting path for future research but beyond the scope of this paper.

2.4 *Some preliminary splits*

In Figure 1, we graphically present the effect of various controls (all three randomized conditions, and a few observables) on the willingness to exit. 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 exit is slightly larger for customers than for employees or shareholders (the difference is significant). This

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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 exit is slightly higher, on average, in the "some impact" condition, consistent with impact-related motives – but again, the difference is not very big. In contrast, the willingness to exit is greatly influenced by the cost: 66% of respondents are willing to exit 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 suggest 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 exit 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 exit than people who do not donate: 68% vs. 51%. Finally, people who are "concerned about the war" are much more willing to exit 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

3.1 Should companies engage in private sanctioning?

Before describing our empirical and theoretical frameworks about how *participants* think about sanctions, we first discuss the determinants of private sanctions. We take three different perspectives: strategic-military, moral, and economic. When strategic-military considerations are important, we do not see why sanctions should be a private matter: the government has both the incentives and the means to mandate companies, for example, to leave Russia. Furthermore, the government has a clear comparative advantage in assessing whether private sanctions play a useful strategic-military role. Thus, strategic-military considerations cannot justify private sanctions.

The moral dimension is more problematic. While corporations have legal personhood, they do not have moral personhood. The morality of a company is nothing more than some aggregation of the morality of its stakeholders. The real questions are who to include in this category, since in the limit we are all stakeholders in all corporations, and how to aggregate the different preferences. If we limit the attention to contractual stakeholders (customers, employees, and investors),

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attribute to all individuals an equal weight, and ignore any transaction costs, then sanctions should be approved whenever the sum of the willingness to pay for sanctions across all contractual stakeholders exceeds the net cost of these sanctions for the company as a whole. We take this to be the efficient outcome.[8]

This efficient outcome ignores institutional features. The vast majority of corporations grant the right to vote for the board of directors to shareholders and shareholders only. Furthermore, those directors owe a fiduciary duty toward shareholders. Thus, from a legal point of view, corporations should act in the interest of shareholders (Strine, 2015). Historically, this interest was taken to be purely financial: companies had to maximize shareholder value (Friedman, 1970). Thus, companies should engage in private sanctions only when the financial benefits of those sanctions exceed their financial costs.

More recently, Hart and Zingales (2017 and 2022) have argued that companies should maximize shareholder welfare, not value, where welfare includes moral considerations shareholders might have. According to this view, companies should engage in private sanctions when the value of those sanctions for shareholders exceeds their net cost. This approach seems to ignore other stakeholders, but it does not. When customers are willing to pay more for goods produced by a firm following certain moral principles and/or employees are willing to work for less if their employer behaves morally, they provide economic incentives for shareholders to act morally, above and beyond what their own morality would suggest. Yet, in this economic approach, employees' and customers' moral preferences enter the shareholders' decision only to the extent they are reflected in actual prices. If they are not, shareholder welfare maximization does not deliver a socially efficient outcome.

Regardless of our perspective, the willingness to pay for sanctions plays a crucial role. This willingness to pay cannot be easily inferred from companies' behavior. First, the translation of stakeholders' desires into action is mediated by many institutional features. Second, many shareholders do not own stock directly but only through mutual funds, which might not represent their preferences. In particular, mutual funds may not reflect the preferences of their underlying investors to the extent that they feel bound to a fiduciary duty to maximize financial return (for a

[8] In principle, this efficient outcome should include also the (negative) willingness to pay of Russian employees and customers of American firms who do not want American firms to leave Russia. In practice, our respondents are all Americans, so this willingness to pay does not enter the calculations.

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discussion of these issues, see Hart and Zingales (2022), for evidence that firms owned by institutional investors are less likely to leave Russia, see Fioretti et al. (2022)). Last but not least, the decision to engage in sanctions is often made by a CEO who might have objectives (like protecting their own image) different from those of other stakeholders.

Precisely because of these confounding effects, it is very difficult to infer stakeholders' actual preferences from a firm's behavior. This is the reason we resort to a survey of the stakeholders themselves, in the spirit of what marketing researchers call "conjoint analysis", i.e., surveys that ask participants for their willingness to pay for individual product features, by randomizing them across individuals. De Pelsmacker et al. (2005) pioneered this approach by using surveys to estimate the willingness to pay for fair trade coffee. In our paper, we use a similar methodology to estimate the willingness to pay of three different groups of stakeholders for "disapproving of the firm" (this is the "product" in our case). An additional advantage of a survey is that we can randomize some of the treatments, allowing for a better causal inference.

Even when we restrict our attention to the exiting decision of each individual stakeholder, this decision is affected by many factors: the cost of exiting, the perceived probability that an individual's exit will make a difference in the firm's decision to leave Russia, and the perception that a firm's departure from Russia will have positive and not negative consequences. To separate these effects, we need a framework. In this section, we present one.

3.2 Empirical Model

The questionnaire presents stakeholders with the fact that the firm they patronized has decided not to withdraw from Russia after the invasion of Ukraine, and asks them whether they are willing to stop patronizing the firm as a consequence. The assumption here is that firms are value-maximizing. Thus, any reputational and business considerations for leaving Russia should have already been factored into the original firm's decision. By stating that the firm chose not to leave, we presume that the value-maximizing decision is to stay and wonder whether stakeholders are willing to penalize these firms based on their own values. Thus, we are going to develop a model based only on the stakeholders' values and their costs.

Our econometric analysis consists in estimating variants of the following model, for participant i:

$$Prob(exit_i | c_i, \Delta q_i, X_i) = F(\kappa + \alpha X_i + \beta c_i + \gamma m_i) \qquad (1)$$

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where F(.) is the logistic cdf. The model is thus a logistic regression, where the LHS variable is a dummy equal to one if the participant chooses to exit the firm and zero if not. As mentioned in Section 2, this dummy variable is constructed from a Likert scale from 1 to 5, taking values 4 and 5 as "exit" and 1, 2, and 3 as "not exit."

In terms of independent variables, c_i measures the cost of exiting the firm. It can have three values: \$0, \$100, and \$500. X_i are controls that vary from one specification to the next: they include socio-demographics, moral values, and political leanings. m_i is the impact stakeholders' exit has <u>on the firm</u>. For customers and employees, it is a dummy, equal to one when the stakeholder is expected to have an impact and zero when it is not. For shareholders, the impact variable has three values (corresponding to the effect of selling on the stock price): 0%, 2%, and 5%. The impact that stakeholders have <u>on the firm</u> can produce personal satisfaction for the stakeholder exiting (the satisfaction of hurting a firm that is not doing the right thing), and can also push the firm to change its decision and exit Russia. Our economic model will clarify these two motives.

In field data, a threat to the interpretation of the above model is that people with different costs may have different moral preferences. For instance, Enke et al. (2022) provide evidence suggesting that wealthier people may have stronger moral preferences (that morality is a luxury good). As explained in our data description, we deal with this concern by randomizing: the stakeholder status, the cost, and the impact variable. This ensures that we measure the "pure" effect of these variables.

In what follows, we will estimate variants of Equation (1), jointly for all stakeholders or separately for each type. We will also test if coefficients significantly vary by subpopulation. We expect that costs will reduce the willingness to exit the firm (β<0), and that impact increases it ($\gamma > 0$), if participants care about their impact on the firm. In the specification where we set $\alpha = 0$, the constant κ also has a natural interpretation: κ corresponds to the willingness to exit by someone who has *no impact* and *no cost of exiting*. We will later interpret this as the *pure* deontological motive.

To clarify these predictions and the meaning of these coefficients, we now describe a simple economic model.

3.3 Economic Foundation for the Empirical Model

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Assume a stakeholder (one among many others) has the choice between two alternatives. The first one is to do nothing. In such a case, the status-quo utility is given by:

$$U(no\ action) = u_i + \lambda_i W_i$$

where u_i is the utility from material consumption in \$ terms. W_i is welfare if no action is taken *by the individual*. It includes all possible paths (possible weakening of the Russian government due to various factors, including the firm's possible decision to finally exit independently of the individual's decision), weighted by their probabilities of occurrence. Here λ_i measures how prosocial an individual *i* is.

We assume that the individual takes the actions of other stakeholders as given. Thus, W_i contains the possible outcomes of their actions. For instance, other stakeholders may revolt against the firm's decision to stay in Russia, which may force its management to reconsider the decision. At the margin, this may contribute to weakening the Russian government. All this is included in W_i. This means that the individual is on his "reaction function", and does not compare two equilibria.

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. The utility a stakeholder derives from exiting is given by:

$$U(\text{i exits}) = (u_i - c_i) + R_i + S_i(m_i) + \lambda_i(W_i + \Delta q_i \Delta p(m_i) \Delta W_i) + \varepsilon_i$$

where c_i is the cost of exiting expressed in monetary terms, R_i is the "deontological" benefit derived from exiting, and $S_i(m_i)$ is the personal pleasure to have hurt a firm that does not exit Russia. m_i, which we randomize, is the quantity of pain that the individual can inflict on the firm. The difference between R_i and $S_i(m_i)$ is that R_i arises independently of the individual's impact *on the firm*, while $S_i(m_i)$ is contingent on that. So in our condition where the agent has *no* impact on the firm, we have $S_i(0) = 0$.

$\lambda_i(W_i + \Delta q_i \Delta p(m_i) \Delta W_i)$ is the true consequentialist benefit from exiting. Δq_i is an individual *i*'s perceived increase in the probability that the Russian government will be weakened, if the company ends up exiting Russia. In this case, global welfare will change by ΔW_i. This

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perceived change 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 $\Delta W_i < 0$. Also 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.

$\Delta p(m_i)$ is the perceived increased probability that, if the participant expresses her discontent, the company reconsiders its strategy and exits Russia.[9] Like S_i, $\Delta p(m_i)$ is assumed to depend on the the quantity of pain that the individual can inflict on the firm: The firm will need to notice the disapproval to change its strategy. We define W_i (the reference expected welfare, conditional on no action) so that $\Delta p(0) = 0$. ε_i is a mean zero, standard deviation σ, (logistic) shock to the utility of exiting, relative to the status quo utility. This model implicitly assumes that moral preferences are stable, a view recently challenged by Bénabou et al. (2022).

This model nests impact-related and deontological motives for exiting. For instance, participants may just 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). Since the dictionary defines deontological as "regarding obligation as deriving from reason or as residing primarily in certain specific rules of conduct rather than in the maximization of some good," we are going to call this motive deontological.[10] Conversely, participants can be pure consequentialists, with $R_i = 0,\ S_i(m_i) = 0, \lambda_i > 0$ (as, for instance, in Broccardo et al., 2022). Finally, participants may be purely motivated by the willingness to "punish" the firm, even if that has no real impact (along the logic of "negative reciprocity", as explained in Fehr and Gächter, 2000). In this case, $\lambda_i = 0$ but $S_i(m_i) > 0$. This differs from deontological thinking in that it is a function of the negative impact a stakholder's action has on the firm. The model is also flexible enough to separate the reasons people do not exit: because they do not believe that exiting will be effective, because they believe that a company's departure is ineffective, or because they do not value the final outcome (that Russia leaves Ukraine).

[9] 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).
[10] Deontological Definition & Meaning | Dictionary.com.

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Note that we assume that the materialistic utility u_i– gross of the monetary cost of exiting – is the same in both alternatives. In field data, this assumption might not hold because people with strong moral values may be poorer or less materialistic (have lower u_i). An advantage of our survey methodology is that we can make it hold by telling the respondents that the *only cost* of exiting is c_i. This is the advantage of hypotheticals: external validity can be limited, but endogeneity is controlled.

The utility difference obtained from exiting is given by the very simple formula:

$$\Delta U_i = -c_i + R_i + S_i(m_i) + \lambda_i . \Delta q_i \Delta p_i(m_i) \Delta W_i + \varepsilon_i . \quad (2)$$

It depends upon i) the individual *cost of exiting* c_i; ii) the deontological utility R_i; iii) the personal pleasure to hurt a firm that does not exit Russia $S_i(m_i)$, iv) the perceived impact <u>of the firm</u> on Russia $\Delta q_i \Delta W_i$; and v) the perceived impact of the participant on the firm, $\Delta p_i(m_i)$.

Survey participants will exit when $\Delta U_i > 0$, hence with probability:

$$P(\text{exit}) = F\left(\frac{-c_i + R_i + S_i(m_i) + \lambda_i . \Delta q_i \Delta p_i(m_i) \Delta W_i}{\sigma}\right) \quad (3)$$

which is equivalent to equation (1), except for "structural" parameters. Set $S_i(m_i) = S_i . m_i$ and $\Delta p_i(m_i) = \Delta p_i . m_i$, then the coefficients κ,α,β,γ in equation (1) can be given a structural interpretation, with:

$$\sigma = -\frac{1}{\beta}, R_i = \frac{\kappa + \alpha X_i}{-\beta} \text{ and } S_i + \lambda_i . \Delta q_i . \Delta p_i \Delta W_i = \frac{\gamma}{-\beta}. \quad (4)$$

A key intuition of this model is that the coefficient on cost helps identify the dispersion in utility differences. If the willingness to exit is more sensitive to costs, it means utility differences are not very dispersed. Further, and as mentioned in the previous section, we ensure that κ, c_i, and m_i are uncorrelated through randomization (in the algebra we write κ as a constant but it could be an individual fixed effect, of which we would estimate the mean).

Thus, the (properly scaled) sensitivity of exiting to impact $\frac{\gamma}{-\beta}$ will identify two motives for exiting the company that correspond to impact <u>on</u> the firm: The pure harm done to the firm (S_i),

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without any actual consequences, and the possible consequentialist belief that the firm may eventually decide to exit Russia, and this may contribute to weakening the Russia government ($\lambda_i . \Delta q_i . \Delta p_i \Delta W_i$). In the latter part of this paper, we will use proxies for the impact of the firm (Δq_i) to test for consequentialist motivations, but these proxies are not randomized and therefore susceptible to a host of different biases. For instance, we ask participants several questions to elicit the perceived impact that the company's departure from Russia will have on social welfare (remember that these questions are asked after the respondent has made her exiting decision). For example, to elicit their perception of impact Δq_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 $\Delta \mathrm{q}_i \Delta \mathrm{W}_\mathrm{i}$ 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 $\Delta q_i > 0$.

4 Main Results

4.1 Zooming in on the deontological motive

We start by restricting our attention to the people who have been told that their exiting has no consequences for the company ($m_i = 0$ in the model). 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").

Our baseline specification is a logistic regression, for which we also report *marginal effects* in most tables. We provide linear probability results in Appendix Tables A1 and A2, which replicate Tables 8 and 9 to check robustness. As can be seen from comparing these tables, marginal effects from logit results do not substantially differ from linear probability model estimates.

The results for the sample of participants with *no impact* are presented in Table 4, first pooled (columns 1 and 2) and then by treatment group (columns 3-5). Not surprisingly, we find that the cost can significantly reduce an individual deontological motive. On average across all stakeholder groups, increasing the cost by $100 reduces the percentage of people who want to exit by five percentage points (column 1, marginal effects). Comparing the three conditions in column

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2, we find that the *level* of willingness to exit is significantly lower for shareholders (the average is lower by 38 ppt). This is consistent with the notion that shareholders have a more transactional relationship with the company than customers or employees. A number of experiments document that market interactions tend to reduce moral concerns (see for instance Falk and Szech, 2013, among many others). The column 2 evidence seems to suggest that the *type* of market interaction may matter, but of course, additional evidence is needed. Columns 3-5 compare the elasticity of the willingness to exit to cost, across all stakeholders. The sensitivity to the cost is the same for shareholders and customers, but it is less for workers. This makes sense in light of the fact that individuals tend to be shareholders of many companies and consumers of many products, but employees of only one company. Thus their loyalty and attachment as employees are higher. This difference also suggests that the framework we use for the questions does work: identical people behave differently qua shareholders and qua workers.

Under a strict interpretation of the model, we can estimate R, the average pure deontological motive value associated with exiting a company. We use formula (4), where controls X_i are absent. The constant in the first regression of Table 4 is .51. The coefficient on cost (in 100s of $) is -0.2. Thus, according to this estimation, the dollar value of the deontological motive is given by $100x(0.51/.2) ≈ $250. This is of course only the *average* value of the deontological motive.

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 exiting 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, which ask individuals how they stand about moral *rules*: "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 leave Russia: participants who score higher on this

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variable tend to think that the right behavior for a firm is to withdraw from Russia, not to maximize profits.[11]

Table 5 shows that the proxy for deontological motives is positively correlated with the willingness to exit. This correlation is very strongly significant, with t statistics between 7 and 14 (we show in Figure 2 that this relationship is non-parametrically linear). The sensitivity is large too (coefficient: .95, t=14). If the deontological motive is one unit greater (approximately one s.d.), the probability of exiting increases by 24 percentage points (from the marginal effects coefficient). In other words, an individual with one unit greater deontological motive is willing to exit even if the cost is (0.95/0.22)x$100 = $432 higher (so the $ equivalent of their average deontological motive is about two times larger than average). Of course, it is difficult to make a fully-fledged causal interpretation of this coefficient, since the deontological variable summarizes ex-post justifications of the answer to our main question, so the correlation is at least partly mechanical.

Another way to identify exiting's moral motivations is to look at the effects other people's decisions have on an individual's willingness to exit. In the questionnaire we ask "Suppose that most other people are not exiting <a company who is not leaving from Russia>, does it make you less likely to exit?". Individuals who disagree with this sentence (i.e., respond 1 or 2) are people who in following their moral principles (in this subsample exit has no consequence on the firm) are not affected by the 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. This variable is only available for ½ of the participants (the other half answered different questions about their motivations). Ceteris paribus, people "willing to exit even if others don't" are more willing to exit (t=7.5). People with a one s.d. larger answer to this variable behave as if their deontological motive to exit is on average $100x(.73/.21) ≈ $350 higher (about 130% larger than the average).

Table 7 tries to dig deeper into the moral values that determine the sense of morality for certain choices and the willingness to exit regardless of the consequences. In column 1, we regress the willingness to exit 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

[11] 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.

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people are more likely to exit, while people loyal to those who are in the same group are slightly less so. Fairness and freedom are pretty orthogonal to the exiting decision. Somewhat more surprisingly, people who defer to legitimate authority are more likely to exit: this may reflect 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 exit. We do not report marginal effects in this Table to conserve space. But compassion is the most quantitatively important driver of opinions: A one s.d. increase in compassion increases the probability of exit by ten ppt (out of a base of 54%). The t stat for compassion is very high too (6.3).

In column 2, we ran the same regression as in column 1 with the addition of a dummy for Liberals (not standardized). The dummy has a coefficient that is significantly positive (t=3.5): Liberals are six ppt more likely to exit the firm (again, estimates from marginal effects).[12] In comparing column 2 with column 1, we see that willingness to exit and values are not exactly aligned with political opinions (pro-authority people, more likely to be conservative, are in favor of leaving Russia). This reflects the somewhat complex consensus behind support for Ukraine in the US. Note also that individual moral values are not affected by controlling for political leanings. Even though political leanings line up very strongly with moral values (Haidt, 2012 among others), they fail to soak up all of the variation.

In column 3, we add some demographic variables to column 2. There is no gender difference in the willingness to exit. Yet, there is an important age difference, which is contrary to expectations. Older people are much more willing to exit 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 sixty-four vis-à-vis those between 45 and 64. One interpretation is that exiting 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.

[12] Since 2016 attitudes towards Russia have been highly associated with 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.

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Richer people are marginally more likely to exit. This is not surprising, since the cost of exiting is less relevant in utility terms for richer people. 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 exit. Regressing "willingness to exit" on stakeholder conditions yields a t stat of 2.1 for the "customer condition"; customers are 3% more likely to exit than employees, and 4.7% more likely than shareholders. Due to multiple testing concerns, such a level of significance is low, and we will treat willingness to exit as similar across stakeholders.

4.2 Impact of exiting on the firm

So far, we have only used the respondents assigned to the no-consequence condition ($m_i = 0$). From now on, we will use the whole sample to test whether stakeholders' willingness to exit is driven by an impact-related motive (in the sense of impact <u>on</u> the firm, whether that translates into real consequences or not). 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 exiting has an effect on the firm.

As Table 8, column 1 shows, in the whole sample, the impact 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 this impact 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). Having an impact on the firm raises the propensity to exit for shareholders by some ten ppt (out of a base rate of 54%). 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 for the differential response to impact is that it is driven by differential harm made to companies (different S_i). 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

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find a replacement, which will cause significant problems"). Participants may still wonder whether the firm's top management will notice. Further, the question may imply that some of the pain of the participant quitting may be shared by co-workers, which may make them reluctant to do so. Customers may perceive their impact as being real but too small to be noticed, as 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." Shareholders do, however, have a large impact: There, the stock price drops by a few percentage points, probably enough of a dent that management would realize something is happening. As a result, we expect S_i, the propensity to harm the firm for doing the wrong thing, to be larger in the shareholder condition.

This absence of effect in the customer condition is less easy to understand if we focus on the true consequentialist part of the impact ($\lambda_i . \Delta q_i . \Delta p_i \Delta W_i$). Indeed, customers are explicitly told that their impact on the firm is proportional to their size, which should in principle be enough to motivate them to act (especially if the cost is low). 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 goods, as discussed in Broccardo et al. (2022).

We can also not ignore the possibility that the impact treatment may lead to a biased inference. The bias could be positive if there is a cross-learning effect, as described in Haaland et al. (2022). For instance, when told that their action has an impact, participants may infer that the firm is weak and subject to pressure from other agents. This could lead them to overestimate their impact. Alternatively, we may underestimate the effect of impact because participants may fail to pay attention to it, that is, just answer as if they had zero impact. We can use qualitative answers to justification questions, but these are noisy and probably polluted by participants' need to justify their actions.

The fact that shareholders care about impact 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 impact 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 that suggests that more

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consequences matter more, at least from a shareholder perspective. While the first dummy is insignificant (t stat of 1.8), the second dummy has a coefficient that is twice as large as the first one and strongly significant (t stat of 3.2).

Our structural model in Equation (4) allows us to map the expected impact of the individual action $S_i + \lambda_i . \Delta q_i . \Delta p_i \Delta W_i$ in dollar terms. This is, again, because we have in the same regression a dollar cost and the impact dummy. For most conditions, the effect of impact is insignificant, so this number is zero (assuming participants understand the experiment condition correctly). For shareholders, however, the effect of a 5% drop in stock prices is highly significant, and the coefficient is 0.13 (Table 8). In dollar terms, this leads to a value of $S_i + \lambda_i . \Delta q_i . \Delta p_i \Delta W_i = \left(\frac{0.52}{0.17}\right) \times \$100 \approx \$305$. Thus, for shareholders who have the opportunity to decrease the share price a lot, the expected impact is evaluated at about the same level as the average deontological motive ($272, from Table 4). Of course, our design does not allow us to separate the pure "desire to harm" motive from the consequentialist one. This would have required additional randomizations, and we were limited by sample size. But we will try below to shed some light on this by using donations and the ex-post justifications of participants (with the obvious caveat that these variables are not randomized and therefore quite endogenous) as proxies for the consequentialist motive $\lambda_i . \Delta q_i . \Delta p_i \Delta W_i$.

4.3 Proxy for pro-social consequentialist preferences λ_i

The model presented in (1) implies that impact should enter only multiplied by the degree of prosociality λ_i. In this section, we explore using the willingness to donate part of the money earned to a Ukrainian cause as a proxy for λ_i. Note that we cannot claim that people who do not donate have a λ_i equal to zero, but only that people who donate have a λ_i larger than people who do not donate. There is also a possibility that people donate for deontological reasons. We explore these in Table 9.

We thus ask whether more concerned participants are more sensitive to impact. We do this by regressing the willingness to exit on cost, impact dummy as in Table 8, but also an interaction between the propensity to donate (as a measure of λ_i) and the "impact" dummy. We report the results for the entire sample as well as all separate conditions in Table 9. We split Table 9 into three panels. Panel A takes the model literally. It assumes that donations pick up

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consequentialist prosocial behavior only (λ_i in the model, but neither R_i nor S_i). Thus, we only include the cost and the interaction term between donation (as a measure of λ_i) and actual impact (Δq_i in the model). We expect people who are more prosocial to care more about impact, and the results from Panel A confirm this for all categories of stakeholders.

Of course, as usual with interaction terms, it is important to control for direct effects, which we do in the following panels. Panel B includes "impact" as a control, which picks up the fact that people who do not donate may still be prosocial (have $\lambda_i > 0$ though lower than for donating participants). This control does not change results very much. Interestingly, the "impact" dummy does not have a significant effect, suggesting that non-donating participants may not be consequentialist (their λ_i is not significantly different from zero).

Finally, Panel C of Table 9 further includes the level of donation as a control. This picks up the fact that donations also measure the deontological motive (R_i in the model: high R_i people are probably more likely to donate) and the willingness to retaliate against bad moral behavior by the firm. This last control makes the interaction term much weaker (t stat of 2 in the entire population), with borderline significance for shareholders only (t=2.4). Unsurprisingly, the dummy variable donation has a positive and highly statistically significant coefficient (0.52, t-stat of 3.4) for the entire sample.

4.4 *Proxy for perceived impact* $\Delta q_i \Delta W_i$

So far we have not introduced any proxy for the impact that companies departing from Russia might have (the impact <u>of</u> the firm, $\Delta q_i \Delta W_i$). This impact can be of two types: it could have a direct consequence on Putin's war decisions via its impact on the Russian economy, or it could have an indirect effect via its impact on other companies' decisions to leave Russia or on Western governments' willingness to support Ukraine. Our questionnaire is designed to capture the first one of these effects. Therefore, 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" which we have discussed in Section 4.2) as the first PC of the PCA for different questions designed to elicit components of consequentialist motivation (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)

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"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 departure 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 (4) 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, as long as $\lambda_i > 0$. We test this in Table 10 by regressing willingness to exit on the "impact treatment," "belief in an impact of firm on the war," and the interaction. Not surprisingly, the perception that departure is impactful has a strong positive and statistically significant effect on the willingness to exit. This is true in all specifications, and likely mechanical if people seek to justify their decision based on impact. The interaction coefficient, however, is insignificant, pointing towards a possible absence of pure consequentialist motive, or the fact that our measure of belief in the impact of firm on the war is too noisy to pick up meaningful variation.

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 separate their moral intuition from their belief about impact properly. This worry is vindicated by Figure 3, where we plot a binned scatter plot of the deontological motives for exiting on the beliefs about the impact of exiting. 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

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of the potential impact on the firm. But our test is likely to have low statistical power if participants underestimate such impact or fail to pay attention to it.

4.6 Intentions and Actions

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 exit and respond to cost. Also, intentions do not always translate into actions. There is a lot of evil in the world that we are sensitive to, yet in practice, we do not always live up to our noble aspirations. This bias is likely to be present in our analysis. This would lead us to underestimate the sensitivity to cost and therefore overestimate the dollar-equivalent value of moral motivations. Note that this bias is likely larger among employees than customers, for instance, since changing employers is in practice more costly than changing gas stations.

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 subsample is made of participants who claim to be "concerned about the situation in Ukraine" before we start the survey. The second subsample is made of the "sincere respondents": those who are not willing to exit, and those who claim to be willing to exit <u>and</u> do actually donate 50c out of their compensation to Ukraine (a large portion of their earnings in the survey). As we show in Table 11, our main results are not affected by focusing on these subsamples. The most robust results are the effect of cost (extremely stable at -0.2), the fact that progressives and compassionate participants are more likely to exit, while those more loyal to the in-group are less so, and the larger propensity of older people to favor exit. It looks as if overall participants are reasonably sincere, even though we cannot completely assuage concerns about external validity.

In line with such evidence, separate data points tend to line up with such real effects of intentions. As it turns out, our findings for the United States are very similar to what Boneva et al. (2022) found for Germany. Their survey does not involve firms but elicits the surcharge on fuel prices Germans are willing to pay to increase the pressure on the Russian government. 67% declare that they are willing to pay at least a positive amount. 58% were willing to pay at least €10 cents more per liter. Since in 2018, the average German household consumed 1007 liters of gasoline,[13]

[13] https://www.destatis.de/EN/Themes/Society-Environment/Environment/Material-Energy-Flows/Tables/mileage-fuel-consumption.html

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this implies a willingness to pay at least €100 per year. At the same time, 20% were willing to pay at least 50 cents per liter, corresponding to €500 per year. Since this paper provides us with the distributions of willingnesses to pay (elicited through a list and not cost randomization as we do), we can compute the average. To do this, we assume that this willingness to pay is bounded below by zero and bounded above by the maximum, and otherwise uniformly distributed within each 10€ bucket. This leads to €269 per German household.

We can compute the same average willingness to exit in our survey and find a surprisingly similar magnitude.[14] The fraction of our respondents who are willing to exit the firm when the cost is $0 is 66%, 53% when the cost is $100, and 43% when it is $500. These numbers are plain averages, taken from Figure 1. As in the German case, we then assume that the willingnesses to exit is uniformly distributed within each bucket [0;100] and [100;500], and with mass points at either end (0 and $500). This leads to an estimate of the average willingness to exit in our survey of .13x50+.10x300+.43x500=$252. Note that this method is similar to our "structural approach" (which imposes the logit structure on the data), and actually provides a similar result ($272 in the sample of "no impact" and hence purely deontological participants). The reason why we use the alternative, simpler approach here is that we do not have the data from Boneva et al.(2022)to estimate our logit model. Overall, and even though we should be cautious not to overdo the comparison, this number ($252) is remarkably similar to the willingness to pay from Boneva et al. (€219).

We can also compare the willingness to pay as stakeholders with the effective help governments did offer to Ukraine. With 41.6 million households, the total willingness to pay of Germans to help Russia was some €11bn, quite close to the total financial assistance Germany provided Ukraine in 2022, €12.5bn.[15] With 124 million households in the US,[16] our survey estimates lead to a total willingness to pay of $31bn (252x124). This is less than the $48bn in aid that the United States sent to Ukraine in 2022.[17] To be fair, most of the aid is decided by the government, not voluntarily supplied by the citizens. Even if the government merely implements the will of the people, we expect government aid to be higher than voluntary donations, since in

[14] Note that in the German case it is clear that the tax on gasoline is the only pro Ukraine measure, while it is not easy to deduce from our survey whether consumers think that they might boycott multiple companies or just one.
[15] https://www.auswaertiges-amt.de/en/aussenpolitik/laenderinformationen/ukraine-node/ukraine-solidarity/2513994
[16] https://www.census.gov/quickfacts/fact/table/US/HSD410221.

[17] https://www.cfr.org/article/how-much-aid-has-us-sent-ukraine-here-are-six-charts

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deciding public contributions voters can assume that their votes will also affect other people's contributions (through taxation), while in deciding whether to donate individually this assumption is not necessarily true.

4.7 Consistency: Attitudes towards Musk in the Twitter Takeover

As we mentioned before, moral preferences may exhibit some inconsistencies (Bénabou et al., (2022), for instance, show this in a variety of thought experiments). We are able to offer some evidence that respondents express a consistent opinion in our survey. At the beginning of our survey, we asked 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 were willing to vote against Musk's bid.

In addition, we show in Figure 4 that there is a very strong correlation between the willingness to exit firms and the propensity to vote for the Twitter takeover. Participants who do not want to exit at all are 85% likely to vote for the merger, compared to 60% for those who "strongly" agree with the idea of exiting. The t statistics of the linear regression is 9.7, highlighting the strong correlation between the answers to these very different questions, showing a high degree of internal consistency in the answers.

4.8 « Specialness » of the Russian Invasion of Ukraine

The Russian invasion of Ukraine is in many ways a very special situation: it is a sudden event, which took many by surprise and received a lot of attention. Many moral issues do not have this feature. They may happen slowly (climate change), or not receive much attention (working conditions, for instance). This raises additional external validity concerns, so in this section, we discuss how much our results line up with different settings.

Several papers have shown the propensity of stakeholders to pay for moral behavior in many other contexts. Focusing on consumers, Hainmueller et al. (2015) provide strong evidence that the demand for fair trade coffee (which addresses a less salient, more stable issue) is quite high for consumers: showing that the Fair Trade label increases demand by 10%. In the high-end segment

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of the market, the price elasticity of demand is low, suggesting that, in practice, reasonably wealthy consumers have a high willingness to pay for an ethical product. Zooming in on shareholders, the lab experiment in Bonnefon et al. (2022) suggests that shareholders have a high willingness to pay for corporate prosocial behavior (i.e., behavior that does not yield profits). Finally, regarding employees, Krueger et al. (2022) show that employees accept lower wages when working for environmentally conscious companies (i.e., companies that address a moral issue that is neither a surprise nor quickly escalates).

All these, however, are just similarities across different contexts. More evidence is needed to deepen our understanding of the effect of context on the moral preferences of various firm stakeholders.

5. Implications

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

5.1 Legitimacy of Private Sanctions

One of the questions our analysis can help answer is the legitimacy of private sanctions. Some view private sanctions as pure CEOs' "woke-washing" (e.g., Pajuste and Toniolo, 2022). Others, see them as the necessary moral response (Sonnenfeld et al., 2022a). Yet, corporations are for-profit entities where shareholders have the ultimate decision power. Thus, one way to think about legitimacy is whether well-informed shareholders wouldhave approved a decision to leave Russia. We see three possible reasons why they might have. First, sanctions may be a form of *captatio benevolentiae* performed by the company vis-à-vis the government. By helping the government achieve its objectives, a company can earn brownie points that it can use to shape regulation down the road.

The second justification is that the moral costs employees and customers endure to work for/shop from a company doing business in Russia are so large that leaving Russia is a profitable proposition, in spite of the high costs. For this to be true, however, not only should the moral outrage be high, but there must be a way to charge employees and customers for the privilege of working for/shopping from a moral firm.

The third justification is that shareholders are so morally upset at their company doing business in Russia that they are better off, in utility if not monetary terms, if their company leaves

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the Russian market, consistent with the idea of shareholder welfare maximization (Hart and Zingales, 2017).

Our results have nothing to say about the first possible justification, but they can provide some empirical guidance for the second and third. Our results provide estimates of how much different stakeholders are willing to pay not to patronize a firm doing business in Russia. Our paper does not deal with the question of how stakeholders are successfully charged for the privilege of working for/ shopping from a moral firm. Yet, a necessary condition for sanctions to be value-maximizing is that stakeholders are willing to pay more for a firm to leave Russia than it costs the firm in terms of lost profits. We have shown that this is certainly the case for a labor-intensive consumer-oriented firm like McDonald's. Whether it is the case for all the firms that decided to leave Russia is an interesting question for future research. Our paper has shown that the moral costs are potentially large enough to justify this choice for many firms.

Finally, can we establish that leaving Russia is also shareholder-welfare maximizing? On average, our respondents are willing to pay $252 to avoid investing in a company doing business in Russia (see calculations in Section 4.6). Thus, to exceed the $1.4bn cost of leaving Russia, one would need 5.6M shareholders, since 5.6M * $252 > $1.4bn. Unfortunately, determining the actual number of McDonald's shareholders is not easy. First of all, many shares are held "in street name", making it impossible to determine how many different shareholders there are. Second, most of us are indirect shareholders of McDonald's through our holdings in index funds. Since 45% of US households own mutual funds,[18] if one out of 10 of these households owned an S&P index fund, it would hold some McDonald's stock, bringing the number of people who invest directly or indirectly in McDonald's shares to exceed 5.6M. Under this reasonable assumption, leaving Russia was shareholder-welfare maximizing for McDonald's.

5.2 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 exit. A large majority of them reject the Friedmanite view that leaving Russia is a "pure business decision"; the moral component also matters. Yet, not all stakeholders exert the same pressure on the firm.

[18] https://www.statista.com/statistics/246224/mutual-funds-owned-by-american-households/

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Keeping personal costs fixed, customers seem the ones most willing to exit firms. If a firm needs to increase all the annual wages by $500 to retain employees, it will not bear high 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 high costs, companies are likely to cave, as discussed in Pajuste and Toniolo (2022).[19]

5.3 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. This section discusses 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. Empathetic people appear much more willing to pay a cost to support Ukraine than

[19] Note that this assumes customers boycott only one firm. If they have to boycott multiple firms, their willingness to pay might be divided by the number of firms.

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non-empathetic 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 that 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 exit than liberal ones. Yet, recent boycotts of popular brands, like Budlight and Target, by conservative activists show that this might not be a universal rule. [20]

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 opinion inside each group of stakeholders (some form of pluralism) would give executives more freedom to run the company. Indeed, in this case, the fraction of unhappy stakeholders would not vary too much whatever the firm decides. 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 would refrain from using their economic power to avoid long-term retaliation. Not only is this tacit agreement now broken, but 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 may be able to 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

[20] https://nymag.com/intelligencer/2023/05/bud-light-target-and-a-new-era-of-corporate-caution.html

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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. Consider, for instance, the recent consumer boycotts at Budweiser and Target in response to LGBTQ+'s friendly ads. 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 having a democratic donor like Jeff Bezos, as its largest and most influential shareholder,[21] 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

[21] https://s2.q4cdn.com/299287126/files/doc_financials/2022/ar/Amazon-2022-Proxy-Statement.pdf

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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.

Our survey estimates of stakeholders' willingness to pay to impose sanctions are sufficiently large to justify the departure decisions of firms like McDonald's, in spite of the $1.4bn in costs incurred. Of course, these survey-based estimates should be taken with caution. Nevertheless, they suggest that the decision to leave Russia was not necessarily CEOs' "woke-washing," as suggested by Pajuste and Toniolo, 2022).

Our analysis is also useful to help predict the willingness to pay. We show that a very simple model that nests deontological reasons and consequentialist reasons to exit a firm that did not leave Russia can explain 24% of the cross-sectional variations in the willingness to pay to exit. While the willingness to pay is only a factor in determining the final outcome, our model can be used to predict which firms will impose private sanctions and in what situations.

In a world in which private sanctions, not only against foreign powers but also against political opponents, are becoming more widespread, the importance of predicting the likelihood of sanctions will become greater. The risk of private sanctions is becoming an important business risk that firms will have to consider in their strategic decisions.

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Figures

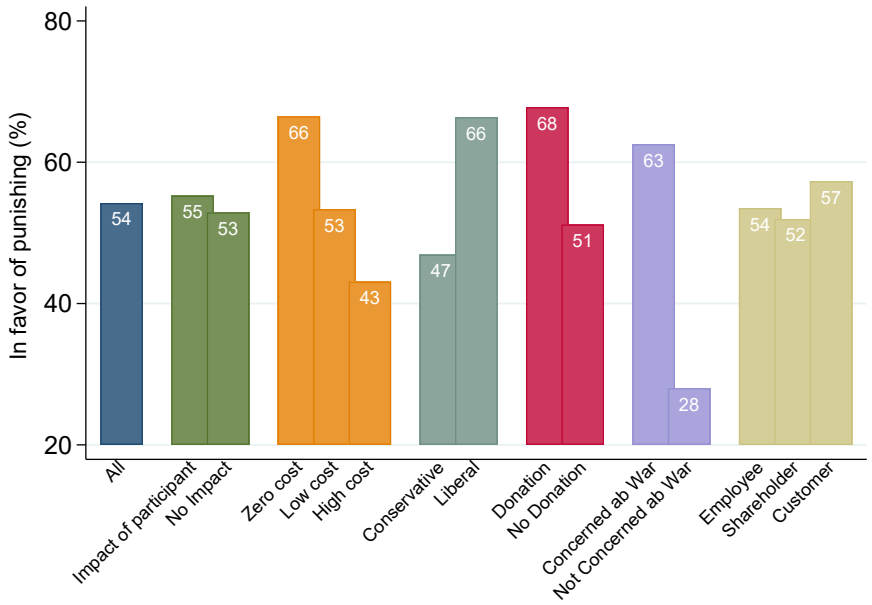

Figure 1: Willingness to Exit

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

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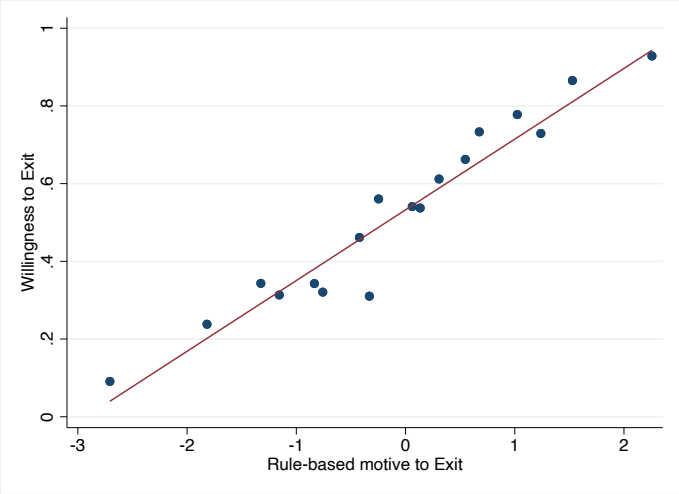

Figure 2: Deontological motive and willingness to Exit - no impact of participant on firm

This graph plots the deontological motive against willingness to Exit for the participant who have no impact on the firm

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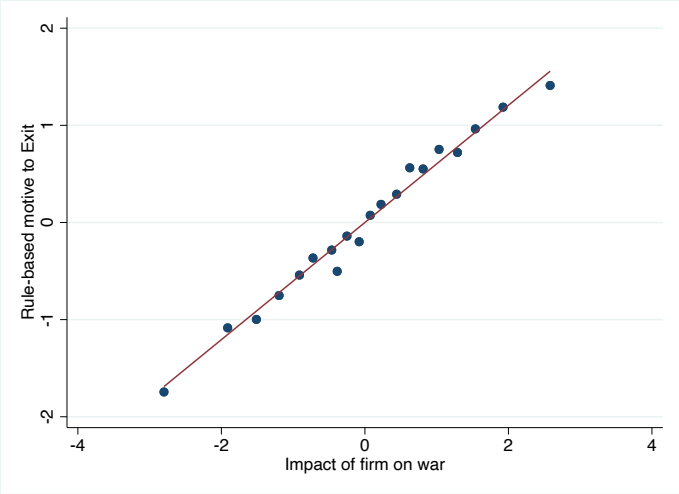

Figure 3: Impact of firm on war and Deontological motive

This graph plots the impact of the firm on the war against the deontological motive

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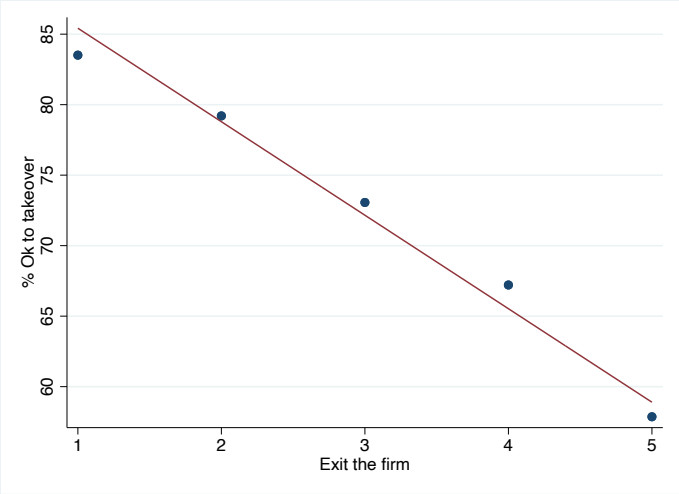

Figure 4: Vote for Musk's Twitter Buyout v. Willingness to Exit Firms Staying in Ukraine

This graph plots a binned scatter plot of the % of participants voting for Musk's Takeover of twitter by bin of willingness to exit (Likert score from 1 to 5)

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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
Four-year college degree or more	0.44	0.34
High-school graduate or less	0.22	0.38
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?"

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Table 2: Summary Statistics

	Mean (1)	St. Dev. (2)	No. Obs (3)
Panel A: Personal Characteristics			
Liberal	-0.00	1.00	2915
Female	0.68	0.47	2915
Age	52.71	17.30	2915
Age categories:			
30-44 yo	0.18	0.38	2915
44-64 yo	0.37	0.48	2915
65+ yo	0.30	0.46	2915
Income:			
20-40k	0.20	0.40	2915
40-60k	0.20	0.40	2915
60-110k	0.29	0.45	2915
110k+	0.18	0.39	2915
Graham& al (2012)'s Moral Values			
Authority	0.00	1.00	2915
Compassion	0.00	1.00	2915
Loyalty	-0.00	1.00	2915
Fairness	-0.00	1.00	2915
Freedom	0.00	1.00	2915
Sanctity	0.00	1.00	2915
Panel B: Attitudes			
Willingness to Exit	0.54	0.50	2915
Company should cut ties to Russia	0.61	0.49	2915
Imposing sanctions is a government decision	0.30	0.46	2915
Stopping business is a mere business decision	0.37	0.48	2915
Leaving Russia pushes Kremlin to end war	0.45	0.50	2915
All Russian are complicit with regime	0.13	0.34	2915
Company have no economic impact	0.16	0.36	2915
Leaving Russia will make Putin harsher	0.25	0.43	2915
Concerned about Ukrainian war	0.76	0.43	2915
Donation	0.18	0.39	2915

This table displays summary statistics for the main variables employed in the paper. Panel A focuses on personal characteristics (social, demographics, values). All of these characteristics are standardized to have a mean of 0 and a s.d. of 1. Income has 5 categories (< 20, $20 - 40$, $40 - 60$, $60 - 110$ and > 110). Panel B focuses on willingness to exit, and on war-related questions. These variables are dummies. Attitudes originally come from a 1-5 Likert scale, and we set these dummies to 1 when the respondent "agrees" (i.e. answers 4 or 5).

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Table 3: Opinions about Sanctions, Political Orientation, Age, and Moral Values

	Sanctions should be government decision (1)	Stopping is a mere business decision (2)	Should cut ties no matter consequences (3)	Will encourage Kremlin stop war (4)
Panel A: Some Socio-demographics				
Liberal	-.03***	-.058***	.1***	.065***
	(-2.7)	(-4.9)	(8.6)	(5.4)
60 or more × liberal	-.012	-.048***	-.016	.021
	(-.7)	(-2.7)	(-.97)	(1.2)
60 or more	.01	-.018	.2***	.062***
	(.59)	(-.98)	(11)	(3.4)
Constant	.3***	.38***	.53***	.43***
	(26)	(32)	(43)	(35)
Observations	2915	2915	2915	2915
R^2	.0064	.028	.067	.024
Panel B: Graham& al (2012)'s Moral Values				
Compassion	-.024***	-.027***	.096***	.085***
	(-2.7)	(-2.9)	(10)	(9.2)
Authority	.014	.046***	.056***	.042***
	(1.5)	(4.7)	(5.7)	(4.3)
Loyalty	.056***	.03***	.0022	-.0049
	(6.3)	(3.2)	(.24)	(-.5)
Fairness	.033***	-.0079	.053***	.056***
	(3.7)	(-.86)	(5.8)	(5.9)
Sanctity	.045***	.062***	-.024***	-.023**
	(4.9)	(6.6)	(-2.6)	(-2.3)
Freedom	.018**	.049***	-.00023	.0028
	(2.1)	(5.6)	(-.027)	(.31)
Constant	.3***	.37***	.61***	.45***
	(36)	(43)	(70)	(51)
Observations	2915	2915	2915	2915
R^2	.041	.056	.068	.054

This table displays the results from descriptive OLS regressions of opinions about sanctions on a few variables (more comprehensive regressions later). The exact wording of questions is in the main text and Appendix. In Panel A, the RHS variables are political leanings and age. In Panel B, we zoom in on moral values. t statistics are reported in parentheses. * (p<0.10), ** (p<0.05), *** (p<0.01)

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Table 4: Regression of willingness to exit on Cost (No Impact Participants)

	Willingness to exit				
	All	All	Shareholder	Customer	Employee
Cost ('00 USD)	-.2***	-.2***	-.27***	-.23***	-.13***
	(-7.4)	(-7.4)	(-4.7)	(-5.2)	(-3.1)
Employee condition		.029			
		(.22)			
Shareholder		-.38**			
		(-2.5)			
Constant	.51***	.59***	.34**	.65***	.48***
	(6.6)	(5.5)	(2.2)	(5.1)	(3.9)
Pseudo R2	.032	.037	.054	.043	.014
Observations	1285	1285	325	472	488
Marginal Effects					
Cost ('00 USD)	-.049	-.05	-.066	-.057	-.032

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars for (1) & (2) the entire sample, (3) shareholders, (4) customers, and (5) employees. The sample is restricted to the participants whose action has no impact on the firm. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table 5: Regression of willingness to exit on Cost and Rule-based Motive (No Impact Participants)

	Willingness to exit			
	All	Shareholder	Customer	Employee
Cost ('00 USD)	-.22***	-.29***	-.24***	-.16***
	(-7.3)	(-4.5)	(-4.7)	(-3.4)
Rule-based motive to Exit (PC)	.95***	.95***	1.1***	.84***
	(14)	(7.5)	(9.2)	(8.2)
Constant	.6***	.41**	.75***	.59***
	(6.8)	(2.3)	(4.9)	(4.2)
Pseudo R2	.2	.23	.24	.15
Observations	1285	325	472	488
Marginal Effects				
Cost ('00 USD)	-.055	-.071	-.06	-.04
Rule-based motive to Exit (PC)	.24	.23	.27	.21

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, and rule-based motive (see main text for description) 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. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table 6: Regression of willingness to exit on Cost and Conformism (No Impact Participants)

	Willingness to exit			
	All	Shareholder	Customer	Employee
Cost ('00 USD)	-.21***	-.27***	-.25***	-.12**
	(-5.3)	(-3.3)	(-3.5)	(-2)
Willing to Exit, even if others don't	.73***	.78***	1.1***	.53***
	(7.5)	(4)	(4.4)	(4)
Constant	.35***	.26	.29	.32*
	(3.1)	(1.2)	(1.4)	(1.8)
Pseudo R2	.12	.15	.17	.062
Observations	649	170	232	247
Marginal Effects				
Cost ('00 USD)	-.052	-.064	-.062	-.031
Willing to Exit, even if others don't	.18	.19	.28	.13

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, and the willingness to exit, even if others don't, 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. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table 7: Regression of willingness to exit on Cost, Moral Values and Socio-Demographics (No Impact Participants)

	Willingness to exit		
Cost ('00 USD)	-.21***	-.21***	-.22***
	(-7.7)	(-7.7)	(-7.8)
Authority	.21***	.25***	.15**
	(3.1)	(3.7)	(2.1)
Compassion	.4***	.37***	.37***
	(6.3)	(5.9)	(5.7)
Loyalty	-.14**	-.11*	-.17**
	(-2.2)	(-1.7)	(-2.5)
Fairness	-.0052	-.073	.019
	(-.081)	(-1.1)	(.27)
Freedom	-.0097	-.0064	.0082
	(-.16)	(-.11)	(.13)
Sanctity	-.21***	-.16**	-.15**
	(-3.3)	(-2.4)	(-2.2)
Liberal		.24***	.26***
		(3.5)	(3.6)
Female			-.21
			(-1.6)
30-44 yo			.2
			(.94)
44-64 yo			.63***
			(3.3)
65+ yo			1.1***
			(5.2)
20-40k			.11
			(.54)
40-60k			.16
			(.76)
60-110k			.41**
			(2)
110k+			.37*
			(1.6)
Constant	.53***	.54***	-.11
	(6.7)	(6.7)	(-.46)
Pseudo R2	.069	.075	.1
Observations	1285	1285	1285

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, moral values and socio-demographics. In this Table, we do not report marginal effects to save space. The sample is restricted to the participants whose action has no impact on the firm. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table 8: Regression of willingness to exit on Cost and Impact

	Willingness to exit				
	All	Shareholder	Shareholder	Customer	Employee
Cost ('00 USD)	-.17***	-.17***	-.17***	-.17***	-.15***
	(-9.6)	(-5.8)	(-5.8)	(-5.6)	(-5.1)
Participant's impact on firm	.12	.4***		.19	-.14
	(1.5)	(2.9)		(1.4)	(-1.1)
2 pct decrease in stock price			.29*		
			(1.8)		
5 pct decrease in stock price			.52***		
			(3.2)		
Constant	.45***	.17	.17	.54***	.53***
	(6.7)	(1.3)	(1.3)	(4.9)	(4.8)
Pseudo R2	.024	.03	.032	.026	.021
Observations	2915	991	991	956	968
Marginal Effects					
Cost ('00 USD)	-.041	-.043	-.043	-.042	-.038
Participant's impact on firm (d)	.029	.099		.047	-.035
2 pct decrease in stock price (d)			.072		
5 pct decrease in stock price (d)			.13		

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, and the "impact on the firm" treatment 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. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table 9: Willingness to Exit, Cost, Donation, and Impact of the participant on the firm

	Willingness to Exit			
	All	Shareholder	Customer	Employee
	(1)	(2)	(3)	(4)
Panel A: Interaction only				
Cost ('00 USD)	-.17***	-.18***	-.18***	-.15***
	(-9.7)	(-5.9)	(-5.7)	(-5.2)
Donation x Impact	.91***	1.7***	.47**	.53**
	(6.7)	(6.7)	(2.1)	(2.1)
Pseudo R2	.035	.065	.028	.023
Observations	2915	991	956	968
Panel B: Impact + Interaction				
Cost ('00 USD)	-.17***	-.18***	-.18***	-.15***
	(-9.7)	(-5.9)	(-5.7)	(-5.1)
Donation x Impact	.93***	1.6***	.4*	.67**
	(6.6)	(6.3)	(1.7)	(2.6)
Participant's impact on firm	-.043	.15	.11	-.25*
	(-.54)	(1)	(.78)	(-1.8)
Pseudo R2	.035	.066	.028	.026
Observations	2915	991	956	968
Panel C: Impact + Interaction + Donation				
Cost ('00 USD)	-.17***	-.19***	-.18***	-.15***
	(-9.8)	(-6)	(-5.8)	(-5.1)
Donation x Impact	.42**	.94**	-.056	.2
	(2)	(2.4)	(-.17)	(.55)
Donation	.52***	.68**	.46*	.47*
	(3.4)	(2.2)	(1.9)	(1.8)
Participant's impact on firm	.049	.26*	.2	-.17
	(.59)	(1.7)	(1.4)	(-1.2)
Pseudo R2	.038	.07	.031	.028
Observations	2915	991	956	968

This table displays the results from a logit regression of the willingness to exit 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. t statistics are reported in parentheses. * ($p<0.10$), ** ($p<0.05$), *** ($p<0.01$)

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Table 10: Regression of willingness to exit on Cost, Impact on Firm, Depending on Impact of Firm on war and Conformism

	Willingness to exit, without any impact			
	All	Shareholder	Customer	Employee
Cost ('00 USD)	-.18***	-.19***	-.19***	-.17***
	(-9.4)	(-5.6)	(-5.5)	(-5.1)
Participant's impact on firm	.11	.4**	.22	-.2
	(1.3)	(2.6)	(1.5)	(-1.4)
Impact of firm on war (PC)	.83***	.96***	.8***	.77***
	(14)	(7.7)	(8.2)	(8.3)
Impact on firm × Impact of firm on war	.053	-.052	.057	.13
	(.67)	(-.34)	(.42)	(.94)
Constant	.52***	.25*	.64***	.58***
	(7.1)	(1.7)	(5.1)	(4.8)
Pseudo R2	.18	.2	.18	.17
Observations	2915	991	956	968
Marginal Effects				
Cost ('00 USD)	-.046	-.048	-.046	-.043
Participant's impact on firm (d)	.027	.1	.054	-.05
Impact of firm on war (PC)	.2	.24	.19	.19
Impact on firm × Impact of firm on war	.013	-.013	.014	.031

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, and impact on the firm, *interacted* with a variable indicating belief in the effect of the firm on war (see main text for description), 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. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table 11: Regression of willingness to exit on Cost, Moral Values and Socio-Demographics (No Impact Participants): Robustness Checks

	Willingness to exit		
	All	Concerned abt war	Donated or don't exit
Cost ('00 USD)	-.22***	-.23***	-.2***
	(-7.8)	(-7.2)	(-4)
Liberal	.26***	.2**	.36***
	(3.6)	(2.4)	(3)
Authority	.15**	.039	.056
	(2.1)	(.46)	(.48)
Compassion	.37***	.29***	.6***
	(5.7)	(3.7)	(4.8)
Loyalty	-.17**	-.11	-.34***
	(-2.5)	(-1.5)	(-3)
Fairness	.019	-.019	-.0078
	(.27)	(-.23)	(-.066)
Freedom	.0082	-.0095	-.25***
	(.13)	(-.13)	(-2.6)
Sanctity	-.15**	-.17**	-.1
	(-2.2)	(-2.2)	(-.88)
Female	-.21	-.39**	-.34
	(-1.6)	(-2.4)	(-1.5)
30-44 yo	.2	.31	1.3***
	(.94)	(1.2)	(3.1)
44-64 yo	.63***	.76***	1.6***
	(3.3)	(3.4)	(3.8)
65+ yo	1.1***	.98***	2.1***
	(5.2)	(4.2)	(4.8)
20-40k	.11	.19	-.19
	(.54)	(.75)	(-.49)
40-60k	.16	.099	.015
	(.76)	(.39)	(.041)
60-110k	.41**	.36	.13
	(2)	(1.5)	(.36)
110k+	.37*	.16	.43
	(1.6)	(.62)	(1.1)
Constant	-.11	.31	-2.5***
	(-.46)	(1.1)	(-5.2)
Pseudo R2	.1	.089	.15
Observations	1285	980	750

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, moral values and socio-demographics for (1) the entire sample, (2) people who agree with the statement that they are "concerned by the war in Ukraine and (3) participants who end up donating 50c out to their $3 earnings. The sample is restricted to the participants whose action has no impact on the firm. We do not report marginal effects to save space. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$,

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APPENDIX TABLES AND FIGURES

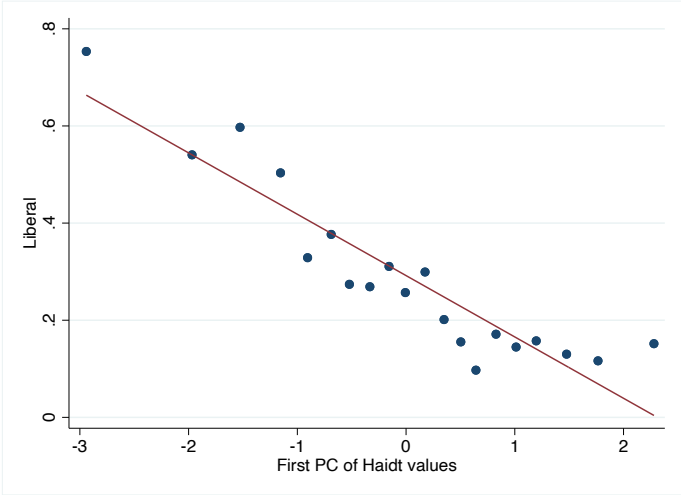

Figure A.1: Haidt values and Political orientation

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.

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Table A.1: Willingness to Exit As a Function of Cost and Political orientation, OLS (No Impact of Participants)

	Willingness to Exit		
	(1)	(2)	(3)
Cost ('00 USD)	-0.05***	-0.05***	-0.05***
	(-7.93)	(-7.98)	(-8.04)
Moral Values:			
Authority	0.05***	0.06***	0.03**
	(3.14)	(3.73)	(2.13)
Compassion	0.09***	0.08***	0.08***
	(6.51)	(6.01)	(5.75)
Loyalty	-0.03**	-0.02*	-0.04**
	(-2.20)	(-1.71)	(-2.48)
Fairness	-0.00	-0.02	0.00
	(-0.09)	(-1.11)	(0.21)
Freedom	-0.00	-0.00	0.00
	(-0.16)	(-0.10)	(0.12)
Sanctity	-0.05***	-0.04**	-0.03**
	(-3.28)	(-2.44)	(-2.22)
Political Orientation:			
Liberal		0.06***	0.06***
		(3.52)	(3.64)
Gender:			
Female			-0.05
			(-1.58)
Age:			
30-44 yo			0.04
			(0.92)
44-64 yo			0.14***
			(3.34)
65+ yo			0.23***
			(5.23)
Income:			
20-40k			0.03
			(0.61)
40-60k			0.04
			(0.82)
60-110k			0.09**
			(2.04)
110k+			0.08*
			(1.70)
Observations	1285	1285	1285
Adj R^2	0.09	0.09	0.12

Column (1) reports the results (marginal effects) from an OLS regression of the willingness to exit on dollar cost in hundred dollars, and moral 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. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, ***$p < 0.01$

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Table A.2: Willingness to Exit As a Function of Cost and Impact of the participant on the firm, OLS

	Willingness to Exit				
	All	Shareholder		Customer	Employee
	(1)	(2)	(3)	(4)	(5)
Cost ('00 USD)	-0.04***	-0.04***	-0.04***	-0.04***	-0.04***
	(-9.79)	(-5.90)	(-5.90)	(-5.78)	(-5.16)
Participant's impact on firm	0.03	0.10***		0.05	-0.03
	(1.54)	(2.88)		(1.43)	(-1.06)
2 pct decrease in stock price			0.07*		
			(1.85)		
5 pct decrease in stock price			0.12***		
			(3.22)		
Constant	0.61***	0.54***	0.54***	0.63***	0.63***
	(38.20)	(17.68)	(17.69)	(23.90)	(23.73)
Observations	2915	991	991	956	968
Adj R^2	0.03	0.04	0.04	0.03	0.03

This table displays the results (marginal effects) from an OLS regression of the willingness to exit 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 exit 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. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A.3: Willingness to Exit As a Function of Cost and Political orientation, OLS with education weights

	Willingness to Exit		
	(1)	(2)	(3)
Cost ('00 USD)	-0.04***	-0.04***	-0.04***
	(-6.81)	(-6.83)	(-7.05)
Moral Values:			
Authority	0.05***	0.06***	0.03*
	(3.06)	(3.65)	(1.79)
Compassion	0.09***	0.09***	0.08***
	(6.66)	(6.16)	(5.80)
Loyalty	-0.03**	-0.02	-0.03**
	(-1.96)	(-1.36)	(-2.06)
Fairness	-0.01	-0.03**	-0
	(-0.94)	(-1.97)	(-0.32)
Freedom	0	0.01	0.01
	(0.24)	(0.42)	(0.70)
Sanctity	-0.04***	-0.03**	-0.03*
	(-2.78)	(-2)	(-1.86)
Political Orientation:			
Liberal		0.06***	0.06***
		(3.90)	(4)
Gender:			
Female			-0.03
			(-1.09)
Age:			
30-44 yo			0.03
			(0.56)
44-64 yo			0.15***
			(3.84)
65+ yo			0.23***
			(5.48)
Income:			
20-40k			0.07
			(1.58)
40-60k			0.07*
			(1.68)
60-110k			0.14***
			(3.36)
110k+			0.13***
			(2.73)
Observations	1285	1285	1285
Adj R^2	0.07	0.08	0.12

Column (1) reports the results (marginal effects) from an OLS regression, with education weights, of the willingness to exit on dollar cost in hundred dollars, and moral 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. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, ***$p < 0.01$

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Table A.4: Willingness to Exit As a Function of Cost and Impact of the participant on the firm, OLS with education weights

	Willingness to Exit				
	All	Shareholder		Customer	Employee
	(1)	(2)	(3)	(4)	(5)
Cost ('00 USD)	-0.04***	-0.03***	-0.03***	-0.04***	-0.03***
	(-8.63)	(-4.76)	(-4.74)	(-5.29)	(-4.79)
Participant's impact on firm	0.03*	0.10***		0.05	-0.03
	(1.82)	(2.87)		(1.59)	(-0.89)
2 pct decrease in stock price			0.07*		
			(1.86)		
5 pct decrease in stock price			0.13***		
			(3.22)		
Constant	0.58***	0.51***	0.51***	0.61***	0.59***
	(35.98)	(16.67)	(16.67)	(22.89)	(22.09)
Observations	2915	991	991	956	968
Adj R^2	0.02	0.03	0.03	0.03	0.02

This table displays the results (marginal effects) from an OLS regression, with education weights, of the willingness to exit 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 exit 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. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A.5: Willingness to Exit As a Function of Cost and Political orientation, OLS with sample weights

	Willingness to Exit		
	(1)	(2)	(3)
Cost ('00 USD)	-0.05***	-0.05***	-0.05***
	(-7.78)	(-7.82)	(-7.97)
Moral Values:			
Authority	0.05***	0.06***	0.04**
	(3.48)	(4.10)	(2.49)
Compassion	0.09***	0.09***	0.08***
	(6.69)	(6.24)	(5.97)
Loyalty	-0.03**	-0.02	-0.03**
	(-2.01)	(-1.46)	(-2.11)
Fairness	-0	-0.02	0
	(-0.29)	(-1.35)	(0.15)
Freedom	-0	-0	0
	(-0.29)	(-0.19)	(0.08)
Sanctity	-0.04***	-0.03**	-0.03*
	(-2.93)	(-2.14)	(-1.86)
Political Orientation:			
Liberal		0.06***	0.06***
		(3.64)	(3.70)
Gender:			
Female			-0.04
			(-1.24)
Age:			
30-44 yo			0.03
			(0.79)
44-64 yo			0.13***
			(3.41)
65+ yo			0.21***
			(5.02)
Income:			
20-40k			0.05
			(1.12)
40-60k			0.06
			(1.25)
60-110k			0.12***
			(2.76)
110k+			0.12**
			(2.42)
Observations	1285	1285	1285
Adj R^2	0.09	0.09	0.12

Column (1) reports the results (marginal effects) from an OLS regression, with sample weights, of the willingness to exit on dollar cost in hundred dollars, and moral 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. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A.6: Willingness to Exit As a Function of Cost and Impact of the participant on the firm, OLS with sample weights

	Willingness to Exit				
	All	Shareholder		Customer	Employee
	(1)	(2)	(3)	(4)	(5)
Cost ('00 USD)	-0.04***	-0.04***	-0.04***	-0.04***	-0.04***
	(-9.35)	(-5.75)	(-5.73)	(-5.30)	(-5.01)
Participant's impact on firm	0.02	0.10***		0.04	-0.04
	(1.32)	(3)		(1.32)	(-1.41)
2 pct decrease in stock price			0.07*		
			(1.95)		
5 pct decrease in stock price			0.13***		
			(3.30)		
Constant	0.58***	0.51***	0.51***	0.60***	0.61***
	(36.44)	(16.68)	(16.68)	(22.21)	(23.33)
Observations	2915	991	991	956	968
Adj R^2	0.03	0.04	0.04	0.03	0.03

This table displays the results (marginal effects) from an OLS regression, with sample weights, of the willingness to exit 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 exit 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. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A.7: Regression of willingness to exit on Cost, Moral Values and Socio-Demographics: Split by Income

	Willingness to exit			
	No Impact Participants		Shareholders Only	
Income	< 100k	> 100k	< 100k	> 100k
Cost ('00 USD)	-.21***	-.28***	-.16***	-.3***
	(-6.6)	(-4)	(-4.7)	(-3.4)
Participant's impact on firm			.38**	.68*
			(2.4)	(1.7)
Liberal	.23***	.53***	.23***	.36
	(3)	(2.7)	(2.6)	(1.3)
Authority	.1	.38**	.075	.054
	(1.3)	(2.1)	(.88)	(.23)
Compassion	.34***	.58***	.29***	.36*
	(4.8)	(3.3)	(3.8)	(1.7)
Loyalty	-.17**	-.23	-.21***	-.22
	(-2.3)	(-1.3)	(-2.6)	(-.96)
Fairness	-.02	.11	.019	.27
	(-.27)	(.61)	(.24)	(1.2)
Freedom	.052	-.2	-.0086	-.37*
	(.77)	(-1.3)	(-.12)	(-1.7)
Sanctity	-.14*	-.2	-.11	-.091
	(-1.8)	(-1.2)	(-1.3)	(-.39)
Female	-.26*	-.23	-.36**	-.6
	(-1.7)	(-.73)	(-2.2)	(-1.5)
30-44 yo	.24	-.22	.39	-.27
	(1.1)	(-.32)	(1.5)	(-.31)
44-64 yo	.75***	-.035	1***	.23
	(3.8)	(-.054)	(4.5)	(.26)
65+ yo	1.2***	.36	1.4***	.11
	(5.5)	(.53)	(5.6)	(.11)
Constant	.025	1.1*	-.47*	.96
	(.12)	(1.7)	(-1.8)	(1.1)
Pseudo R2	.095	.16	.094	.17
Observations	1052	233	830	161

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, moral values and socio-demographics for all participants with no impact (col 1-2) and shareholders only (with or without impact, col 3-4). Each group is then split into two income groups. We do not report marginal effects to save space. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A.8: Regression of willingness to exit on Cost, Moral Values and Socio-Demographics: Split by Politics

	Willingness to exit			
	No Impact Participants		Shareholders Only	
Political leaning	Conservative	Liberal	Conservative	Liberal
Cost ('00 USD)	-.3***	-.17***	-.27***	-.21***
	(-5.2)	(-3.1)	(-4.5)	(-3)
Participant's impact on firm			.56*	.38
			(2)	(1.3)
Authority	.35*	.13	.045	.086
	(1.9)	(1)	(.26)	(.59)
Compassion	.55***	.33**	.27**	.33**
	(4.2)	(2.4)	(2)	(2.3)
Loyalty	-.14	-.35***	-.23	-.2
	(-1)	(-2.7)	(-1.5)	(-1.4)
Fairness	-.13	.13	.089	.12
	(-.91)	(1)	(.6)	(.78)
Freedom	.076	-.049	-.27**	.074
	(.65)	(-.41)	(-2.3)	(.48)
Sanctity	-.09	-.1	.14	-.23
	(-.67)	(-.82)	(.92)	(-1.5)
Female	-.23	-.35	-.2	-.29
	(-.92)	(-1.3)	(-.71)	(-.91)
30-44 yo	.17	.31	-.48	.77*
	(.3)	(.91)	(-.77)	(1.8)
44-64 yo	.23	1.1***	.35	1.1***
	(.47)	(3.4)	(.69)	(3)
65+ yo	.94*	1.2***	.77	1.4***
	(1.9)	(3.4)	(1.5)	(3.1)
20-40k	-.73*	.017	-1.1**	-.2
	(-1.7)	(.041)	(-2.2)	(-.42)
40-60k	-.3	.074	-1.1**	.38
	(-.69)	(.17)	(-2)	(.76)
60-110k	-.3	.41	-1.1**	.36
	(-.75)	(1)	(-2.2)	(.8)
110k+	-.62	.3	-1.1**	.37
	(-1.5)	(.63)	(-2)	(.66)
Constant	.46	.025	.89	-.23
	(.84)	(.053)	(1.4)	(-.42)
Pseudo R2	.13	.11	.14	.12
Observations	369	382	301	273

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, moral values and socio-demographics for all participants with no impact (col 1-2) and shareholders only (with or without impact, col 3-4). Each group is then split into two groups by political leanings (liberals and conservatives). We omit centrists (those who answer 3 on a scale of 1 to 5). We do not report marginal

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Table A.9: Regression of willingness to exit on Cost, Moral Values and Socio-Demographics: Split by Gender

	Willingness to exit			
	No Impact Participants		Shareholders Only	
Gender	Male	Female	Male	Female
Cost ('00 USD)	-.22***	-.23***	-.2***	
	(-7.8)	(-7.2)	(-4)	
Liberal	.26***	.2**	.36***	
	(3.6)	(2.4)	(3)	
Authority	.15**	.039	.056	
	(2.1)	(.46)	(.48)	
Compassion	.37***	.29***	.6***	
	(5.7)	(3.7)	(4.8)	
Loyalty	-.17**	-.11	-.34***	
	(-2.5)	(-1.5)	(-3)	
Fairness	.019	-.019	-.0078	
	(.27)	(-.23)	(-.066)	
Freedom	.0082	-.0095	-.25***	
	(.13)	(-.13)	(-2.6)	
Sanctity	-.15**	-.17**	-.1	
	(-2.2)	(-2.2)	(-.88)	
Female	-.21	-.39**	-.34	
	(-1.6)	(-2.4)	(-1.5)	
30-44 yo	.2	.31	1.3***	
	(.94)	(1.2)	(3.1)	
44-64 yo	.63***	.76***	1.6***	
	(3.3)	(3.4)	(3.8)	
65+ yo	1.1***	.98***	2.1***	
	(5.2)	(4.2)	(4.8)	
20-40k	.11	.19	-.19	
	(.54)	(.75)	(-.49)	
40-60k	.16	.099	.015	
	(.76)	(.39)	(.041)	
60-110k	.41**	.36	.13	
	(2)	(1.5)	(.36)	
110k+	.37*	.16	.43	
	(1.6)	(.62)	(1.1)	
Constant	-.11	.31	-2.5***	
	(-.46)	(1.1)	(-5.2)	
Pseudo R2	.1	.089	.15	
Observations	1285	980	750	

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, moral values and socio-demographics for all participants with no impact (col 1-2) and shareholders only (with or without impact, col 3-4). Each group is then split by gender. We do not report marginal effects to save space. t statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table A.10: Regression of willingness to exit on Cost, Moral Values and Socio-Demographics: Split by Age Group

	Willingness to exit			
	No Impact Participants		Shareholders Only	
Age	<60	60+	<60	60+
Cost ('00 USD)	-.23***	-.22***	-.19***	-.2***
	(-6.1)	(-4.9)	(-4.4)	(-4)
Participant's impact on firm			.44**	.41*
			(2.2)	(1.8)
Liberal	.3***	.23**	.25**	.17
	(3.2)	(2)	(2.3)	(1.3)
Authority	.25***	-.056	.16	-.024
	(2.9)	(-.41)	(1.6)	(-.17)
Compassion	.35***	.44***	.38***	.2*
	(4)	(4.2)	(3.9)	(1.8)
Loyalty	-.1	-.28***	-.084	-.35***
	(-1.2)	(-2.6)	(-.87)	(-2.9)
Fairness	-.044	.18	.089	.078
	(-.5)	(1.5)	(.9)	(.64)
Freedom	-.0059	.04	.035	-.11
	(-.07)	(.44)	(.36)	(-1.1)
Sanctity	-.17**	-.11	-.24**	.042
	(-2)	(-1)	(-2.3)	(.34)
Female	-.11	-.46**	-.42**	-.43*
	(-.59)	(-2.2)	(-2.1)	(-1.9)
20-40k	.3	-.28	-.029	-.34
	(1.1)	(-.8)	(-.09)	(-.87)
40-60k	.25	.066	.093	.073
	(.89)	(.18)	(.29)	(.18)
60-110k	.82***	-.18	.67**	-.55
	(3)	(-.53)	(2.2)	(-1.5)
110k+	.87***	-.34	1***	-.53
	(3)	(-.92)	(3.1)	(-1.2)
Constant	-.15	1.6***	-.21	1.3***
	(-.56)	(4.5)	(-.65)	(3)
Pseudo R2	.097	.11	.11	.083
Observations	741	544	567	424

This table displays the results from a logistic regression of the willingness of exiting on cost of exiting in hundred dollars, moral values and socio-demographics for all participants with no impact (col 1-2) and shareholders only (with or without impact, col 3-4). Each group is then split into participants below and above 60 years old. We do not report marginal effects to save space. t-statistics are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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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

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[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:

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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)

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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

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- 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

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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

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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

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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

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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]

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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]**

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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

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- 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

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