Corporate Social Responsibility and Firm Performance:

Field Experimental Evidence on the Role of Employee Salary Requirements and Productivity

Vanessa C. Burbano*

Job Market Paper

November, 2014

Abstract

Whether and how corporate social responsibility (CSR) adds value to the firm remain topics of considerable debate. Much focus has been placed on external stakeholders as channels through which CSR contributes to firm value. This paper focuses on an internal stakeholder—the employee. Using three natural field experiments implemented in online labor marketplaces, I provide causal evidence of the effect of CSR on employee outcomes that have been shown to be critical to firm performance: salary requirements and employee performance. Workers were recruited for short-term jobs and I manipulated whether or not they received information about the employer's CSR program. I then observed the payment workers were willing to accept for the job and their performance on the job. Surveys administered at the end of the experiments gauging workers' perceptions about the received CSR information also provide insight into the distinct mechanisms through which CSR affects the different employee outcomes. This paper contributes to an understanding of how CSR adds value to the firm and highlights the role of the employee in explaining this relationship.

* UCLA Anderson School of Management, vanessa.burbano.2015@anderson.ucla.edu. I thank the Strategy Research Foundation and UCLA Anderson for their financial support. I thank Magali Delmas, Witold Henisz, Ian Larkin, Marvin Lieberman, James Ostler, Sara Parker, Leah Platt-Boustan, Suzanne Shu, Jason Snyder, Stephen Spiller, and Elizabeth Webb for their thoughtful comments. I also thank participants in the 2014 Strategy and the Business Environment Conference at Kellogg Business School, the 2014 CCC Doctoral Colloquium at Boston University, the 2014 Alliance for Research on Corporate Sustainability Conference, the 2014 Academy of Management meeting, the 2013 Next Generation Environmental, Social and Governance Workshop at Bentley University, and the 2013 Strategic Management Society meeting.

1. Introduction

Companies continue to invest in and place importance on corporate social responsibility (CSR).[1] Although it has been argued that CSR can be strategic (Porter, 2008; Porter and Kramer, 2006; Porter and van der Linde, 1995), whether and how firms can "do well by doing good" remains a topic of considerable debate, as an extensive amount of empirical testing of the relationship between CSR and firm performance has resulted in mixed findings (Barnett and Salomon, 2012; Margolis and Walsh, 2001, 2003; Orlitzky, Schmidt, and Rynes, 2003). An important critique of earlier studies has been that the causal chain of connection between CSR and firm performance has often been missing (Delmas and Toffel, 2008), leaving us with too little understanding of the mechanisms by which CSR affects firm performance (Margolis et al., 2009; Margolis and Walsh, 2003). Numerous studies have since expounded on the role of external stakeholders in linking CSR and firm performance. Less attention has been paid to the role of internal stakeholders, despite the importance of human capital to firm performance (e.g., Campbell et al., 2012; Huselid, Jackson, and Schuler, 1997; Koch and McGrath, 1996) and the fact that corporate CFOs, investment professionals, and CSR professionals consistently report that one of the key ways that CSR programs improve companies' financial performance is through employees.[2]

Using three natural field experiments implemented in online labor marketplaces, this paper (a) provides *causal* evidence that certain CSR policies influence certain employee outcomes and (b) provides insight into distinct mechanisms by which they do so.[3] Specifically, CSR influences salary requirements by acting as an informational signal about a firm's treatment of its employees and influences employee performance by generating feel good, "warm glow" utility.

I also demonstrate that higher-performing workers, who normally command higher wages, were more responsive to a corporate philanthropy program than lower-performing workers and were

[1] Governance & Accountability Institute, *Corporate ESG/Sustainability/Responsibility Reporting*, 2012.
[2] McKinsey and Company, *Valuing Corporate Social Responsibility: McKinsey Global Survey Results*, 2009.
[3] Institutional Review Board approval was obtained to conduct these experiments. Salary requirements (Carnahan, Agarwal, and Campbell, 2012; Larkin, Pierce, and Gino, 2010) and employee performance (Koch and McGrath, 1996; Shaw, Park, and Kim, 2013) are employee outcomes that have been shown to be critical to firm performance.

willing to give up their wage differential to work for a firm with a corporate philanthropy program. This elevates the strategic relevance of CSR programs, since it has been established that higher-performing workers have higher bargaining power and contribute more value to the firm (Campbell et al., 2012). It also suggests that, at the recruiting phase, firms where higher-performing recruits command a significant salary differential may benefit more from CSR programs than other firms do.

In sum, this paper contributes to the debate on the role of CSR in corporate strategy by positing mechanisms by which CSR can influence firm financial performance via a critical internal stakeholder—the employee—and by providing causal evidence of those mechanisms.

My research settings are the online labor marketplaces of two employers: a small startup company hiring on Elance (in Experiment 1) and a fictitious company hiring on Amazon Mechanical Turk (AMT) (in Experiments 2 and 3). The use of online labor marketplaces has been skyrocketing in recent years, making these research settings increasingly relevant.[4] Indeed, the strategic management of online workers, independent contractors, and other non-inhouse workers will become increasingly important (Chesbrough and Teece, 2012; Gibson and Cohen, 2003; Kirkman et al., 2004).

Three attributes of these settings make them valuable for the study of the relationships of interest. First, the employers are not well-known firms, one being a startup with little Web presence at the time of the study and one being fictitious. This ensures that a worker's preconceived notions about the firm's reputation or its social responsibility do not confound the results. Second, there is no information about the socially responsible or irresponsible activities or objectives of these firms available on the Internet or elsewhere. This ensures that workers' perceptions of the firms' social responsibility cannot be influenced by information outside of the researcher's control. (For example, workers would not find out anything about either company's CSR by googling it.) Third, workers complete their work online and without interacting with each other. This reduces the likelihood of treatment-effect diffusion from the treatment group to the control group. The use of these research

[4] Accenture, *Trends Reshaping the Future of HR: The Rise of the Extended Workforce*, 2013.

settings thus avoids many of the internal validity challenges that would plague similar experiments in well-known companies with non-online workers.

In each experiment, workers were hired online for short-term jobs, I manipulated whether or not the worker received information about the employer's CSR program, and then observed subsequent worker behavior. In Experiments 1 (Elance) and 2 (AMT), I show that receiving information about the firm's CSR program caused recruits to reduce their salary requirements. In Experiments 2 and 3 (both AMT), I show that receiving information about a corporate philanthropy program increased both the quantity and quality of unrequired work completed by the worker, a measure of a type of employee performance—organizational citizenship behavior.

This paper is, to my knowledge, the first to empirically demonstrate a causal effect of CSR programs on revealed (as opposed to hypothetical) employee salary requirements and productivity in a real labor-market setting.[5] Although it has been shown that individuals rate socially responsible hypothetical employers as being more attractive (e.g., Albinger and Freeman, 2000; Backhaus, Stone, and Heiner, 2002; Greening and Turban, 2000; Turban and Greening, 1996), these studies stopped short of establishing a *revealed* preference for CSR firms when individuals make actual job choices. Establishing that prospective employees are in practice willing to pay to work for a socially responsible employer helps establish a revealed preference for CSR. Related empirical studies using observational data have mainly focused on comparing wages at nonprofit firms with wages at for-profit firms (as opposed to comparing varying social responsibility among for-profit firms) and have resulted in mixed findings (e.g., Frank, 1996; Leete, 2001), likely due to endogeneity challenges. As it could be the case that lower-performing workers self-select into nonprofit or CSR firms, resulting in lower wages at these firms (Preston, 1989), it is important to isolate a causal effect to understand the implications of CSR for the firm. Studies have found that people are hypothetically willing to give up

[5] In a working paper, Frank (2012) studies the effect of a social versus a nonsocial organizational mission on employee willingness to pay and finds results complementary to mine regarding the effect of CSR on employee salary requirements. This paper, unlike Frank's, studies the effect of CSR while holding the mission of the organization constant (a profit-maximizing mission). This paper also studies the effect on employee performance, which Frank's does not.

part of what they might make in the future to work for a socially responsible firm (Montgomery and Ramus, 2011) or to participate in a firm's CSR activities (Bode and Singh, 2014), but the authors of these studies acknowledge that responses might be inflated due to social desirability. As it has been established that responses to hypothetical questions are not always consistent with the decisions made when real choices are on the line (List and Gallet, 2001)—in particular, with prosocial preferences and behavior (Levitt and List, 2007)—it is critical to study the relationship between CSR and employee salary requirements in real labor-market settings.

Researchers have used cross-sectional data to demonstrate an empirical relationship between CSR and employee performance (Delmas and Pekovic, 2013; Hansen et al., 2011), but have recognized the limitations of using cross-sectional data to establish causal effects. Others have used an experimental approach to study the relationship between people's self-reported perceptions about CSR and self-reported measures of willingness to go above and beyond in their work (Rupp et al., 2013), but have recognized that people don't always walk their talk.

Because the subjects of my natural field experiments undertake their tasks naturally, unaware of the experiment, this paper combines the most attractive elements of lab experimentation and naturally occurring data—randomization and realism, respectively (List, 2009). Furthermore, subjects cannot excuse themselves from being treated, minimizing self-selection bias (List, 2009).

By demonstrating a *causal* effect of CSR on *revealed* employee behaviors that have already been shown to be critical to firm performance, this paper provides insight into the role of an internal stakeholder—the employee—in explaining the relationship between CSR and firm performance. It therefore contributes to the emerging literature on the mechanisms by which CSR influences firm performance.

The remainder of the paper is organized as follows: Section 2 summarizes the relevant literature and develops hypotheses. Section 3 describes the field experiment settings, Elance and Amazon Mechanical Turk. Sections 4, 5, and 6 summarize the design, data sample, construction, and results of Experiments 1, 2, and 3, respectively. Section 7 explores the mechanisms behind the effect

of CSR on employee behavior. Section 8 concludes and discusses implications for managers and for future research.

2. Literature Review and Hypothesis Development

2.1. Corporate Social Responsibility and Firm Performance: The Role of Stakeholders

In explaining the relationship between CSR and firm performance, the role of external stakeholders such as consumers (e.g., Casadesus-Masanell et al., 2009; Du, Bhattacharya, and Sen, 2011; Elfenbein, Fisman, and McManus, 2001; Servaes and Tamayo, 2013), regulators (e.g., Koh, Qian, and Wang, 2013), activists (e.g., Baron and Diermeier, 2007; Henisz, Dorobantu, and Nartey, 2013), the media (e.g., Luo, Meier, and Oberholzer-Gee, 2012), and capital providers (e.g., Cheng, Ioannou, and Serafeim, 2013; Ioannou and Serafeim, 2014) has been highlighted. In contrast, the role of an internal stakeholder—the employee—should be better understood, given the importance of human assets to the firm (Campbell et al., 2011; Coff, 1977).

The empirical literature using firm-level analysis to study how CSR influences firm financial performance through stakeholders faces two main challenges. First, methodological concerns such as omitted-variable bias and reverse causality (Margolis and Walsh, 2001) continue to be a problem. Indeed, stakeholders posited to be the channels through which CSR influences firm performance have been shown to influence CSR.[6] Second, the appropriate measurement and specification of CSR (Waddock and Graves, 1997) has been a challenge. It has been noted that although a plethora of CSR ratings is available to researchers (Delmas, Etzion, and Nairn-Birth, 2013), even the best—those of the KLD Stats Database—are noisy aggregate measures of a firm's true CSR (Chatterji, Levine, and Toffel, 2009). Furthermore, the aggregation of varied CSR constructs makes interpretation of results difficult and may fail to capture differential effects (Chen and Delmas, 2011; Delmas and Doctori-

[6] For example, scholars have explained that consumers, a channel identified as a mechanism by which CSR influences firm performance (Servaes and Tamayo, 2013), can influence the firm's socially responsible/irresponsible behavior (Bennett, Pierce, Snyder, and Toffel, 2013) and can influence firms to increase their socially responsible claims (McDonnell and King, 2013). Likewise, reducing regulatory and government scrutiny has been described as a mechanism by which CSR can influence performance (e.g., Koh, Qian, and Wang, 2013), but it has also been shown that community institutional pressures (Marquis, Gynn, and Davis, 2007) and government actors (Marquis and Qian, 2014) influence CSR.

Blass, 2010; Mattingly and Berman, 2006; Rowley and Berman, 2000). Godfrey et al. (2009) point out opportunities to study finer-grained CSR activities to better understand how value is created for the firm.

This paper seeks to address these two major challenges by (a) focusing on specific CSR-related policies and actions rather than using aggregated CSR constructs and (b) taking a different approach and seeking to establish a *causal* relationship in the first link of the chain connecting CSR to stakeholder outcome to firm performance. The latter part of my approach draws from Du, Bhattacharya, and Sen (2011), who point out that the effectiveness of a macro-level activity such as CSR as an instrument of competitive strategy depends on the micro-level actions of individuals.[7] My approach also speaks to the micro-foundations of strategy, an emerging subfield of strategic management research that highlights the importance of understanding how firm policies affect individual behavior and, in particular, employee behavior (Foss and Lindberg, 2013).

2.2. Corporate Social Responsibility and Employee Behavior

Individuals develop perceptions of a firm's qualities by interpreting various informational signals (Fombrun and Shanley, 1990). A firm's CSR activities are among those signals with a favorable influence (Barnett, 2007; Barnett and Salomon, 2012; Waddock and Graves, 1997).

2.2.1. CSR and Prospective Employee Salary Requirements. Prospective employees have imperfect information about a firm's working conditions and treatment of its employees and thus are uncertain about how a firm would treat them once it hired them. They interpret a firm's CSR activities as a signal that the firm is trustworthy and treats the community well (Godfrey et al., 2009) and infer from this that the firm likely treats its employees well (Greening and Turban, 2000; Turban and Greening, 1996). Prospective employees therefore prefer socially responsible firms. It has been

[7] While Du and her colleagues focused on identifying the effect of CSR on consumer behavior, I focus on identifying its effect on two employee outcomes that have been shown to be critical to firm financial performance: salary requirements (Carnahan, Agarwal, and Campbell, 2012; Larkin, Pierce, and Gino, 2010) and performance (Koch and McGrath, 1996; Shaw, Park, and Kim, 2013).

established that individuals are willing to pay more for products tied to charitable donations or other socially responsible practices (e.g., Casadesus-Masanell et al., 2009; Elfenbein, Fisman, and McManus, 2012; Elfenbein and McManus, 2010). It has also been suggested that it is prosocially oriented recruits who are attracted to CSR firms (Evans and Davis, 2011) and thus should be willing to pay a premium to work there. By contrast, a mechanism of signaling about employee treatment implies that even purely self-interested, non-prosocially oriented individuals should prefer to work with a CSR firm—everybody prefers to be treated better—and thus be willing to pay for this by accepting lower payment. This leads to the prediction:

Hypothesis 1 (H1): A CSR program makes recruits willing to accept lower payment.

2.2.2. CSR and a Treatment Effect on Employee Performance. A firm's CSR activities also signal to stakeholders whether and to what extent the firm is prosocial or "moral." This enables an employee to indirectly garner utility similar to the that of the "warm glow" utility (Andreoni, 1989, 1990) that can be obtained by behaving prosocially himself or herself (Barnea and Rubin, 2010). When a firm's CSR activities signal the firm's prosocial orientation to the outside world, this also enables an employee to indirectly garner utility similar to the "image" utility that can be obtained from having a prosocial image him or herself (Ariely, Bracha and Meier, 2009; Benabou and Tirole, 2006) Through the "warm glow," a firm's CSR activities in turn can help satisfy an employee's need for a meaningful existence (Rupp et al., 2006). Drawing on social identity theory, both "warm glow" and "image" utility manifest as greater self-image and increased job satisfaction among employees. That is, when an employee of a socially responsible firm favorably compares his or her qualities—or that of his or her employer—to that of others, his or her self-image and job satisfaction increases (Ashforth and Mael, 1989; Dutton and Dukerich, 1991; Greening and Turban, 2000; Turban and Greening, 1996).

High job satisfaction (Bateman and Organ, 1983; Illies, Scott, and Judge, 2006) and the perception that an employer is trustworthy and fair (e.g., Bolino and Turnley, 2003; Niehoff and Moorman, 1993) have been identified as drivers of an important type of employee performance: organizational citizenship behavior (OCB) (Morrison, 1994; Organ, 1988), also called prosocial organizational behavior (e.g., Brief and Motowidlo, 1986). OCB includes taking on additional assignments, voluntarily assisting others at work, and otherwise going above and beyond what is formally required by the job (Bolino and Turnley, 2003). It has been shown to be critical for organizational effectiveness (Nahapiet and Ghoshal, 1998).

Since CSR influences the drivers of OCB, it should increase OCB. This mechanism by which CSR influences employee performance is a *treatment* effect of CSR on employee performance and thus differs from a selection or sorting effect channeling higher performers into CSR firms (e.g., as suggested by Albinger and Freeman, 2000; Brekke and Nyborg, 2008). Thus, irrespective of the type of performer, CSR programs should improve a certain type of worker performance: willingness to go above and beyond what is formally required by the job.

Hypothesis 2a (H2a): A CSR program makes employees more likely to go above and beyond what is formally required by the job.

The "warm glow" utility of working for a socially responsible firm is even higher if the employee is prosocially oriented and sees value congruence with the employer (Evans and Davis, 2011). Since one of the drivers of OCB is higher for these individuals, we would expect CSR to positively influence their OCB more than the OCB of individuals who are not prosocially oriented.

Hypothesis 2b (H2b): Prosocially oriented employees are more likely to go above and beyond what is formally required by the job in response to a CSR program than employees who are not prosocially oriented.

2.2.3. Employee Participation in CSR. Scholars have established that employee participation in general affects job satisfaction (Wagner, 1994). It has also been pointed out that for employees in meaningful jobs, greater connection to the prosocial impact of their jobs improves outcomes (e.g., Grant, 2008) and that employee participation in CSR influences employee-company identification (Kim et al., 2010). By this reasoning, employees should have an even greater preference to work at a firm that elicits their participation in its CSR program than at a firm that does not and should thus be even more willing to pay to work there. Likewise, employees should be even more willing to engage in OCB when working for a firm that elicits their CSR participation.

Hypothesis 3a (H3a): A CSR program that elicits employee participation makes recruits accept lower payment than a CSR program that does not.

Hypothesis 3b (H3b): A CSR program that elicits employee participation makes employees more likely to go above and beyond what is formally required by the job than a CSR program that does not.

3. Field Experiment Settings

The settings for the experiments used to analyze the relationships of interest are two online labor marketplaces, Elance and Amazon Mechanical Turk (AMT). The use of online labor marketplaces, also referred to as independent contractor sites, has been rising in recent years.[8] Freelancers, contractors, and temporary workers make up an estimated 20-30% of the US workforce, up from 6% in 1989, and companies spend an estimated $300 billion per year on contingent labor.[9] Online independent contracting is a rapidly growing market, with eight times the number of workers

[8] Accenture, *Trends Reshaping the Future of HR: The Rise of the Extended Workforce*, 2013.
[9] Accenture, *Trends Reshaping the Future of HR*.

registered on Elance and ODesk (the two largest sites) alone in 2013 compared to the number of workers registered on such sites in the entire decade leading up to 2013.[10]

3.1. Elance

Elance is an online labor marketplace that has been identified as a promising yet underused setting for management research (Aguinis and Lawal, 2012) since small, medium-sized, and even large companies are increasingly outsourcing job functions and using websites like Elance (Needleman, 2010). There are over 500,000 businesses posting jobs on Elance and over 2.3 million registered Elance workers. According to Elance's Online Employment Report, in 2013 alone, 441,000 new businesses joined Elance, 1,214,000 new jobs were posted, 1,153,000 new freelancers joined, and freelancers earned $285,000,000.

On Elance, employers post jobs, freelancers submit proposals including bids for those jobs, and employers select from submitted proposals to hire workers. Typical job values are in the hundreds of dollars, although there is significant variation by type of job. Elance job categories include IT and programming (37% of jobs posted), design and multimedia (23%), writing and translation (17%), administrative support (9%), sales and marketing (9%), finance and management (2%), engineering and manufacturing (2%), and legal (1%). The average hourly wage for US freelancers on Elance is $28; this would translate into an annual income of $56,000 (Eha, 2013).

After a job is completed on Elance, employers submit ratings and feedback, which are easily viewed on the worker's Elance page. These ratings affect the worker's overall Elance performance rating, which appears prominently on a worker's proposal. There is little recourse for undoing an unfair or particularly harsh rating and there are a number of blogs and websites concerned with how to get good and fair feedback on Elance. Given the online nature of the employer-employee relationship, there is also some concern amongst workers that employers may not pay the agreed amount in a timely manner or at all. If the employer is unresponsive or shuts down its Elance account, there is little the

[10] Accenture, *Trends Reshaping the Future of HR*.

worker can do to retrieve payment.[11] An informational signal about a potential employer's likelihood of fair or generous treatment would therefore be valuable to a prospective worker.

3.2. Amazon Mechanical Turk

Amazon Mechanical Turk (AMT) is an online labor marketplace that has been frequented by researchers as an online alternative to lab surveys and experiments where participants are aware they are participating in a research study, but has been underused as a setting in which to implement field experiments and study actual employer-employee behavior in a real labor market. Only very recently has its potential as a field experimental setting to study inputs to worker motivation and output (e.g., Chandler and Kapelner, 2013; Horton and Chilton, 2010) begun to be tapped.

On AMT, "requesters" post jobs and "workers" choose which jobs to complete for a payment set by the employer. Jobs are carried out and submitted online. AMT jobs, called HITs (an acronym for human intelligence tasks) are typically simple enough to take only a few minutes. They include such tasks as image interpretation, audio transcription, and survey completion. More complicated tasks are typically decomposed into smaller HITs. Pay can be as low as $0.01 and rarely exceeds $1.00. The average effective wage of an AMT worker is $4.80 per hour (Mason and Suri, 2012). Approximately 500,000 HITs are currently available. Studies have confirmed that US AMT workers are not uncharacteristic of the US work population (Berinsky, Huber, and Lenz, 2012) and act in accordance with behavior in other online, offline, and lab studies (Horton and Chilton, 2010; Horton, Rand, and Zeckhauser, 2011; Paolacci, Chandler, and Ipeirotis, 2010).

After a worker completes a HIT, the requester can reject it and not pay if the work is deemed unsatisfactory. A rejection affects the worker's HIT approval rating, a score logged by AMT that indicates the proportion of a worker's previous AMT HITs that have been approved. Since employers can screen workers based on their HIT approval ratings, a high rating is important. If a worker feels

[11] The employer and worker can opt to use an escrow account to ensure that the employer has the funds available to pay the worker through Elance, but not all employers use this feature and it is up to the employer to release the funds from escrow.

unfairly treated by a requester, he or she can post about this experience on one of the numerous AMT-related blogs/websites, but there is little other recourse.

As in the Elance setting, an informational signal about a potential employer's likelihood of fair or generous treatment would be valuable to a prospective AMT worker. We would thus expect that information about an employer's CSR would affect prospective employees' salary requirements in both settings. Because the workers complete their work online and anonymously, the potential "image" utility mechanism that could contribute to the effect of CSR on employee willingness to go above and beyond for the firm is controlled for. An effect of CSR on OCB in this setting would thus likely be explained by the feel-good, "warm glow" mechanism.

3.3. Tradeoffs between Elance and Amazon Mechanical Turk

Both Elance and AMT offer natural labor-market contexts in which to study firm-employee (or firm-contractor) interactions. Each has pros and cons from a research perspective. When implementing field experiments on AMT, the researcher can easily ensure random assignment without any confounding exchange of information (since instructions are automated online and are thus controlled and exactly the same for all workers), whereas on Elance additional steps must be taken to ensure that there is no confounding exchange of information (since communication can take place between the employer and freelancer before, during, and after the job). On AMT, it is easy to attract and hire many workers for a single job, whereas on Elance it is harder to do so, resulting in smaller sample sizes. Compared to AMT HITs, Elance jobs are more complex, require more time, and command higher pay, making them more representative of corporate or entrepreneurial work.

4. Field Experiment 1

4.1. Design

The first field experiment was implemented in collaboration with a startup company, UrGift.In.[12] UrGift.In advertised jobs on Elance: first, "Data Entry into Excel from Website (Top 100 Mom Blogs of 2012)" and subsequently (after the first job posting was closed), "Data Entry into Excel from Website (Directorio de Entidades...)."[13] Each job posting noted that the job would be posted for up to two weeks and that payment would be fixed-price (as opposed to hourly).[14] In the job description, interested applicants were directed to complete a prequalification survey. Prequalification surveys or tasks are sometimes required on Elance to help hiring companies filter out applicants who submit generic proposals and to help identify the applicants best suited for a particular job. During the prequalification survey, administered on an external survey site, participants were first asked a few questions related to UrGift.In's line of business; that is, whether they had ever used Amazon, Facebook, and mobile applications before. Those who answered "no" to all three questions were informed that they did not prequalify. The rest were randomly assigned to one of two conditions: (1) a CSR treatment group, which received information about UrGift.In's intent to be a socially responsible company and (2) a control group, which did not. (See Figure 1 for the exact messages corresponding to each condition) After receiving their messages, applicants were invited to continue with the application process and were then asked for information about their level of education and years of work experience. Lastly, they were given a prequalification code to include in their Elance proposal, which included their bid amount. UrGift.In later chose and hired one worker for each of the two job postings.[15]

[12] UrGift.In is a startup company, founded in June 2012, which has won entrepreneurial competitions such as MassChallenge. It uses Elance for most of its hiring. At the time of the study, there was no information available online or elsewhere about UrGift.In's socially responsible intent or CSR programs/activities. The experiment took place in August 2013.

[13] Although the second job description included a Spanish-language website, the job description indicated that knowledge of Spanish was not required.

[14] The proposal bid amounts were set as private, so that applicants could not see the bids submitted by others. Freelancers with a premium Elance membership (which costs $10/month) can only view the average, lowest, and highest bid amounts at any given time.

[15] Data was not gathered on these two workers' performance on the job.

Insert Figure 1 about here

4.2. Sample

Of the 125 people who started the prequalification survey, 17 exited before the random assignment of conditions. Of those who were randomly assigned to a control or treatment condition, 6 did not finish the survey. Of those who finished, 13 did not submit proposals on Elance. As there was no statistically significant difference between the control and treatment groups in either likelihood of finishing the prequalification survey or likelihood of submitting an Elance proposal, this suggests that selection bias due to attrition is minimal.[16] Four observations were dropped because a person completed the survey more than once and saw both the treatment and the control messages. The resulting sample size is 79 observations.

Table 1 reports summary statistics for the sample by condition. There were no statistically significant differences between the mean characteristics listed in Table 1 for the treatment and control groups except for geographic location, suggesting that randomization was successful and that selection bias due to observables is minimal.[17] Based on self-reported data gathered during the prequalification survey, 86% of the applicants in the sample have a college degree and applicants have, on average, 11 years of work experience. Based on Elance proposal data, applicants had, on average, completed 12 previous Elance jobs, earned $119.13 per job, and received 3.8 stars (out of 5) for previous Elance jobs. Almost half are based in Asia (46%), followed by the US (35%), non-European Union Europe (6%), Central and South America (5%), the European Union (4%), and Canada (3%). Based on a classification of names and pictures from their Elance proposals, 64% of the applicants are women. The mean bid amount for the sample was $100.75 (standard deviation $94.4).

[16] There was no significant relationship between likelihood of finishing the entire survey and treatment condition although, directionally, individuals who received the CSR message were more likely to finish the survey (0.92 for the control group, 0.98 for the CSR treatment group, $\chi^2(1)=0.55$, $p=0.46$). There was no significant relationship between likelihood of submitting a proposal and treatment condition although, directionally, individuals who received the CSR message were more likely to submit a proposal (0.81 for the control group, 0.91 for the CSR treatment group, χ^2 (1)=1.99, $p=0.16$).

[17] These geographic controls are thus included in the main regressions reported in Section 4.4.

Insert Table 1 about here

4.3. Variable Construction

Dependent variable. Bid amount is a continuous variable measured as the bid amount submitted on the Elance proposal.

Independent variable. CSR message is a dummy variable coded 1 if the worker received information about the company's intention to be a socially responsible company and 0 otherwise.

Control variables. Control variables were constructed from information reported by the applicants during the prequalification survey (whether the worker has a college degree and years of work experience) and from information provided by Elance for proposal submissions (all other demographic and Elance experience characteristics). *Years of work experience, Number of previous Elance jobs, and Earnings per previous Elance job* are continuous variables. *College degree* is a dummy variable coded 1 if the worker has a college degree and 0 otherwise. *Female* is a dummy variable. Gender was assigned based on the profile name and picture of the applicant. When gender could not be determined (because the profile name is a company name or gender-neutral name and the profile picture is a logo), this variable was coded as missing (for 5 observations). *Living in Asia* is a dummy variable coded 1 if the worker lives in Asia and 0 otherwise. *Living in US* is a dummy variable coded 1 if the worker lives in the US and 0 otherwise. *2nd job posting* is a dummy variable coded 1 if the worker submitted a proposal for the second of the two jobs posted and coded 0 if the worker submitted a proposal for the first job.

4.4. Results

Figure 2 presents the kernel density estimations of bid amount (USD) for the control and CSR treatment groups. The Kolmogorov-Smirnov and Wilson rank-sum (Mann-Whitney) tests confirm that the distributions of the control and treatment groups are statistically different (p <0.05). The mean bid

amount was significantly higher for the control group than for the CSR treatment group ($130.59 vs. $73.10, t(77)=2.84, p <0.01), as was the median bid amount ($87.67 vs. $54.79, χ^2 (1)=6.65, p <0.05), providing support for H1.

Insert Figure 2 about here

OLS regression results are reported in Table 2. The dependent variable is the bid amount in US dollars. Model 1 shows that receiving a socially responsible message resulted in a significantly lower bid amount (β = -$57.97, p <0.01). Model 2 includes control variables that could influence workers' bid amounts. The coefficient on *2nd job posting* shows that whether the applicant submitted a proposal for the first or second job posted did not have a significant effect on the bid amount. This reflects the fact that the job posts were very similar. Women submitted higher bids than men (β = $69.12, p <0.01). The coefficient on *College degree* is not significant, but is in the direction one would expect. Applicants with more work experience (not specific to Elance) submitted higher bids (β = $1.92, p <0.10), while applicants with more Elance experience (*Number of previous Elance jobs* and *Earnings per previous Elance job*) submitted slightly lower bids (β = -$0.32, p <0.01 and β = $-0.03, p <0.10, respectively). *Living in the US* and *Living in Asia* are included due to imperfect randomization of geographic location across the control and treatment groups, but the coefficients on these variables are not significant. The coefficient on *CSR* remains significant with the inclusion of these control variables (β = -$48.68, p <0.05). This represents an economically significant decrease of approximately 35% compared to the mean bid amount of the control group, providing support for H1.

Model 3 includes as controls those variables that were shown in Model 2 to be statistically significant predictors of bid amount and also includes the interaction of *CSR* with *Female.* It demonstrates that women submitted lower bids in response to the socially responsible message than

men did (β = -$60.92, p <0.10). Interactions of other individual-level characteristic variables with *CSR* were not statistically significant.

The effect of a CSR message on bid amount is robust to a log transformation of the bid amount variable (OLS regression including controls, β = -0.32, p <0.10). This analysis suggests that people in the CSR treatment group submitted bids that were 32% lower than those of the control group. The effect of a CSR message on bid amount is robust to using Poisson—rather than OLS—regression (β = -0.49, p <0.01), to dropping the top and bottom two percent of bids (β = -$42.66, p <0.05), and to dropping bids more than two standard deviations from the mean (β = -$29.54, p <0.05).

Insert Table 2 about here

These results provide strong support for the prediction that a CSR program makes recruits lower their payment requirements (H1).

5. Field Experiment 2

5.1. Design

Acting as a firm, A and Z Inc., I advertised a HIT on AMT for the completion of a short survey to determine eligibility for an image-interpretation job.[18] The posting indicated that workers would be paid $0.25 to complete the eligibility questions and survey, which was estimated to take three minutes, and that, if deemed eligible, workers would have a chance to complete a one-minute image-interpretation job for up to $0.30. The survey HIT and the image-interpretation job were designed to resemble other HITs encountered on AMT in terms of nature, pay, and difficulty. Once workers were hired, they were taken to an external survey site for the remainder of the study. There, they were asked a few questions which were supposedly to determine their eligibility for the task (although all participants were deemed eligible by design).

[18] This experiment took place in June 2011.

To construct a proxy for CSR treatment, workers were then randomly assigned to one of five conditions: a control group and four philanthropy treatment groups. Each group received a different message. (See Figure 3 for the message corresponding to each condition.) The degree of employee participation was varied in the four philanthropy treatment groups to test whether philanthropy programs with and without employee participation have different effects. I considered two types of participation: the first links the charitable giving amount to completion of the worker's job (compared to a generic message about the employer's charitable giving). The second solicits the worker's input through selection of or voting for the charities to receive the donation (compared to simply being informed of the charities to receive the donation). The charitable giving language was similar to that used by firms in emails or printed reports informing employees about corporate charitable giving.

Insert Figure 3 about here

To construct a proxy for the reservation wage, workers were asked to indicate—in one-cent increments between $0.00 and $0.30—what payments they would accept for completing a one-minute image-interpretation task. They were informed that a payment in that range would be offered and that only those workers who indicated that they would accept that amount would be prompted to complete the image-interpretation job and be paid for doing so (as a bonus payment). The method used to elicit reservation wage was based on the Becker-DeGroot-Marschak (1964) method, commonly used in experimental economics to ensure incentive compatibility in responses about willingness to pay. That is, by only allowing those workers who have already indicated that they would be willing to accept the amount that is subsequently offered to complete the image-interpretation task and be paid for doing so, I ensured that workers have the incentive to report their true wage preferences.

After a wage was randomly selected and those whose reservation wage was too high were informed that they did not qualify, those whose reservation wage was low enough completed the

image-interpretation job.[19] All workers were then surveyed to gather information on demographic and other characteristics. Lastly, the workers were asked to answer six optional multiple-choice questions providing feedback about the job. It was explained that these were not required for payment but would be helpful to the company. Workers were paid at the end of the job.

5.2. Sample

Five hundred workers living in the United States, with HIT approval ratings of 95% or higher, were recruited on AMT for this field experiment.[20] Sixty-six observations were dropped due to (a) repeat IP addresses, suggesting that a worker may have participated in the experiment more than once; (b) starting but not completing the HIT; (c) irrational responses to the reservation wage question (for example, acceptance of a wage of 11 cents but not 12 cents); or (d) other indications that the worker was not paying attention to the job and clicked through the responses as quickly as possible (for example, answering that age is 0 or above 100). Only 11 individuals who did not complete the HIT exited after the random assignment of conditions and there was no statistically significant difference between the control and treatment groups in likelihood of exiting.[21] This suggests that selection bias due to attrition is minimal. The resulting sample size is 434 workers.

Table 3 presents summary statistics for workers in the sample: demographic characteristics, AMT experience characteristics, and charitable characteristics—all self-reported. Most workers reported that they complete jobs on AMT for the purpose of earning money (67%), suggesting that payment received for AMT jobs is indeed important to workers.

Insert Table 3 about here

[19] The image interpretation task (interpreting cells in an image as malignant or not based on their shape/features) was designed to be similar to that of other AMT HITs. Since the interpretation task was subjective, there is no performance/accuracy measure for this task.
[20] 95% is a common cutoff in AMT job postings since employers, in an effort to ensure high-quality output, want to screen out workers who use automated programs to complete HITs.
[21] Likelihood of finishing the HIT was 0.99 for the control group and 0.97 for the CSR treatment group; $t(240)=-1.27$, $p=0.20$.

There were no statistically significant differences (p >0.10) between the mean demographic, AMT experience, and charitable characteristics listed in Table 3 for the CSR and control groups, suggesting that randomization was successful and that selection bias due to observables is minimal. [22]

5.3. Variable Construction

Dependent variables. Reservation wage is a continuous variable measured as the lowest wage each worker indicated that he or she would accept for completion of the one-minute image-interpretation task. *Answered optional questions* is a dummy variable coded 1 if the worker answered any of the optional questions and 0 otherwise. This represents extra effort put forth by the worker beyond formal job requirements and, in this context, is a proxy for a type of worker performance—organizational citizenship behavior.

Independent variables. CSR message is a dummy coded 1 if the worker received any type of information about the corporate philanthropy program and 0 otherwise.

Control variables. Control variables are constructed from survey answers collected at the end of the job. These include demographic control variables (including gender, age, level of education, income, political affiliation, and race); charitable characteristic control variables (including volunteer and donation history); and AMT experience control variables (including HITs per week in the last month). *Top performer* is a proxy for worker performance using the rating that an AMT worker received based on his or her performance on past HITs. It is operationalized as a dummy variable equal to 1 if the worker had a HIT approval rating of 100 (the highest possible rating) and 0 otherwise.

5.4. Results

Table 4 reports mean reservation wage and likelihood of answering the optional questions for the entire AMT sample and by condition. The mean reservation wage for the entire sample was $0.144.

[22] Based on independent sample t-tests. Lack of statistical significance is robust to use of chi-square tests for categorical variables.

As Columns 2 and 3 demonstrate, the mean reservation wage for the control group was marginally significantly higher than that of the CSR treatment group ($0.158 vs. $0.140, t(164)=-1.88, p <0.10; an 11% difference). Eighty-eight percent of all workers in the sample answered the optional questions. Workers who received a philanthropy message were more likely to answer them than workers in the control group (0.89 vs. 0.80, t(432)=-2.34, p <0.05).[23]

The mean reservation wage and likelihood of answering the optional questions for workers receiving the different philanthropy messages (reported in Columns 4-7) were statistically equivalent, whether the message was general or tied to the job and whether or not it solicited input.[24] This contradicts the prediction that a CSR program that elicits employee participation should have an even greater effect on employee salary requirements (H3a) or productivity (H3b) than one that does not. These four CSR treatment conditions have thus been pooled under one "CSR message" condition in the analyses that follow.

Insert Table 4 about here

Figure 4 presents the kernel density estimations of reservation wage (US cents) for the control and CSR message conditions. The Kolmogorov-Smirnov test suggests that the distributions of the control and treatment groups are statistically different (p <0.10).

Insert Figure 4 about here

The results of several OLS regressions are reported in Table 5. Model 1 shows that receiving a philanthropy message resulted in a marginally significantly lower average reservation wage (β = -$0.0183, p <0.10). In Model 2, demographic control variables (gender, age, level of education,

[23] Robust to use of chi-square test.

[24] For reservation wage: F(1, 431)=0.11, p=0.74 that general = tied-to-HIT; F(1,431)=0.08, p=0.78 that without input = with input. For likelihood of answering the optional questions: $\chi^2(1)$=0.47, p=0.49 that general = tied-to-HIT; $\chi^2(1)$=0.66, p=0.42 that without input = with input.

income, race, and political affiliation) were included in an alternate specification as a robustness check. Coefficients on the demographic variables were not statistically significant (p >0.10). With the inclusion of demographic controls, a philanthropy message resulted in a lower average reservation wage (β = -$0.0195, p <0.05). This represents a decrease of 12.5% compared to the control. This supports the proposition that a CSR program will make recruits accept lower payment (H1).

Model 3 examines the effect of being a *Top performer* on reservation wage. As would be expected, those with the highest possible HIT approval rating, 100, have a higher reservation wage (β = $0.067, p <0.01). This wage premium is qualified by a large negative interaction between *Top performer* and *CSR message* (β = -$0.061, p <0.01). Thus, receiving information about the company's corporate philanthropy program leads the highest performers to forego most of the wage premium that they otherwise require. To investigate why the highest-performing workers might exhibit a greater response to *CSR message*, I compared them to everyone else on a number of characteristics. The highest performers were more likely to indicate that they had volunteered in the previous year (50% vs. 38%, t(376)=-2.09, p <0.05), suggesting that they may be more prosocial, as proposed by Brekke and Nyborg (2008). However, people who volunteered or donated in the past—behaviors which are proxies for prosocial inclination—did not exhibit a differential response in reservation wage to a CSR message. This suggests that it is not prosocial inclination that is driving the differential response among high performers. Instead, an intuitive explanation is that, because the highest performers care more about their performance rating and AMT reputation than others do (since employers can screen workers in order to hire only those with high or even perfect prior performance scores), these workers are more willing to pay to work with an employer that is likely to treat them fairly and generously and they take CSR as a signal of that. This supports the signaling explanation of why CSR should affect reservation wage. The mechanisms behind the effects of CSR on employee behavior are further explored in Section 7.

Insert Table 5 about here

The logistic regressions exhibited in Table 6 provide insight into the drivers affecting whether workers answered the optional questions. Model 1 demonstrates that receiving a philanthropy message increased the probability of answering the optional questions (p <0.05), supporting the prediction that a CSR program increases employees' organizational citizenship behavior. A marginal effects analysis provides a sense of the effect size, showing that the probability of answering the optional questions increases by 9% for workers in the CSR treatment condition compared to those in the control condition. In Model 2, I control for worker characteristics that affect the likelihood of answering the optional questions. Intuitively, whether a worker completed the image-interpretation job would likely affect his or her experience on the HIT and thus the likelihood that he or she would go above and beyond for the employer. Likewise, workers with certain demographic characteristics could be more likely to go above and beyond for an employer. Model 2 shows that workers who completed the image-interpretation job were more likely to answer the optional questions (p <0.10) and that women were more likely to do so than men (p <0.05).) This supports the notion that women are more cooperative and altruistic than men (Hofstede, 1980). Controlling for whether or not the worker completed the image-interpretation job and for demographic characteristics does not change the fact that receiving a philanthropy message results in a higher probability of answering the optional questions (p <0.05). Results are also robust to the use of OLS and to probit—rather than logit—regressions. These results support H2a. I further explore the effect of a CSR program on organizational citizenship behavior in Experiment 3.

Insert Table 6 about here

6. Field Experiment 3

6.1. Design

Acting as a firm, A and Z Inc., I advertised a data-gathering HIT on AMT, estimated to take 5-10 minutes, for payment of $0.50.[25] Hired workers were taken to an external survey site to complete the HIT. Workers were given detailed instructions for the job, which consisted of gathering weather information for 10 specified dates from a historical weather website and completing a short survey. Workers were given a sample data-entry question and were instructed to enter an answer for feedback.[26] To construct a proxy for CSR treatment, workers were then randomly assigned to one of two conditions: a control group and a philanthropy treatment group.[27] Each group received a different message (see Figure 5 for the messages). Workers then received feedback about whether their answer to the sample question was correct and what the correct answer was.

Insert Figure 5 about here

Workers were prompted to enter the 10 required data-entry points, then asked if they were willing to complete additional data-entry points, which were optional and not required for payment. Those who were willing were provided 20 more data-entry queries and could provide answers to none, some, or all of them. Workers were then surveyed to gather information on demographic and other characteristics. They were paid at the end of the job.

6.2 Sample

Six hundred workers living in the United States, with HIT approval ratings of 95% or higher, were recruited on AMT for this field experiment. Thirty-two observations were dropped due to (a) repeat IP

[25] The job description was titled "Gather 10 data points from a historical weather website and answer a short survey." This study took place in August 2013.
[26] Sample question: "In New York City, New York on Jan 1 2010, what was the Actual Max Temperature (in Fahrenheit)?"
[27] Because there was no differential response to the different types of philanthropy messages in Experiment 2, I used a single philanthropy treatment group in Experiment 3.

addresses, suggesting that a worker may have participated in the experiment more than once; (b) starting but not completing the HIT; (c) answering that the worker has worked for the hiring employer before.[28] Thirty individuals who did not complete the HIT exited after the random assignment of conditions and there was no statistically significant difference between the control and treatment groups in likelihood of exiting.[29] This suggests that selection bias due to attrition is minimal. The resulting sample size is 568 workers.

Table 7 presents summary statistics for workers in the sample. There were no statistically significant differences (p >0.10) between the mean characteristics listed in Table 7 for the CSR and control groups, suggesting that randomization was successful and that selection bias due to observables is minimal.[30]

Insert Table 7 about here

6.3. Variable Construction

Dependent variables. # required data points correct is the number of required data points (out of 10) that the worker entered correctly. It is a proxy for quality of work required by the job. *# unrequired optional data points completed* is the number of optional data points (out of 20) that the worker completed, whether or not correctly. It is a measure of quantity of extra work output, a proxy for OCB in this context. *# unrequired optional data points correct* is the number of optional data points (out of 20) that the worker completed correctly, conditional on the worker completing at least one. It is a measure of the quality of extra work output and is another proxy for OCB.

[28] All workers whose AMT IDs were associated with a previous A and Z Inc. job were excluded from completing this job, so it is unlikely that these worker actually worked for this employer before. It is possible that a worker created a new AMT ID, however, so these observations are dropped.
[29] Likelihood of finishing was 0.94 for the control group and 0.96 for the CSR treatment group; t(596)=-1.12, p=0.26.
[30] Based on independent sample t-tests. Lack of statistical significance is robust to use of chi-square tests for categorical variables.

Independent variables. CSR message is a dummy coded 1 if the worker received information about the corporate philanthropy program and 0 otherwise.

Control variables. Control variables include demographic control variables and AMT experience and performance control variables. *HIT approval rating* is a proxy for prior AMT performance and takes the values 95, 96, 97, 98, 99, or 100. *HITs per week buckets* is a proxy for prior AMT experience and is an ordinal variable with the following values: 1 if the worker completed less than 10 HITs per week in the past month, 2 if the worker completed 10-49, 3 if the worker completed 50-100, and 4 if the worker complete more than 100. *Female* is a dummy variable equal to 1 if the worker is female and 0 if the worker is male. *College degree* is a dummy variable equal to 1 if the worker has a college degree and 0 otherwise. *Volunteer* is a dummy variable equal to 1 if the worker volunteered in the prior year and 0 otherwise. *Volunteer & donate* is a dummy variable equal to 1 if the worker volunteered and donated to charity in the prior year and 0 otherwise.

6.4. Results

Figure 6 presents the kernel density estimations of # *required data points correct*, # *unrequired data points completed,* and # *unrequired data points correct* for the control and CSR message conditions. The Kolmogorov-Smirnov test suggests that the distributions of the control and treatment groups are statistically equivalent for # *required data points correct* (p >0.10), but statistically different for # *unrequired data points completed* (p <0.10) and # *unrequired data points correct* (p <0.01).

Insert Figure 6 about here

Table 8 presents summary statistics for these measures of worker performance. The mean number of required data points correct was statistically equivalent for the control and treatment groups (t(565)=-0.14, p >0.10). The treatment group completed more optional data points than the control group (t(563)=-2.01, p <0.05) and did so more accurately (t(219)=-3.52, p <0.01).

Insert Table 8 about here

The results of several OLS regressions exploring the drivers of the different measures of performance are reported in Table 9.[31] Models 1 and 2 show that receiving a philanthropy message had no effect on the number of required data points correct. Instead, this seems to be explained by prior AMT performance (HIT approval rating; β = 0.14, p <0.10), prior AMT experience (β = 0.12, p <0.05), and having a college degree (β = 0.25, p <0.10). Models 3 and 4 suggest that receiving a philanthropy message positively affected the number of unrequired data points completed. Model 4 shows that, even controlling for demographics, prior performance, and prior experience, receiving a CSR message caused workers to complete more of the unrequired data points (β = 1.83, p <0.05; this represents an approximate 30% increase compared to the control group mean). Women were more likely to complete extra work (β = 2.88, p <0.01), supporting, as in Experiment 2, the notion that women are more cooperative and altruistic than men (Hofstede, 1980) and thus are more likely to engage in OCB (Organ and Ryan, 1995). Volunteering in one's free time was negatively associated with completing extra work unrequired for payment (β = -1.91, p <0.05). Interestingly, the prior performance, prior experience, and prior education factors that were predictive of in-role performance were not predictive of this measure of extra-role performance (p>0.10). Models 5 and 6 suggest that receiving a philanthropy message positively affected the number of unrequired data points completed accurately, conditional on completing at least one. Model 6 shows that—controlling for demographics, prior performance, and prior experience—receiving a CSR message caused workers who completed at least one unrequired data point to do so more accurately (β = 3.24, p <0.01; this represents an approximate 25% increase compared to the control group mean). Women completed more unrequired data points correctly than men (β = 1.74, p <0.10). Workers with higher AMT scores

[31] The direction and significance of the coefficients of the variables of interest are robust to the use of Poisson—rather than OLS—regressions. OLS regression results are reported in this paper because of their ease of interpretation. Poisson regression results are available from the author upon request.

completed fewer unrequired data points correctly (β = -0.90, p <0.01). Models 3-6 suggest that receiving a CSR message caused workers to be more willing to go above and beyond for the firm by doing more extra work unrequired for payment and by doing it at a higher level of quality (H2a). Model 7 shows that individuals who volunteered and donated in the past year responded to a CSR message by completing extra work of higher quality than individuals who did not volunteer or donate in the past year (β = 4.82, p >0.05). Individuals who volunteered and donated in the past year also completed directionally more unrequired data points in response to a CSR program, although this difference was not statistically significant (β = 2.50, p =0.14 on the interaction term in an OLS regression of number of unrequired data points completed on independent variables including demographic controls). These results provide marginal support for H2b.

Insert Table 9 about here

7. How CSR Affects Employee Salary Requirements and OCB

To explore the mechanisms driving the effect of receiving information about CSR on different behavioral outcomes, I analyzed self-reported survey data collected from the CSR treatment groups (who received information about the firm's corporate philanthropy program) at the end of experiments 2 and 3.[32] Participants in the CSR treatment groups were asked to indicate their agreement with a series of statements, using a five-point Likert scale with 1 being "Strongly Disagree" and 5 being "Strongly Agree." Table 10 presents summary statistics of workers' responses. Almost half of the workers in each experiment interpreted the charitable giving program as a positive signal about the employer's likely treatment of its employees (an index comprised of statements 1 through 3 in Experiment 2 and statements 1 and 2 in Experiment 3). Just over half of the workers indicated that learning about the charitable giving program made them feel good about themselves while working with this employer. Just under a quarter of the workers responded that the charitable giving program

[32] Such data was not collected for Experiment 1.

was an indication that the employer had excess profits. About a third of the workers indicated that working with this employer was a way for them to donate to charity.

Insert Table 10 about here

To further explore the mechanisms driving individuals' behavioral responses to information about the corporate philanthropy program, Table 11 presents OLS regression results of the main dependent variables of interest on binary statement variables (equal to 1 if the individual "Agreed" or "Strongly Agreed" with the statement and 0 otherwise).[33] Demographic characteristics are included as controls in the presented regression results. Model 1 suggests that interpretation of the corporate philanthropy program as a signal about the employer's likely treatment of its employees was highly correlated with a decrease in reservation wage (β = -3.29, p <0.05). This is in line with a signaling theory argument for how CSR can positively influence prospective employees' behavior before they are hired. A feel good or "warm glow" mechanism does not appear to affect this behavior (p >0.10). By contrast, a feel good or "warm glow" mechanism does appear to drive much of the positive effect on employee behavior *after* employees are hired, as we would expect (in Model 2, β = 3.31, p <0.05). Interestingly, interpretation of the corporate philanthropy program as a signal about the employer's likely treatment of its employees was negatively correlated with the number of unrequired data points completed (in Model 2, β = -3.08, p <0.05). This suggests (a) that workers who are less certain about whether their employer treats its workers well (for example, by not unfairly rejecting the HIT to avoid paying) may do extra work to increase their chances of being treated well and (b) that the signaling mechanism could actually work to the employer's detriment after employees have been hired.

Agreement that working for the employer is a way to donate to charity was marginally correlated with the number of unrequired data points completed (β = 2.71, p <0.05), suggesting that

[33] Although agreement with these statements was not exogenous in this study, the relationships presented give insight into the mechanisms likely driving participants' behavioral response to CSR.

some of the effect on extra work completed could be due to workers feeling that they are indirectly donating their time to charity by putting forth extra effort for an employer that donates to charity; here is an alternate mechanism for the observed effect of CSR on willingness to do extra work. In both Models 2 and 3, interpretation of the CSR message as an indication that the employer has excess profits was uncorrelated with reservation wage and number of unrequired data points completed, suggesting that employee behavior was not negatively affected by this perception of CSR in either experiment (p >0.10).

Insert Table 11 about here

8. Discussion and Conclusions

This paper provides causal empirical evidence that CSR decreases job seekers' salary requirements and increases employees' willingness to go above and beyond for the firm in a labor-market setting that is becoming increasingly relevant to strategic management. The finding that individuals have a willingness to pay to work with socially responsible employers supports the argument that prospective employees have a preference for working with socially responsible employers not only in hypothetical situations but *when actual job decisions are on the line*. The finding that a philanthropic giving program resonated even more strongly with higher-performing workers, making them willing to give up the wage differential they otherwise demanded, elevates the strategic relevance of CSR programs, since it has been established that higher-performing workers have higher bargaining power and contribute more value to the firm (Campbell et al., 2012). It also suggests that firms where higher-performing recruits command a significant wage differential may benefit by this mechanism more than other firms.

I provide evidence of a treatment effect of a CSR program on employee performance, a mechanism distinct from those put forth in the formal theoretical literature where it has been suggested, for example, that there is a labor-market screening effect of CSR with implications for employee performance (e.g., Brekke and Nyborg, 2008; Burbano, Mamer, and Snyder, 2014). It

suggests that, irrespective of the type of performer, CSR programs can motivate workers to go above and beyond for the firm.

My findings are consistent with an informational signaling theory explanation for how CSR affects recruits' salary requirements and with a "warm glow" explanation for how CSR affects employees' OCB. The finding that interpretation of a firm's CSR program as a signal of its likely treatment of employees was positively correlated with reduced reservation wage but negatively correlated with willingness to complete extra work unrequired for payment suggests that there may be value-creating and value-destroying tradeoffs in reducing uncertainty about how well an employer treats its employees. Future work could explore this tradeoff. Future work could also further explore the "image" utility mechanism through which CSR could affect OCB, as this paper's settings controlled for this mechanism.

This paper's findings complement those of the behavioral economics literature that has studied how a task's meaningfulness affects work effort and reservation wage (e.g., Ariely et al., 2008; Chandler and Kapelner, 2013) and how prosocial or mission-induced motivation affects principal-agent problems and work effort. (For a survey of economic theories on prosocial behavior generally, see Meier, 2007; for a review of the effects of prosocial motivation on principal-agent problems and work effort, see Delfgaauw and Dur, 2008.) Empirical papers have more recently assessed whether prosocially motivated effort (for example, where student workers are told that donations will be made to charity as a function of their work effort or performance) differs from effort that is not prosocially motivated, but have come up with mixed findings (e.g., Fehler and Kosfeld, 2014; Hossain and Li, 2014; Tonin and Vlassopoulos, 2010). My findings suggest that firm-level CSR policies which are independent of workers' effort or performance may induce motivational effects similar to those of linking workers' effort or performance to a prosocial outcome. Future work could explore how these effects differ.

Similarly, related empirical work in organizational behavior has provided evidence that making the impact of meaningful work (such as public service work) more salient increases effort and

improves performance (for a summary, see Michaelson, Pratt, Grant, and Dunn, 2014). It has been pointed out that this literature has demonstrated the effects of the meaningfulness *of* work rather than the effects of meaningfulness *at* work (Michaelson et al., 2014). My findings suggest that CSR policies, which could be an input to meaningfulness *at* work, may induce motivational effects similar to the effects of the meaningfulness *of* work.

The methodology used in this paper—random assignment of firm-level conditions through natural field experiments implemented in online marketplaces—can help establish causality when studying other relationships relevant to strategic management, particularly if employee outcomes are the dependent variable. Furthermore, as the strategic management of online virtual workers, independent contractors, and other non-inhouse workers becomes increasingly important (Chesbrough and Teece, 2012; Gibson and Cohen, 2003; Kirkman et al., 2004), these research settings will become even more relevant in their own right.

From a practical perspective, this paper suggests that managers involved in recruiting and hiring should highlight their firms' corporate philanthropy programs and socially responsible intent, particularly in firms where higher-performing recruits command a significant salary differential. It furthermore suggests that dissemination of this information in print (for example, in recruiting documents and presentations at career fairs) can be effective. This paper suggests that when managing virtual employees and short-term contractors, sharing information about a firm's CSR programs can make the employer more attractive to the employee, can influence the salary that employees are willing to accept (and likely reduce the likelihood that higher salaries than those offered will be demanded by more qualified applicants), and can motivate employees to go above and beyond in their work. Offering or paying lower wages could then have negative employee-performance consequences for the firm; such tradeoffs are not explored in this paper.[34] Likewise, whether CSR's benefits to the firm—in the form of increased attractiveness to recruits, a willingness to accept lower payment, and

[34] It has been shown that, in some cases, wage can be negatively associated with employee effort (Fehr and Goette, 2007), which would reduce this concern.

increased OCB—outweigh the potential costs of the CSR programs and activities themselves is outside the scope of this paper.[35]

A notable limitation of any field experiment is its generalizability. AMT HITs are not characteristic of typical full-time jobs. Elance jobs, albeit much more typical of "regular" jobs in large firms, are nevertheless managed and completed online, which is not the typical employer-employee relationship. Although this paper's findings are not directly generalizable to firms where employees work in-house and for a longer time, the theoretical underpinnings of the relationship between CSR and employee outcomes suggest that the effects may be even greater for more ordinary workers. If the informational signal CSR provides about a potential employer's likely treatment of its employees is valuable to prospective employees in a context where the employee-employer relationship will be short-lived and distant, it may be even more valuable when the employee-employer relationship will be longer-lasting and less distant. If employees feel good about—and generate "warm glow" utility from—working with a socially responsible firm for a short time, we might expect that employees working with a socially responsible firm for a longer time, or working where the CSR activity is more integrated with the company's business, would experience similar or even greater "warm glow" utility.

Furthermore, one mechanism through which CSR would likely influence employee behavior in a more traditional employer-employee relationship—the "image" utility mechanism—was controlled for in this paper. It has been posited that CSR influences employee utility through perceived external prestige (Kim et al., 2010) and that individuals are motivated by public recognition and awareness of their own prosocial behavior (Ariely, Bracha, and Meier, 2009; Benabou and Tirole, 2006) and, by extension, of their employer's prosocial behavior. We can extrapolate that the effects could be even greater were the employee not working anonymously, as this paper's subjects were. Of course, these speculative extrapolations of existing theory are not tested in this paper. There is an opportunity for future research to empirically study how the effects found in this paper vary by the degree of integration of the employer-employee relationship. My findings are more easily

[35] There are additional benefits to be garnered from CSR through its impact on other stakeholders.

generalizable to the strategic management of "virtual" human assets—a type of employee that is becoming increasingly important (e.g., Chesbrough and Teece, 2012; Gibson and Cohen, 2003; Kirkman et al., 2004)—through the use of online independent contractor sites. This paper suggests that these virtual employees respond to employers' social responsibility and suggests the relevance of future research into such workers' non-extrinsic motivations.

Another limitation of this study is its simple operationalization of CSR. By design, each experiment used one type of CSR (socially responsible intent in the Elance study and corporate philanthropy in the AMT study) to prevent problems associated with aggregating varied CSR constructs in empirical research (Chatterji and Levine, 2006; Chatterji et al., 2009). But that means the findings may not be easily generalized to CSR programs that are more interrelated and complex. Is has been suggested that the positive effects of CSR should be even greater the more integrated a company's CSR is with its business practice (Du, Bhattacharya, and Sen, 2007; Porter and Kramer, 2006). Furthermore, the lack of a differential effect on reservation wage between a charitable giving program that involves employee participation and one that does not, as found in Experiment 2, may not apply to programs that involve employees in a more personal manner (for example, corporate charity days or employee volunteer programs). The bar for finding an effect in this study was high, given the context.

The effects of the CSR programs in this study suggest that further analysis of CSR programs—for example, analyzing the efficacy of other types of CSR and whether multiple CSR activities act as substitutes or complements—may be a fruitful direction for future research. Although my AMT study was limited to US workers, participants in the Elance study were geographically diverse. There are future opportunities to study how the effects identified in this paper vary by the geographic origin and location of the workers.

References

Aguinis H, Lawal SO. 2012. Conducting field experiments using eLancing's natural environment. *Journal of Business Venturing* 27(4): 49-505.

Albinger HS, Freeman SJ. 2000. Corporate social performance and attractiveness as an employer to different job seeking populations. *Journal of Business Ethics* 28(3): 243-253.

Andreoni J. 1989. Giving with impure altruisim: applications to charity and ricardian equivalence. *Journal of Public Economy* 97: 1447-1458.

Andreoni J. 1990. Impure altruism and donations to public goods: a theory of warm-glow giving. *Economic Journal* 100: 464-477

Ariely D, Bracha A, Meier S. 2009. Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *American Economic Review* 99(1): 544-555.

Ariely D, Kamenica E, Prelec D. 2008. Man's search for meaning: the case of legos. *Journal of Economic Behavior & Organization* 67(3): 671–677.

Ashforth BE, Mael F. 1989. Social identity theory and the organization. *Academy of Management Review* 14(1): 20-39.

Backhaus KB, Stone BA, Heiner K. 2002. Exploring the relationship between corporate social performance and employer attractiveness. *Business & Society* 41(3): 292-318.

Barnea A, Rubin A. 2010. Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics* 97(1): 71-86.

Barnett ML. 2007. Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *The Academy of Management Review* 32(3): 794-816.

Barnett ML, Salomon RM. 2012. Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic Management Journal* 33(11): 1304-1320.

Baron DP, Diermeier D. 2007. Strategic activism and nonmarket strategy. *Journal of Economics and Management Strategy* 16(3): 599-634.

Bateman TS, Organ DW. 1983. Job satisfaction and the good soldier: the relationship between affect and employee 'citizenship.' *Academy of Management Journal* 26(4): 587-595.

Becker GM, DeGroot MH, Marschak J. 1964. Measuring utility by a single-response sequential method. *Behavioral Science* 9(3): 226-232.

Benabou R, Tirole J. 2006. Incentives and prosocial behavior. *American Economic Review* 96(5): 1652-1678.

1652-Bennett VM, Pierce L, Snyder JA, Toffel MW. 2013. Customer-driven misconduct: how competition corrupts business practices. *Management Science* 59(8): 1725-1742.

Berinsky AJ, Huber GA, Lenz GS. 2012. Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis* 20(3): 351-368.

Bode C, Singh J. 2014. Taking a hit to save the world: employee participation in social initiatives. Working paper.

Bolino MC, Turnley WH. 2003. Going the extra mile: cultivating and managing employee citizenship behavior. *Academy of Management Perspectives* 17: 60-71.

Brekke KA, Nyborg K. 2008. Attracting responsible employees: green production as labor market screening. *Resource and Energy Economics* 30(4): 509-526.

Brief AP and Motowidlo SJ. 1986. Prosocial organizational behaviors. *Academy of Management Review* 11(4): 710-725.

Burbano VC, Mamer J, Snyder J. 2014. How socially responsible business practices reinforce effective human capital strategy. Working paper.

Campbell BA, Ganco M, Franco AM, Agarwal R. Who leaves, where to, and why worry? Employee mobility, entrepreneurship and effects on source firm performance. *Strategic Management Journal* 33(1): 65-87.

Carnahan S, Agarwal R, Campbell BA, 2012. Heterogeneity in turnover: the effect of relative compensation dispersion of firms on the mobility and entrepreneurship of extreme performers. *Strategic Management Journal* 33(12): 1411-1430.

Casadesus-Masanell R, Crooke M, Reinhardt F, Vasishth V. 2009. Households' willingness to pay for 'green' goods: evidence from Patagonia's introduction of organic cotton sportswear. *Journal of Economics & Management Strategy* 18(1): 202-233.

Chandler D, Kapelner A. 2013. Breaking monotony with meaning: motivation in crowdsourcing markets. *Journal of Economic Behavior and Organization* 90(1): 123-133.

Chatterji AK, Levine DI, Toffel MW. 2009. How well do social ratings actually measure corporate social responsibility? *Journal of Economics & Management Strategy* 18(1): 125-169.

Chatterji AK, Toffel MW. 2010. How firms respond to being rated. *Strategic Management Journal* 31(9): 917-945.

Chen CM, Delmas, MA. 2011. Measuring corporate social responsibility: an efficiency perspective. *Production and Operations Management* 20(6): 789-804.

Cheng B, Ioannou I, Serafeim G. 2013. Corporate social responsibility and access to finance. *Strategic Management Journal* 35(1): 1-23.

Chesbrough HW and Teece, DJ. 2012. When is virtual virtuous? In *The Strategic Management of Intellectual Capital,* Klein DAA (ed.). Butterworth-Heinemann: Massachusetts.

Coff RW. 1997. Human assets and management dilemmas: coping with hazards on the road to resource-based theory. *Academy of Management Review* 22(2): 374-402.

Delfgaauw J, Dur R. 2008. Incentives and workers' motivation in the public sector. *The Economic Journal* 118(525): 171-191.

Delmas MA, Doctori-Blass V. 2010. Corporate environmental performance: the trade-offs of sustainability ratings. *Business Strategy & the Environment* 19(4): 245–260.

Delmas MA, Etzion D, Nairn-Birch N. 2013. Triangulating environmental performance: what do corporate social responsibility ratings really capture? *Academy of Management Perspectives* 57(3): 255-267.

Delmas MA, Pekovic S. 2012. Environmental standards and labor productivity: understanding the mechanisms that sustain sustainability. *Journal of Organizational Behavior* 34(2): 230-252.

Delmas MA, Toffel MW. 2008. Organizational responses to environmental demands: opening the black box. *Strategic Management Journal* 29(10): 1027–1055.

Du S, Bhattacharya CB, Sen S. 2011. Corporate social responsibility and competitive advantage: overcoming the trust barrier. *Management Science* 57(9): 1528-1545.

Du S, Bhattacharya CB, Sen S. 2007. Reaping relational rewards from corporate social responsibility: the role of competitive positions. *International Journal of Research in Marketing* 24(3): 224-241.

Dutton JE, Dukerich, JM. 1991. Keeping an eye on the mirror: image and identity in organizational adaptation. *The Academy of Management Journal* 34(3): 517-554.

Eha BP. 2013. The freelance economy is booming. But is it good business? *Reuters UK Edition* 10 October. http://uk.reuters.com/article/2013/10/10/idUK45420574920131010.

Elfenbein DW, Fisman R, McManus B. 2012. Charity as a substitute for reputation: evidence from an online marketplace. *Review of Economic Studies* 79(4): 1441-1468.

Elfenbein DW, McManus B. 2010. A greater price for a greater good? Evidence that consumers pay more for charity-linked products. *American Economic Journal: Economic Policy* 2(2): 28-60.

Evans RW, Davis WD. 2011. An examination of perceived corporate citizenship, job applicant attraction, and CSR work role definition. *Business and Society* 50(3): 456-480.

Fehr E, Goette L. 2007. Do workers work more if wages are high? Evidence from a randomized field experiment. *American Economic Review* 97(1): 298-317.

Fehrler S, Kosfeld M. 2014. Pro-social missions and worker motivation: an experimental study. *Journal of Economic Behavior and Organization* 100(1): 99-110.

Fombrun C, Shanley M. 1990. What's in a name? Reputation building and corporate strategy. *The Academy of Management Journal* 33(2): 233-258.

Foss NJ, Lindenberg SM. 2013. Microfoundations for strategy: a goal-framing perspective on the drivers of value creation. *Academy of Management Perspectives* 27(2): 85-102.

Frank RH. 1996. What price the moral high ground? *Southern Economic Journal* 63(1): 1-17.

Frank DH. 2012. Employees and corporate social responsibility: will employees sacrifice pay to work for a good cause? Working paper.

Gibson CB, Cohen SG. 2003. The last word: conclusions and implications. In *Virtual Teams that Work: Creating Conditions for Virtual Team Effectiveness,* Gibson CB, Cohen SG (eds.): 403-421.

Godfrey PC, Merrill CB, Hansen JM. 2009. The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic Management Journal* 30(4): 425-445.

Grant AM. 2008. Employees without a cause: the motivational effects of prosocial impact in public service. *International Public Management Journal* 11(1): 48-66.

Greening DW, Turban DB. 2000. Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & Society* 39(3): 254-280.

Hansen SD, Dunford BB, Boss AD, Boss RW, Angermeier I. 2011. Corporate social responsibility and the benefits of employee trust: a cross-disciplinary perspective. *Journal of Business Ethics* 102(1): 29-45.

Henisz WJ, Dorobantu S, Nartey LJ. 2013. Spinning gold: the financial returns to stakeholder engagement. *Strategic Management Journal,* early online version.

Hillman AJ, Keim GD. 2001. Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic Management Journal* 22(2): 125-139.

Hofstede G. 1980. *Culture's consequences: international differences in work-related values.* Sage: Beverly Hills, CA.

Horton JJ, Chilton LB. 2010. The labor economics of paid crowdsourcing. *Proceedings of the 11th ACM Conference on Electronic Commerce,* 209-218.

Horton JJ, Rand DG, Zeckhauser RJ. 2011. The online laboratory: conducting experiments in a real labor market. *Experimental Economics* 14(3): 399-425.

Hossain T, Li KK. 2013. Crowding out in the labor market : a prosocial setting is necessary. *Management Science,* early online version.

Huselid MA, Jackson SE, Schuler RS. 1997. Technical and strategic human resource management effectiveness as determinants of firm performance. *The Academy of Management Journal* 40(1): 1771-188.

Illies, R, Scott BA, Judge TM. 2006. The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behavior. *Academy of Management Journal* 49(3): 561-575.

Iounnou I, Serafeim G. 2014. The impact of corporate social responsibility on investment recommendations: analysts' perceptions and shifting institutional logics. *Strategic Management Journal*, early online version.

Ipeirotis PG. 2010. Analyzing the Amazon Mechanical Turk marketplace. Available at http://dl.acm.org/citation.cfm?id=1869094.

Kim HR, Lee M, Lee HT, Kim NM. 2010. Corporate social responsibility and employee-company identification. *Journal of Business Ethics* 95(4): 557-569.

Kirkman BL, Rosen B, Tesluk PE, Gibson CB. 2004. The impact of team empowerment on virtual team performance: the moderating role of face-to-face intervention. *Academy of Management Journal* 47(2): 175-192.

Koch MJ, McGrath RG. 1996. Improving labor productivity: human resource management policies do matter. *Strategic Management Journal* 17(5): 335-354.

Koh P, Qian C, Wang H. 2013. Firm litigation risk and the insurance value of corporate social performance. *Strategic Management Journal,* early online version.

Larkin I, Pierce L, Gino F. 2012. The psychological costs of pay-for-performance: implications for the strategic compensation of employees. *Strategic Management Journal* 33(10): 1194-1214.

Leete L. 2001. Whither the nonprofit wage differential? Estimates from the 1990 census. *Journal of Labor Economics* 19(1): 136-170.

Levitt S, List J. 2007. What do laboratory experiments measuring social preferences tell us about the real world? *Journal of Economic Perspectives* 21(2): 153-174.

List JA. 2009. An introduction to field experiments in economics. *Journal of Economic Behavior and Organization* 70(3): 439-442.

List JA, Gallet CA. 2001. What experimental protocol influence disparities between actual and hypothetical stated values? *Environmental and Resource Economics* 20(3): 241-254.

Luo J, Meier S, Oberholzer-Ghee F. 2012. No news is good news: CSR strategy and newspaper coverage of negative firm events. HBS Working Paper, April 17, 2012.

Margolis JD, Elfenbein HA, Walsh JP. 2009. Does it pay to be good…and does it matter? A meta-analysis of the relationship between corporate social and financial performance. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1866371.

Margolis JD, Walsh JP. 2001. *People and Profits? The Search for a Link Between a Company's Social and Financial Performance.* Lawrence Erlbaum Associates: Mahweh, New Jersey.

Margolis JD, Walsh JP. 2003. Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly* 48(2): 268-305.

Marquis CM, Glynn M, Davis GF. 2007. Community isomorphism and corporate social action. *Academy of Management Review* 32(3): 925-945.

Marquis CM, Qian C. 2014. Corporate social responsibility reporting in China: symbol or substance? *Organization Science* 25(1): 127-148.

Mason W, Suri S. 2012. Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods* 44(1): 1-23.

Mattingly JE, Berman SL. 2006. Measurement of corporate social action discovering taxonomy in the Kinder Lydenburg Domini ratings data. *Business & Society* 45(1): 20-46.

McDonnell M and King, B. 2013. Keeping up appearances: reputational threat and impression management after social movement boycotts. *Administrative Science Quarterly* 58(3): 387-419.

Meier, S. 2007. A survey of economic theories and field evidence on pro-social behavior. In *Economics and Psychology: A Promising New Cross-Disciplinary Field,* Frey BS and Stutzer A (eds.). MIT Press: Cambridge, Massachusetts.

Michaelson C, Pratt MG, Grant AM, Dunn CP. 2014. Meaningful work: connecting business ethics and organization studies. *Journal of Business Ethics* 121(1): 77-90.

Morrison EW. 1994. Role definitions and organizational citizenship behavior: the importance of the employee's perspective. *The Academy of Management Journal* 37(6): 1543-1567.

Montgomery DB, Ramus CA. 2011. Calibrating MBA job preferences for the 21st century. *The Academy of Management Learning and Education* 1(10): 9-26.

Nahapiet J, Ghoshal S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review* 23(2): 242–266.

Needleman SE. Negotiating the Freelance Economy. The Wall Street Journal, May 6, 2009. Available at http://online.wsj.com/news/articles/SB124157147509390007.

Niehoff BP, Moorman RH. 1993. Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behaviors. *Academy of Management Journal* 36(3): 527–556.

Organ DW. 1988. *Organizational Citizenship Behavior*. Lexington, MA: Lexington Books.

Organ DW, Ryan K. 1995. A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology* 48(4): 775-802.

Orlitzky M, Schmidt FL, Rynes SL. 2003. Corporate social and financial performance: a meta-analysis. *Organization Studies* 24(3): 403-441.

Paolacci G, Chandler J, Ipeirotis P. 2010. Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making* 5(5): 411-419.

Porter ME. 2008. Strategy and society: the link between competitive advantage and corporate social responsibility. In *On Competition: Updated and Expanded Edition*. Harvard Business School Publishing Corporation: Boston, MA.

Porter ME, Kramer MR. 2006. Strategy and society: the link between competitive advantage and corporate social responsibility. *Harvard Business Review* 84(12): 76-92.

Porter ME, van der Linde C. 1995. Green and competitive: ending the stalemate. *Harvard Business Review* 73(5): 120-134.

Preston AE. 1989. The nonprofit worker in a for-profit world. *Journal of Labor Economics* 7(4): 438-463.

Rowley T, Berman S. 2000. A brand new brand of corporate social performance. *Business & Society* 39(4): 397-418.

Rupp DE, Ganapathi J, Aguilera RV, Williams CA. 2006. Employee reactions to corporate social responsibility: an organizational justice framework. *Journal of Organizational Behavior* 27(4): 537-543.

Rupp DE, Shao R, Thornton MA, Skarlicki DP. 2013. Applicants' and employees' reactions to corporate social responsibility: the moderating effects of first-party justice perceptions and moral identity. *Personnel Psychology* 66(4): 895-933.

Servaes H, Tamayo A. 2013. The impact of corporate social responsibility on firm value: the role of customer awareness. *Management Science* 59(5): 1045-1061.

Shaw JD, Park T, Kim E. 2013. A resource-based perspective on human capital losses, HRM investment, and organizational performance. *Strategic Management Journal* 34(5): 572-589.

Tonin M, Vlassopoulos M. 2010. Disentangling the sources of pro-socially motivated effort: A field experiment. *Journal of Public Economics* 94(11): 1086-1092.

Turban DB, Greening DW. 1996. Corporate social performance and organizational attractiveness to prospective employees. *The Academy of Management Journal* 40(3): 658-672.

Waddock SA, Graves SB. 1997. The corporate social performance - financial performance link. *Strategic Management Journal* 18(4): 303-319.

Wagner JA. 1994. Participation's effects on performance and satisfaction: a reconsideration of research evidence. *The Academy of Management Review* 19(2): 312-330.

Figures and Tables

Figure 1. Message received, by condition
Experiment 1 (Elance)

Control group	CSR treatment group
We are processing your answers to determine whether we would like to invite you to continue with the application process... Click on "continue" after the button appears are the bottom right of this page. This should take approximately 10 seconds.	
	Meanwhile, we would like to tell you about the goals of our company. We seek to be a company that not only provides an excellent service to our consumers, but also which has a positive impact on the *broader community* and on the *environment.* We hope that you share these goals and will support us in our efforts to be a *socially responsible company.*

Figure 2. Kernel densities of bid amount (USD), by condition
Experiment 1 (Elance)

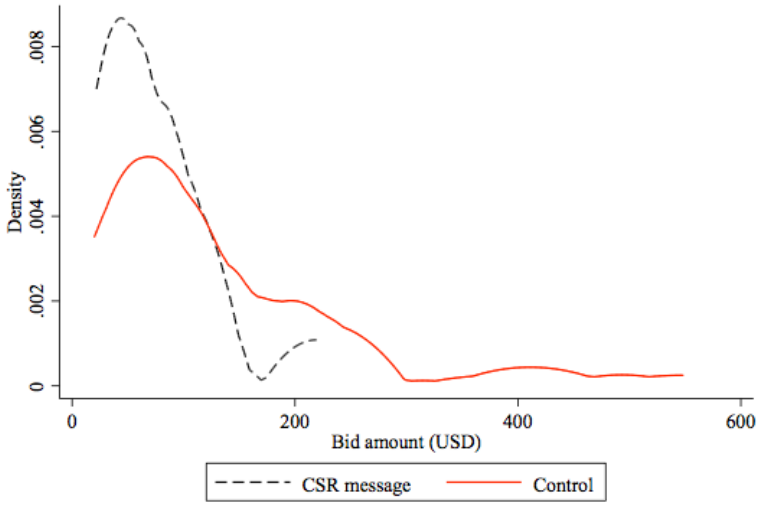


Figure 3. Message received, by condition
Experiment 2 (AMT)

<table>
<tr><th>Control group</th><th colspan="4">Philanthropy treatment groups</th></tr>
<tr><th>(1)</th><th>General message without input (2)</th><th>General message with input (3)</th><th>Tied-to-job message with input (4)</th><th>Tied-to-job message without input (5)</th></tr>
<tr><td colspan="5">We are processing your answers to determine whether you are eligible for the image interpretation task.
Click on "continue" after the button appears at the bottom right of this page.
This should take approximately 15 seconds. Thank you for your patience.</td></tr>
<tr><td rowspan="6"></td><td colspan="4">In the meantime, we'd like to tell you about one of our philanthropic programs.

<u>Charitable Giving Program</u>

We have a longstanding tradition of giving back to the communities where our workers live and work.</td></tr>
<tr><td></td><td colspan="2">We like to involve our workers in our philanthropic work whenever possible, and seek to support charities that reflect our workers' personal causes and interests.</td><td></td></tr>
<tr><td colspan="2">In 2011, we donated 1% of our profit to 5 charities</td><td colspan="2">With this goal, we will donate $0.10 to a charity when you finish this HIT.</td></tr>
<tr><td>In 2012, we will continue to identify nonprofit organizations that contribute to the well-being of our broader community. The recipients of our 2011 donations were:</td><td>based on votes from our employees. Please select the nonprofit charity below that you would most like to receive a donation in 2012. 2012 donation funds will be distributed according to the percent of employee votes for each organization.</td><td>Please select the nonprofit charity below to receive this donation.</td><td>One of the below five charities, selected at random, will receive the donation.</td></tr>
<tr><td colspan="4">The American Red Cross
enables communities to prepare for and respond to natural disasters.
The Boys and Girls Clubs of America
enables young people to reach their potential.
The Cancer Research Institute
supports and coordinates lab and clinical efforts towards the treatment, control and prevention of cancer.
The Global Hunger Project
works towards the sustainable end of hunger and poverty.
The Greenpeace Fund
increases public awareness and understanding of environmental issues.</td></tr>
</table>

Figure 4. Kernel densities of reservation wage, by condition
Experiment 2 (AMT)

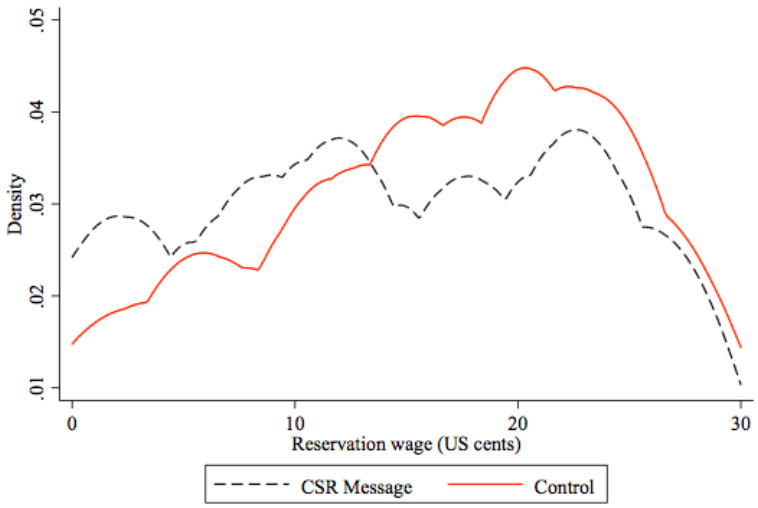


Figure 5. Message received, by condition
Experiment 3 (AMT)

<table>
<tr><th>Control group
(1)</th><th>Philanthropy treatment group
(2)</th></tr>
<tr><td colspan="2">We are processing your answer. Click on "continue" after the button appears at the bottom right of this page.
This should take approximately 15 seconds. Thank you for your patience.</td></tr>
<tr><td></td><td>In the meantime, we would like to tell you about one of our philanthropic programs.

<u>Charitable Giving Program</u>

We have a longstanding tradition of giving back to the community.

In 2012, we donated 1% of our profit to charities doing important work in our community.

In 2013, we will continue to identify the nonprofit organizations that contribute to the well-being of the broader community.

The recipients of our 2012 donations were:

The American Red Cross
enables communities to prepare for and respond to natural disasters.

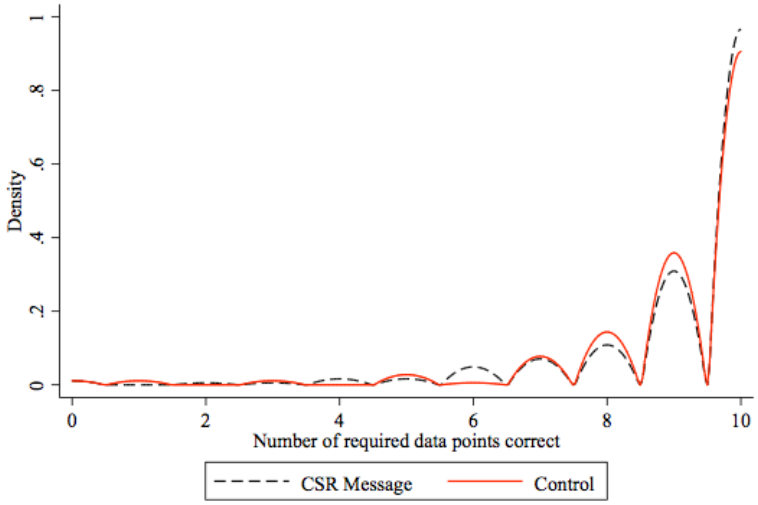
The Boys and Girls Clubs of America
enables young people to reach their full potential.

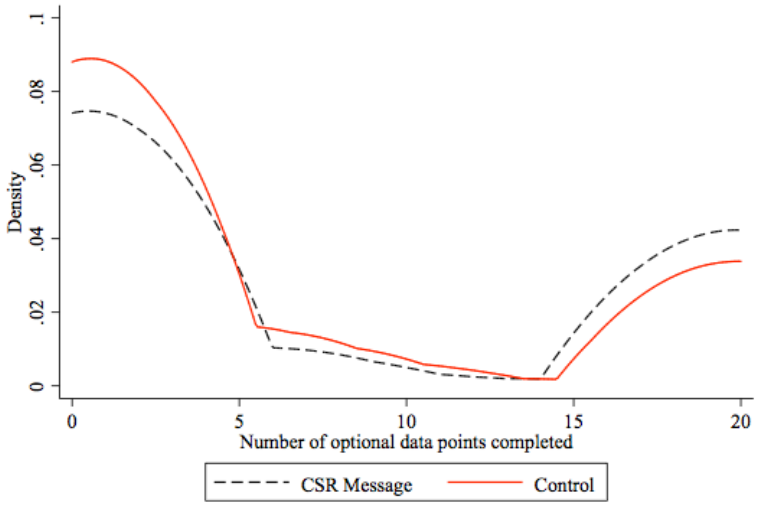
The Cancer Research Institute
supports and coordinates lab and clinical efforts towards the treatment, control and prevention of cancer.

The Global Hunger Project
works towards the sustainable end of hunger and poverty.

The Greenpeace Fund
increases public awareness and understanding of environmental issues.</td></tr>
</table>

Figure 6. Kernel densities of measures of worker performance, by condition Experiment 3 (AMT)





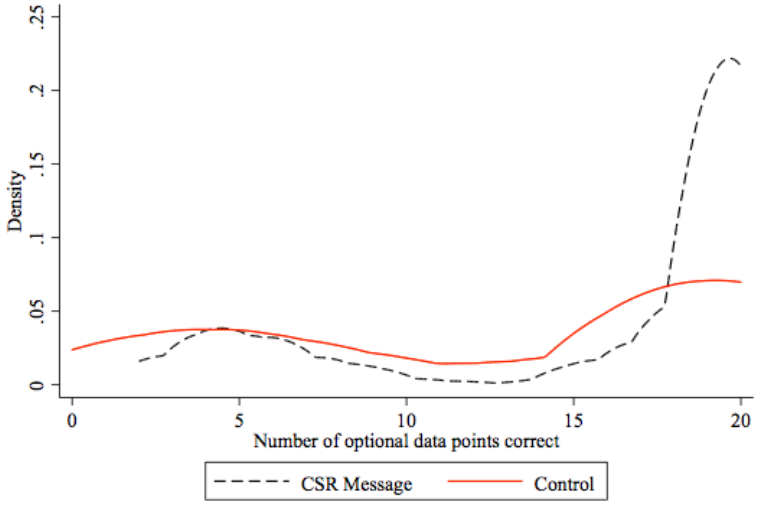


Table 1. Worker characteristics: summary statistics, by condition (randomization balance) Experiment 1 (Elance)

	Control	CSR Treatment	p-value of null that difference of means equals 0
College degree	0.87	0.85	0.85
	(0.34)	(0.36)	
Years work experience	11.45	9.76	0.35
	(8.26)	(7.97)	
Female	0.69	0.58	0.30
	(0.47)	(0.50)	
Number of previous Elance jobs completed	7.36	16.40	0.28
	(20.46)	(46.90)	
Earnings per previous Elance job (USD)	94.62	141.85	0.60
	(197.65)	(511.81)	
Performance on previous Elance jobs (out of 5 stars)	3.53	3.99	0.44
	(2.19)	(1.76)	
Living in US	0.46	0.26	0.07
	(0.51)	(0.45)	
Living in Asia	0.34	0.56	0.05
	(0.48)	(0.56)	
Living in Central or South America	0.08	0.02	0.34
	(0.27)	(0.16)	
Living in Non-EU Europe	0.05	0.07	1.00
	(0.23)	(0.26)	
Living in EU	0.03	0.05	1.00
	(0.16)	(0.22)	
Living in Canada	0.00	0.05	0.50
	(0.00)	(0.22)	

Means are reported with standard deviations in parentheses in Columns 1 and 2.
In Column 3, chi-squared test results are reported for College degree, Female, Living in US, and Living in Asia. Independent sample t-test results are reported for Years work experience, Number of previous Elance jobs completed, Earnings per previous Elance job, and Performance on previous Elance jobs. Fisher exact tests results are reported for Living in Central or South America, Living in Non-EU Europe, Living in EU, and Living in Canada. Statistical significance is robust to the use of alternate statistical tests.
Earnings per previous Elance job includes an outlier of $3289.80. Without this outlier, mean earnings per previous job for the CSR treatment group is $63.15 (std. dev. $90.87), which remains statistically equivalent to that of the control group ($t(76)=0.91$, $p=0.37$).
N=79, except for Female (N=74) and Performance on previous Elance jobs (N=45).

Table 2. Results of OLS regressions for bid amount (USD)
Experiment 1 (Elance)

	Model 1	Model 2	Model 3
CSR message	-57.97***	-48.68**	-9.23
	(21.26)	(21.45)	(16.44)
Female		69.12***	97.32***
		(22.98)	(31.98)
(CSR message) x (Female)			-60.92*
			(33.27)
2nd job posting		1.13	
		(26.08)	
College degree		23.66	
		(21.07)	
Years of work experience		1.92*	1.56
		(1.10)	(0.99)
Earnings per previous Elance job (USD)		-0.03*	-0.02
		(0.02)	(0.12)
Number of previous Elance jobs		-0.34***	-0.27***
		(0.11)	(0.08)
Living in US		12.69	
		(31.36)	
Living in Asia		28.24	
		(24.15)	
Constant	131.42***	34.00	54.43***
	(19.67)	(32.57)	(17.10)
N	79	74	74

Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses.
The dependent variable is bid amount in US dollars.
Significant at 10%, **significant at 5%, *** significant at 1%.

Table 3. Worker characteristics: summary statistics
Experiment 2 (AMT)

	Mean	Standard deviation
Demographic characteristics		
Female (Y=1, N=0)	0.45	0.50
Age	30.00	10.55
College degree (Y=1, N=0)	0.50	0.50
Income (<$30K=1, $30-60K=2, >$60K=3)	1.86	0.82
White (Y=1, N=0)	0.80	0.40
Black (Y=1, N=0)	0.08	0.27
Hispanic (Y=1, N=0)	0.05	0.21
Asian (Y=1, N=0)	0.12	0.33
Pacific islander (Y=1, N=0)	0.01	0.10
Other race/ethnicity (Y=1, N=0)	0.01	0.08
Democrat (Y=1, N=0)	0.44	0.50
Republican (Y=1, N=0)	0.14	0.34
Independent (Y=1, N=0)	0.32	0.47
Other political affiliation (Y=1, N=0)	0.10	0.30
AMT experience characteristics		
HITs per week in the last month (<10 = 1, 10-49=2, 50-100=3, >100=4)	2.30	1.02
HIT approval rate (between 95 and 100)	98.62	1.33
HIT approval rate of 100 (Y=1, N=0)	0.29	0.45
Primary reason complete HITs on AMT (Y=1, N=0):		
"The money I earn on MTurk is my primary source of income."	0.13	0.34
"The money I earn on MTurk is not my primary source of income, but is the main reason I complete HITs on MTurk."	0.54	0.50
"It is a productive use of my free time."	0.29	0.45
"It is fun."	0.04	0.20
Charitable characteristics		
Donated money to a charity or nonprofit in 2011 (Y=1, N-0)	0.53	0.50
Volunteered with charity or nonprofit in 2011 (Y=1, N=0)	0.41	0.49

N=434 except for HIT approval rate, for which N=378

Table 4. Mean reservation wage and likelihood of answering optional questions, by condition
Experiment 2 (AMT)

	Entire sample	No phil. message (control)	Any phil. message	General phil. message without input	General phil. message with input	Tied-to-job phil. message without input	Tied-to-job phil. message with input
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Reservation wage	14.4	15.8	14.0	14.9	14.2	14.2	13.5
	(8.8)	(8.1)	(8.9)	(8.8)	(8.9)	(8.8)	(9.2)
Answered optional questions	0.88	0.80	0.89	0.91	0.91	0.91	0.86
	(0.33)	(0.40)	(0.31)	(0.29)	(0.29)	(0.31)	(0.34)
N	434	92	342	87	74	87	94

Means are reported with standard deviations in parentheses.
Reservation wage is reported in US cents.
Answered optional questions is a dummy variable coded 1 if the worker answered any of the optional questions, 0 otherwise.

Table 5. Results of OLS regressions for reservation wage
Experiment 2 (AMT)

	Model 1	Model 2	Model 3
CSR message	-1.83*	-1.95**	0.47
	(0.97)	(0.96)	(1.29)
Top performer			6.67***
			(2.01)
(CSR message) x (Top performer)			-6.08***
			(2.00)
Constant	15.8***	18.20***	12.60***
	(0.85)	(2.33)	(1.15)
Worker demographics	No	Yes	Yes
N	434	434	378

Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses.
The dependent variable is reservation wage in US cents.
*Significant at 10%, ** significant at 5%, *** significant at 1%.

Table 6. Results of logistic regressions for answered optional questions Experiment 2 (AMT)

	Model 1	Model 2
CSR message	0.73**	0.80**
	(0.32)	(0.35)
Completed image interpretation job		0.71*
		(0.37)
Female		0.79**
		(0.37)
Constant	1.41***	-0.40
	(0.26)	(0.91)
Worker demographics	No	Yes
N	434	434

Estimated coefficients of logistic regressions are reported, with robust standard errors in parentheses.
The dependent variable is a dummy variable coded 1 if the worker answered any of the optional questions, 0 otherwise.
***Significant at 10%, **Significant at 5%, *** significant at 1%.

Table 7. Worker characteristics: summary statistics
Experiment 3 (AMT)

	Mean	Standard deviation
Demographic characteristics		
Female (Y=1, N=0)	0.44	0.50
Age	30.29	10.16
College degree (Y=1, N=0)	0.50	0.50
Income (<$30K=1, $30-60K=2, >$60K=3)	1.93	0.81
White (Y=1, N=0)	0.76	0.43
Black (Y=1, N=0)	0.08	0.27
Hispanic (Y=1, N=0)	0.06	0.23
Asian (Y=1, N=0)	0.14	0.34
Pacific islander (Y=1, N=0)	0.01	0.07
Other race/ethnicity (Y=1, N=0)	0.01	0.10
Democrat (Y=1, N=0)	0.43	0.50
Republican (Y=1, N=0)	0.15	0.36
Independent (Y=1, N=0)	0.33	0.47
Other political affiliation (Y=1, N=0)	0.08	0.28
AMT experience characteristics		
HITs per week in the last month (<10 = 1, 10-49=2, 50-100=3, >100=4)	2.82	1.04
HIT approval rate (between 95 and 100)	98.95	1.06
Primary reason complete HITs on AMT (Y=1, N=0):		
"The money I earn on MTurk is my primary source of income."	0.15	0.36
"The money I earn on MTurk is not my primary source of income, but is the main reason I complete HITs on MTurk."	0.57	0.50
"It is a productive use of my free time."	0.26	0.44
"It is fun."	0.02	0.16
Charitable characteristics		
Donated money to a charity or nonprofit in 2012 (Y=1, N-0)	0.53	0.50
Volunteered with charity or nonprofit in 2012 (Y=1, N=0)	0.31	0.46

N=568, except for HIT approval rate, for which N=544

Table 8. Mean worker performance measures, by condition
Experiment 3 (AMT)

	Entire sample	No philanthropy message (control)	Philanthropy message (treatment)
	(1)	(2)	(3)
# required data points correct	9.15	9.15	9.16
	(1.56)	(1.57)	(1.56)
N	568	281	287
# unrequired data points completed	6.57	5.82	7.31
	(8.88)	(8.46)	(9.23)
N	568	281	287
# unrequired data points correct	14.89	13.28	16.34
	(6.92)	(7.53)	(5.96)
N	241	116	125

Standard deviations are reported in parentheses.
unrequired data points correct includes only those who answered at least one of the unrequired data points.

Table 9. OLS regression results
Experiment 3 (AMT)

Dependent variable:	# required data points correct (out of 10)		# unrequired data points completed (out of 20)		# unrequired data points correct (out of 20)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
CSR message	0.02	0.02	1.49**	1.83**	3.09***	3.24***	2.32**
	(0.13)	(0.13)	(0.74)	(0.75)	(0.88)	(0.91)	(0.99)
Female		0.14		2.88***		1.74*	1.66*
		(0.14)		(0.77)		(0.93)	(0.93)
HIT approval rating		0.14*		-0.40		-0.90***	-0.96***
		(0.08)		(0.38)		(0.34)	(0.36)
HITs per week buckets		0.12**		-0.26		0.44	0.67
		(0.06)		(0.75)		(0.44)	(0.43)
College degree		0.25*		-0.25		0.08	0.13
		(0.14)		(0.75)		(0.89)	(0.89)
Volunteer		0.04		-1.91**		-1.28	
		(0.14)		(0.79)		(1.02)	
Volunteer & donate							-3.93**
							(1.63)
(CSR message) x (Volunteer & donate)							4.82**
							(2.04)
Constant	9.15***	7.86***	5.82***	7.44***	13.28***	15.46***	18.37***
	(0.09)	(0.51)	(0.50)	(2.37)	(0.70)	(2.41)	(4.02)
Other demographics	No	Yes	No	Yes	No	Yes	Yes
N	568	544	568	544	241	233	233

Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses.
unrequired data points correct includes only those who answered at least one of the unrequired data points.
*Significant at 10%, ** significant at 5%, *** significant at 1%.

Table 10. Survey responses regarding perception about CSR message: summary statistics Experiments 2 and 3 (AMT)

	Experiment 2			Experiment 3		
	Mean Likert response	Standard deviation	% Strongly agreed or agreed	Mean Likert response	Standard deviation	% Strongly agreed or agreed
(1) "The charitable giving program was a signal to me that this employer is trustworthy"	3.27	1.01	0.46	3.33	0.89	0.46
(2) "The charitable giving program was a signal to me that this employer is not greedy"	3.44	0.96	0.55	3.46	0.86	0.51
(3) "The charitable giving program was a signal to me that the employer will pay the bonus amount promised in exchange for the image interpretation task"	3.28	0.99	0.45	-	-	-
(4) Index that charitable giving program was a signal about the employer's likely treatment of employees (average of above responses)	3.33	0.86	0.49	3.39	0.79	0.49
(5) "Learning about the charitable giving program made me feel good about myself while working with this employer"	3.52	0.99	0.59	3.40	0.90	0.51
(6) "The charitable giving program indicated to me that this employer has excess profits"	2.80	0.99	0.24	2.80	0.90	0.23
(7) "I have been wanting to donate to charity - working with this employer is a way for me to do this"	3.02	1.09	0.35	3.01	1.01	0.34

N = 342 for Experiment 2. N = 287 for Experiment 3.
This sample includes only individuals in the CSR treatment groups in each experiment.
Likert responses reflect a 5-pt scale with 1 being “Strongly disagree” and 5 being “Strongly agree.”

Table 11. Exploring mechanisms: OLS regression results
Experiments 2 and 3 (AMT)

Dependent variable:	Reservation wage (Experiment 2)	# unrequired data points completed (Experiment 3)
	Model 1	Model 2
CSR is signal about treatment of employees	-3.29**	-3.08**
	(1.50)	(1.47)
CSR makes me feel good about myself	-0.96	3.31**
	(1.27)	(0.23)
Working for CSR employer is a way for me to donate	-0.97	2.71*
	(1.12)	(1.38)
CSR indicates employer has excess profit	1.46	-1.60
	(1.10)	(1.33)
Constant	17.86***	4.05
	(2.67)	(3.49)
Worker demographics	Yes	Yes
N	342	287

Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses.
Samples include only individuals in the CSR treatment groups in each experiment.
*Significant at 10%, ** significant at 5%, *** significant at 1%.