Can Firms Pay Less and Get More...By Doing Good?

The Effect of Corporate Social Responsibility on Employee Salary Requirements and Performance

Vanessa C. Burbano
UCLA Anderson
vanessa.burbano.2015@anderson.ucla.edu

Working Paper, April 2014

This work is funded by the Strategy Research Foundation Dissertation Grant

Abstract: Companies continue to invest in corporate social responsibility (CSR) activities, yet whether and how CSR influences firm performance remain topics of considerable debate. Using two field experiments implemented in online labor marketplaces, this paper provides causal evidence that certain CSR activities can affect critical employee outcomes: employee salary requirements and employee extra-role prosocial behavior / organizational citizenship behavior. Real workers were hired for real short-term jobs where the employer’s CSR was randomly assigned. Results show that workers who were informed about a CSR program were willing to accept a lower wage and were more likely to go “above and beyond” for the employer by doing extra work not required for payment. Higher performing workers were more responsive to CSR than lower performers. This research contributes to an understanding of the mechanisms through which CSR influences firm performance.
1. Introduction

Companies continue to invest in and place importance on corporate social responsibility (CSR) (Servaes and Tamayo 2013). Fifty-three percent of companies in the S&P 500 published CSR reports in 2012, more than double that of 2011, demonstrating the continued importance of CSR to these companies. Although it has been argued that CSR can be strategic (Porter and van der Linde 1995, Porter and Kramer 2006, Porter 2008), whether firms can ‘do well by doing good’ remains a topic of considerable debate in the strategy literature, 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, resulting in a lack of sufficient understanding with respect to the mechanisms through which CSR affects firm performance (Margolis et al. 2009, Margolis and Walsh 2003). This has led more recent studies to focus on the indirect channels through which CSR influences firm performance rather than on the direct link between CSR and firm performance (Servaes and Tamayo 2013). Scholars have begun to identify mediating factors that are integral to understanding the CSR-firm performance relationship including investment in R&D (McWilliams and Siegel 2000), innovation and industry differentiation (Hull and Rothenberg 2008); intangible resources (Surroca Tribo and Waddock 2009); stakeholder influence capacity (Barnett and Salomon, 2012); the level of dynamism in firms’ operational environment (Wang and Bansal 2012); pragmatic and moral legitimacy (Koh Qian and Wang 2013); and customers (Servaes and Tamayo, 2013). The literature using firm-level analysis to study the mechanisms through which CSR influences firm

---

financial performance faces two main empirical challenges. First, methodological concerns such as omitted variable bias and reverse causality (Margolis and Walsh 2001) continue to challenge this research. Indeed, it is likely that the mechanisms posited to be the channels through which CSR influences firm performance simultaneously influence CSR.\(^2\) Second, the appropriate measurement and specification of firm CSR (Waddock and Graves 1997) remains a challenge. It has been noted that although there is plethora of CSR ratings available to researchers (Delmas, Etzion and Nairn-Birth, 2013), even the best CSR ratings – those of the KLD Stats Database – are noisy aggregate measures of a firm’s true CSR levels (Chatterji et al. 2009, Entine 2003). Furthermore, the aggregation of varied CSR constructs makes interpretation of results difficult and may fail to capture differential effects (Mattingly and Berman 2006, Rowley and Berman 2000). Godfrey et al. (2009) point out that opportunities exist to study finer-grained CSR activities to better understand how value is created for the firm. This paper seeks to address these two major empirical challenges by 1) taking a different approach and seeking to establish a causal relationship in the first link of the ‘CSR-mechanism-firm performance’ chain, and 2) by focusing on specific CSR-related policies and actions rather than using aggregated CSR constructs.

This paper draws from those who have emphasized the firm’s stakeholders as channels through which CSR influences firm performance (e.g., Hillman and Keim 2001, Baron 2001, Barnett 2007, Delmas and Toffel 2008, Casadesus-Masanell et al. 2009, Servaes and Tamayo 2013, Henisz, Dorobantu and Narute 2011). It has been argued that CSR can attract socially conscious consumers (e.g., Elfenbein, Fisman, and McManus, 2001); reduce the likelihood of negative regulatory, legislative or fiscal action (e.g., Koh, Qian, and Wang, 2013); mitigate

\(^2\) For example, scholars have explained that consumers, a channel identified as a mechanism through which CSR influences firm performance (Servaes and Tamayo, 2013), can influence firms to engage in socially irresponsible behavior (Bennett et al. 2013) and increase socially responsible claims (McDonnell and King, 2013).
retaliation from activist organizations (e.g., Baron, 2001; Baron and Diermeier, 2007); act as an insurance mechanism (e.g., Muller and Kraussi, 2011; Minor and Morgan, 2012); and reduce capital constraints (e.g., Cheng, Ioannou, and Serafeim, 2013). Employees, although not the only stakeholder group through which CSR likely affects firm performance, are a critical one, given the importance of human assets to firm performance (e.g., Lieberman Lau and Williams 1990, Koch and McGrath 1996, Huselid Jackson and Schuler 1997, Campbell et al. 2011). Indeed, corporate CFO’s, investment professionals and CSR professionals believe one of the key ways that CSR programs improve their companies’ financial performance is through employees.3 Recent attention on the micro foundations of strategy furthermore highlights the importance of understanding how firm policies affect employee behavior (Foss and Lindberg, 2013).

It has been well established that two employee outcomes are critical to firm performance: employee compensation (Larkin Pierce and Gino 2010, Carnahan Agarwal and Campbell 2012) and employee performance or productivity (Koch and McGrath 1996, Shaw Park and Kim 2013). A certain type of employee performance has in particular been identified as a source of sustainable advantage for the firm: a willingness to go “above and beyond” for the firm beyond what is explicitly required in a job description or contract, referred to as (extra-role) prosocial organizational behavior or organizational citizenship behavior (Bolino, Turnley, & Bloodgood, 2002; Nahapiet & Ghoshal, 1998). The first link of the ‘CSR-employee outcomes-firm performance’ chain remains to be empirically established, however. This paper focuses on this first link, in the nature of Du, Bhattacharya and Sen (2011), who point out that the success of a macro-level strategic objective such as CSR serving as an effective instrument of competitive strategy depends on the micro-level actions of individuals. They focused on identifying the

effect of CSR on consumer behavior (Du et al. 2011). This paper focuses on identifying the
effect of CSR policies on employee behavior.

Both social identity theory from the social psychology field and signaling theory provide
theoretical explanations for why employees should derive utility from and have a preference for
working at a firm that engages in CSR. Social identity theory suggests that working for a CSR
firm improves employees’ self-image (Ashforth and Mael 1989, Dutton and Dukerich 1991,
Turban and Greening 1997, Albinger and Freeman 2000, Backhaus Stone and Heiner 2002,
Delmas and Pekovic 2012, Greening and Turban 2000, Rupp et al. 2006), and signaling theory
explains that CSR serves as a source of informational signals about a firm’s values and
trustworthiness to prospective and current employees (Fombrun and Shanley 1990, Waddock and
Graves 1997, Turban and Greening 1997, Godfrey et al. 2009). If individuals have a preference
for CSR firms, they should be “willing to pay” for this preference. In a labor market context,
this should manifest as a lower reservation wage or willingness to accept lower payments for a
job. Empirical studies of the relationship between wages and socially responsible jobs have
resulted in mixed findings, and do not establish causal effects, however. For example, Frank
(1996) found a salary differential among Cornell graduates, with the jobs rated as more socially
responsible offering lower wages, while Goddeeris (1998), Leete (2001), Ruhm and Borkoski,
(2003), and Frye et. al. (2006) found no correlation after controlling for individual
characteristics. By asking MBAs how much of their salary they would be willing to give up to
work for a socially responsible firm, Montgomery and Ramus (2011) elicited a stated willingness
to forego salary for firm CSR, but these authors themselves acknowledge that respondents’ stated
willingness to forego salary might be inflated due to social desirability in their responses.
Furthermore, responses to hypothetical questions are not always consistent with decisions when real choices are on the line (List and Gallet 2001).

It has also been argued that socially responsible firms can benefit from greater employee productivity (e.g., Brekke and Nyborg 2008, Delmas and Pekovic 2013, Burbano Mamer and Snyder 2013). Delmas and Pekovic (2013) use a cross-sectional employer-employee survey to demonstrate an empirical relationship between environmental standards and labor productivity, but the authors themselves recognize the limitations of cross-sectional data to establish causal effects.

I investigate these relationships by implementing field experiments in two unknown firms in two online jobs marketplaces. I collaborated with a small startup company, UrGift.In, to randomly assign CSR ‘treatments’ to 96 of their recruits on Elance in one field experiment, and acted as a generic company, “A and Z Inc.” (a fictitious company), to randomly assign CSR ‘treatments’ to 450 workers hired on Amazon Mechanical Turk (AMT) in a second field experiment. I then observed the effect of ‘treatment’ on worker behavior. Elance has been identified as a promising yet underused setting for field-experimental research in management and entrepreneurship (Aguinis and Lawal 2012), since small and medium-sized companies, and even large corporations, are increasingly outsourcing job functions and using websites like Elance to source hiring needs (Needleman, 2010). Indeed, the strategic management of ‘virtual’ human assets is becoming increasingly relevant as firms adjust the way they operate to meet increased uncertainty (Gibson and Cohen 2003, Kirkman et al. 2004, Noveck 2009, O’Conner 2013). Elance jobs span the range of most corporate job functions: everything from data entry and admin support; programming; mobile development; finance and accounting; sales and

---

Institutional Review Board approval was obtained.
marketing; legal support; even operations and corporate strategy. The AMT online labor market 
crowdsources micro-tasks that are much less typical of corporate job functions, but offers 
researchers an inexpensive and easily accessible setting to identify mechanisms driving 
employee behavior. AMT has been frequented by researchers as an online alternative to lab 
studies of students who willingly participate in experiments or surveys, 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 experiment setting 
to study inputs to worker motivation and output (e.g., Barankay 2011, Chandler and Kapelner 
2013, Horton and Chilton 2010, Mason and Watts 2010, Rogstadius et al. 2011) begun to be 
tapped.

Three attributes of these settings make them valuable ones in which to study the 
relationships of interest. First, the fact that the employers are unknown, rather than well-known, 
firms (a small startup company with little web presence at the time the study was conducted and 
a fictitious company) ensures that workers’ preconceived notions about firm reputation or social 
responsibility do not confound results. Second, the fact that there is no information about the 
socially responsible or irresponsible activities or objectives of these firms available on the 
Internet or elsewhere ensures that workers’ perceptions of employers’ social responsibility 
cannot be confounded by information outside of the control of the field experiments (e.g., by 
workers googling the company names). Third, the fact that workers complete their work online, 
in isolation and anonymity, reduces the likelihood of social desirability biasing their behavior 
(List and Gallet 2001).

The random assignment of CSR conditions addresses identification and causality in my 
findings, and builds on the work of researchers such as Agarwal, Croson and Mahoney (2010)
who point out that experiments can enable strategy researchers to disentangle the effects of the independent variable of interest from decision-making endogenous to the dependent variable of interest. Because workers complete their work in a natural work environment, as opposed to hiring students to complete work (differently from Hossain and Li 2013), findings are more externally generalizable to an adult work population.

To avoid the trap of aggregating different things into a single monolithic CSR construct (Hillman and Keim 2001, Brammer and Millington 2008, Godfrey et al. 2009, Chen and Delmas 2011, Jayachandran Kalaighnanam and Eilert 2013), I continue a trend in the literature toward considering CSR activities as a set of heterogeneous firm actions (e.g., King and Lenox, 2002) and operationalize only one specific CSR-related policy/action (e.g., Lev Petrovis and Radhakrishnan 2010) per field experiment: a statement of socially responsible intent (on Elance) and a corporate philanthropy program (on AMT).

In both field experiments, I show that receiving information about the corresponding CSR program caused employees to reduce their salary requirements for a job. In the second field experiment (Amazon Mechanical Turk), I show that receiving information about a corporate philanthropy program increased workers’ likelihood of going ‘above and beyond’ for the employer by doing additional work unrequired for payment. I find that higher performing workers were more affected by a CSR program than their lower performing counterparts, and were willing to give up the wage differential they otherwise demand. 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). Interestingly, I find that individuals who stated that they would accept a lower salary to work for an employer that gives back to the community did not in practice accept a lower salary in
response to a CSR program than individuals who stated that they would not accept a lower salary to work for an employer that gives back to the community. Likewise, individuals who stated that they would work harder for an employer that gives back to the community were not in practice more likely to complete additional work for the employer in response to a CSR program than those who stated that they would not work harder for an employer that gives back to the community. These findings highlight the important difference between revealed and stated behavior, particularly in domains such as CSR in which stated responses might be inflated due to social desirability in responses (List and Gallet 2001).

This paper contributes to the emerging literature on the mechanisms through which CSR influences firm performance by providing causal evidence of a micro-mechanism: that certain CSR policies decrease recruits’ reservation wages and increase workers’ likelihood of completing extra work unrequired for payment, an example of prosocial organizational behavior.

The remainder of the paper is organized as follows: the next section describes the field experiment settings, Elance and Amazon Mechanical Turk. This is followed by a brief summary of the literature on CSR and employees, and development of hypotheses in Section 3. Section 4 summarizes the Elance field experiment: the field experiment design, data sample, empirical methods used, and results. Section 5 summarizes the Amazon Mechanical Turk field experiment: the field experiment design, data sample, empirical methods used, and results. Section 6 concludes and discusses implications for future research.

2. Field Experiment Settings

2.1. Elance

Elance is an online marketplace where employers post jobs, freelancers submit proposals including bid amounts for those posted jobs, and employers select from submitted proposals to
hire workers. Elance job categories include IT and programming (37% of jobs posted), design and multimedia (23%), writing and translation (17%), admin support (9%), sales and marketing (9%), finance and management (2%), engineering and manufacturing (2%), and legal (1%).

There are over 500,000 active businesses posting jobs on Elance and over 2.3 million registered Elance workers. 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. Typical job values are in the hundreds of dollars, although there is significant variation by type of job. The average hourly wage for US freelancers on Elance is $28; this would translate into an annual income of $56,000 (Eha 2013).

2.2. Amazon Mechanical Turk

Amazon Mechanical Turk (AMT) is an online labor marketplace where “requesters” post jobs and “workers” choose which jobs to complete for a payment amount set by the employer. Jobs are conducted and submitted online. AMT jobs, called HITs (an acronym for human intelligence tasks), tend to be tasks that require some sort of human involvement and are typically simple enough to require only a few minutes to complete. HITs include such tasks as image tagging, audio transcription, and survey completion. More complicated tasks are typically decomposed into a series of smaller HITs. Pay can be as low as $0.01, and rarely exceeds $1.00. Translated into an hourly wage, the average effective wage of a typical AMT worker is $4.80 per hour (Mason and Suri 2012). Studies have confirmed that AMT workers 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) and that US AMT workers are not uncharacteristic of the US work population (Berinsky Huber and Lenz 2012).

Both Elance and AMT both offer natural labor market contexts in which to study firm-employee (or firm-contractor) interactions. Comparatively, the two settings each have 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 no confounding exchange of information (since communication can take place between employer and applicant/employee\(^8\)). On AMT it is easy to attract and hire a large number of workers for a single job to ensure sufficient power for statistical analyses, whereas on Elance it is harder to 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 job functions.

3. CSR and Employees

The theoretical frameworks elucidating how CSR affects the attitudes and behavior of firm employees are based primarily on tenets of signaling theory and, from the social psychology field, social identity theory. In accordance with signaling theory, stakeholders gauge a firm’s relative merits and develop a perception of a firm’s image and reputation by interpreting various

---

\(^8\) On Elance there is a communication portal where communication between employer and applicant/employee can take place, making it more challenging for the researcher to ensure that communication does not confound the effect of the treatment being studied.
informational signals (Fombrun and Shanley 1990). A firm’s CSR activities serve as one source of these signals (Waddock and Graves 1997). When these CSR activities are interpreted as credible indicators of a firm’s values, stakeholders’ perceptions are favorably influenced and firms can gain advantage from such activities (Barnett 2007, Barnett and Salomon 2012, Godfrey et al. 2009). Indeed, according to the person-organization fit literature, individuals are attracted to organizations they perceive as exhibiting the values and norms they consider important (Cable and Judge 1996, Chatman 1989, Judge and Bretz 1992). CSR activities signal that the firm is not completely self-interested and is likely moral and trustworthy (Godfrey et al. 2009). Perceived values and norms serve as signals of firm working conditions to prospective and current employees (Albinger and Freeman 2000, Greening and Turban 2000, Turban and Greening, 1997). When an organization is concerned about the effect of its activities on people and communities outside the organization and has established mechanisms to address these issues, this may indicate to employees that their organization also has concern for them (Rupp et al. 2006) and that there is an alignment between the identities of the employee and organization (Collier and Esteban, 2007). Furthermore, employees who view their employer as moral and trustworthy should be less likely to quit, thus reducing search costs, negotiation costs, and other transaction costs associated with hiring and training new employees (Jones 1995).

Drawing on social identity theory, individuals classify themselves and others into various social categories and evaluate their self-image by comparing the features of the social group to which they belong with the characteristics of other groups (Ashforth and Mael 1989, Dutton and Dukerich 1991, Turban and Greening 1997). When working with companies with higher levels of CSR, individuals have a more favorable self-image and increased job satisfaction than when

---

9 Some posit that the direction of the signal can also go the other way; that the firm can use some types of CSR such as pro bono activities as a signal of employee quality (e.g., Burbano, Mamer and Snyder, 2013)

Put another way, employees make judgments about the employing firm’s CSR activities, which provide evidence regarding the fulfillment of their psychological needs (Rupp et al. 2006). Working for an organization perceived as fair or generous in its interactions with the broader society helps satisfy individuals’ need for a meaningful existence (Rupp et al. 2006).

Related to the arguments underpinning social identity theory is the term ‘warm glow’ that has been used to describe the positive feeling an individual experiences from behaving altruistically. Indeed, it has been argued that the utility characteristically garnered from the ‘warm glow’ that individuals receive from direct charitable giving may also be obtained by more indirect activities such as purchasing and holding securities issued by socially responsible firms (Graff and Small 2005), or by working for a firm that spends money on a good cause (Barnea and Rubin 2010).

### 3.1. CSR and Employee Salary Requirements

Both signaling theory and social identity theory suggest that firms with higher levels of CSR provide increased utility, or a value, to employees, all else being equal. It has been established that individuals are willing to pay for increased utility from products tied to charitable donations or other socially responsible practices in the form of increased prices (e.g., Casadesus-Masanell et al 2009, Elfenbein and McManus 2010, Elfenbein, Fisman and McManus 2012). Likewise, if individuals have a taste or preference for CSR in the workplace because it provides them with increased utility or value, then they should be willing to ‘pay’ for CSR in the form of a lower acceptable wage. This argument parallels the argument that firms can extract a wage differential.
for catering to scientists’ taste for science in the workplace (Stern 2004). In the Elance context, a declaration of socially responsible intent should thus result in lower bid amounts for a typical Elance job such as a data entry job. In the Amazon Mechanical Turk context, a message about the employer’s corporate philanthropy program should thus result in lower reservation wages amongst workers to complete a typical AMT job such as an image interpretation job.

Scholars have established that employee participation affects employee satisfaction (Wagner 1994). It has also been pointed out that employee outcomes can be enhanced when employees are more connected to the prosocial impact of their jobs (Grant 2008) and that employee participation in CSR has a direct influence on 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 corporate philanthropy program than at a firm that does not elicit employee participation in its corporate philanthropy program. Thus, recruits should have an even higher “willingness to pay” for these firms, and therefore should be willing to accept a lower wage to work at a firm that elicits employee participation in CSR than at a firm that does not.

*Hypothesis 1a (H1a):* A declaration of socially responsible intent causes freelancers to submit lower bids for a data entry job on Elance.

*Hypothesis 1b (H1b):* A corporate philanthropy program message causes recruits to accept lower payment for an image interpretation job on Amazon Mechanical Turk.

*Hypothesis 1c (H1c):* A corporate philanthropy program message that elicits employee participation causes recruits to accept lower payment for an image interpretation job on Amazon Mechanical Turk than a corporate philanthropy program that does not elicit employee participation.
3.2. CSR and Employee Performance

In the organizational literature focused on employee output, a distinction is made between meeting formal job requirements and exceeding formal job requirements (Barnard 1938, Katz 1964, Katz and Kahn 1978, Morrison 1994); the latter has been referred to as organizational citizenship behavior (Organ 1988) or (extra-role) prosocial organizational behavior (e.g., Brief and Motowidlo 1986, O’Reilly and Chatman 1986, Puffer 1987, Van Dyne et al. 1994). This behavior 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). Organizational citizenship behavior (OCB) is critical for organizational effectiveness and can comprise a source of sustainable advantage (Bolino, Turnley, and Bloodgood 2002, Nahapiet and Ghoshal 1998).

Prosocial organizational behavior increases when employees perceive that employers are trustworthy and fair (e.g., Moorman, Blakely and Niehoff 1998, Bolino and Turnley 2003, Fahr Podsakoff and Organ 1990, Konovsky and Pugh 1994, Moorman 1991, Niehoff and Moorman 1993, Organ 1990) and when job satisfaction is high (Bateman and Organ 1983, Illies, Scott and Judge 2006). As described earlier, both signaling theory and social identity theory suggest that CSR influences these drivers of organizational citizenship behavior. If CSR contributes to the drivers of prosocial organizational behavior, and doing extra work not formally required by the job is one example of this type of behavior, CSR should cause employees to be more willing to do extra work not formally required by their job. On AMT, HITs are often entirely comprised of answering survey questions. Thus, answering additional optional questions unrequired for
payment at the end of a survey-answering HIT constitutes completing extra work for the employer in this context.

_Hypothesis 2 (H2): A corporate philanthropy program message causes employees to be more likely to answer additional survey questions not required for payment on Amazon Mechanical Turk._

4. Field Experiment 1 (Elance)

4.1. Field Experiment Design

To test H1a in the Elance setting, I collaborated with a startup company, UrGift.In\textsuperscript{10}. UrGift.In advertised two jobs on Elance in the month of August 2013: first, “Data Entry into Excel from Website (Top 100 Mom Blogs of 2012)” and subsequently, “Data Entry into Excel from Website (Directorio de Entidades...)”. Each job posting\textsuperscript{11} noted that the job would be posted for up to two weeks, that the jobs were to start immediately, and that payment for the jobs would be fixed price (as opposed to hourly). In the job description, interested applicants were directed to complete a pre-qualification survey to be considered for the job. Pre-qualification surveys or tasks are sometimes required on Elance to help hiring companies filter out applicants who automatically submit generic proposals and to help identify applicants best suited for a particular job. During the pre-qualification survey administered on an external survey site, participants were first asked a few questions related to UrGift.In’s line of business: whether the applicants had ever used Amazon, Facebook, and mobile applications before. Those who answered “no” to

\textsuperscript{10}UrGift.In is a startup company founded in June 2012 that has won entrepreneurial competitions such as MassChallenge and Wayra. Like many startups and small businesses, UrGift.In has relied on sites such as Elance for the majority of its hiring needs. 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.

\textsuperscript{11}The budget was indicated to be ‘not sure’ so that the bid amounts would not be anchored or influenced by a starting budget amount. The proposal bid amounts were set as private, so that applicants could not see the bid amounts submitted by other applicants. Freelancers with a premium Elance membership (which costs $10/month) can only view the average, lowest and highest bid amounts at any given time.
all three questions were informed that they did not pre-qualify for a job with UrGift.In. To construct a proxy for CSR ‘treatment,’ those who did pre-qualify for a job with UrGift.In 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 corresponding messages, applicants were invited to continue with the application process and were asked to enter their bid amount for the job. Applicants were then asked for information about their level of education and years of work experience. Lastly they were provided a pre-qualification code to include in their Elance proposal, which included their official bid amount for the job. UrGift.In later chose and hired the workers for the advertised jobs based on their Elance proposals and bid amounts.

***Insert Figure 1 here***

4.2. Sample

Ninety-six individuals completed the prequalification survey. Of those ninety-six, eighty-three submitted a complete proposal on Elance during the timeframe of the field experiment. Fifty-four applied for the first job posting (Data Entry into Excel from Website; Top Mom Blogs of 2012) and twenty-nine applied for the second job posting (Data Entry into Excel from Website; Directorio de Entidades…). Participants that exited the pre-qualification survey before finishing, did not pre-qualify (and thus exited the study before the random assignment of conditions), or completed a pre-qualification survey more than once were excluded from this sample.

Table 1 reports summary statistics for the sample. Based on self-reported data, 84% of workers in the sample had a college degree, and on average workers had 11 years of experience. Almost half of workers are based in Asia (45%), followed by the US (37%), Europe (6%),
Central and South America (5%), the European Union (3%), and Canada (2%). Based on a classification of names and pictures, 65% of workers are female. The mean bid amount for the entire sample was $100.

***Insert Table 1 here***

There were no statistically significant differences between the mean characteristics listed in Table 1 for the treatment and control groups except for geographic location\textsuperscript{12}, suggesting that randomization was successful and findings are not biased by differences in characteristics across conditions that could influence bid amount.

4.3. Variable Construction

4.3.1. Dependent Variable. Bid amount is a continuous variable measured as the bid amount officially submitted by the applicant on their Elance proposal.

4.3.2. Independent Variable. CSR is a dummy variable coded as 1 if the worker received information about the company’s intention to be a socially responsible company and is coded as 0 if the worker received no information about the company’s intention to be a socially responsible company.

4.3.3. Control Variables. Control variables were constructed from information reported by the workers during the prequalification survey (whether the worker has a college degree and years of work experience) and from information provided on their proposal submissions (geographic location and gender). College degree is a dummy variable coded as 1 if the worker has a college degree and coded as 0 if the worker does not have a college degree. Years of work

\textsuperscript{12} Living in the US: 0.26 in treatment group vs. 0.48 in control group (p<0.05); living in Asia: 0.54 in treatment group vs. 0.34 in control group (p<0.10). These geographic controls are thus included in regressions reported in Section 4.4.
Experience is a continuous variable. Female is a dummy variable coded as 1 if the worker is female and coded as 0 if the worker is male. Gender was assigned based on the profile name and picture of the applicant. In cases where gender could not be determined (i.e., when the profile name is a company name or gender-neutral name and the profile picture is a logo), this variable is coded as missing.

4.4. Results

OLS regression results are reported in Table 2. The dependent variable is bid amount in US dollars. Model 1 shows that receiving a socially responsible message resulted in a significantly lower bid amount (β = -$53.77, p < 0.01). Compared to the average bid amount in the sample ($100), this is an economically significant amount. Model 2 includes in the regression 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 by UrGift did not have a significant effect on the bid amount. This reflects the fact that the job posts were very similar in nature and scope. Females submitted higher bids than males (β = 61.18, p < 0.01). The coefficients on College Degree and Years of Work Experience are not significant, but are in the direction one would expect. 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.

Noting the wide dispersion in bid amounts (the minimum bid in the sample was $20, the maximum bid was $547.95)\(^{13}\), I explore whether dropping the top and bottom one or two percent of bid amounts, or bid amounts above or below more than two standard deviations from the

\(^{13}\) COO of UrGift. In confirmed that receipt of a wide variance in bid amounts is common with Elance job posts.
mean, changes results. The effect of receiving a socially responsible message on bid amount is robust to these exclusions.

***Insert Table 2 here***

The results of the Elance field experiment provide strong support for H1a: a declaration of socially responsible intent caused recruits to submit lower bids for a data entry job on Elance.

5. Field Experiment 2 (Amazon Mechanical Turk)

5.1. Field Experiment Design

Acting as a generic 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 and the potential opportunity for additional payment for the completion of the image interpretation job, if eligibility qualifications were met. The job posting indicated that workers would be paid $0.25 for completion of the eligibility questions and survey, which was estimated to take under three minutes to complete, and that, if deemed eligible, workers would be given the opportunity to complete a one-minute image interpretation job for an additional payment of up to $0.30. The initial survey HIT, as well as the additional image interpretation job, was purposefully designed to be very similar to other HITs encountered on AMT in terms of nature, pay, and difficulty. Once workers were hired, they were taken to an external survey site on Qualtrics for the remainder of the study. Through this external survey site, participants were asked a few questions which were supposedly to determine their eligibility for the task (although all participants were deemed eligible by design).

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 2 for the exact message corresponding to each condition). The degree of employee participation was varied in the four philanthropy treatment groups to test H1c. I consider two different types of employee participation with this research design. 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 is similar to that of that of many actual firms that send employees emails or printed reports informing them about the company’s charitable giving.

***Insert Figure 2 here***

To construct a proxy for the lowest acceptable salary (or reservation wage), workers were asked to indicate the wage that they would be willing to accept in exchange for completion of a one-minute image interpretation task in one-cent increments between $0.00 and $0.30. They were informed that a payment amount in that range would be offered, and that only those workers who indicated that they would accept the chosen wage amount would be prompted to complete the image interpretation job at the specified wage. The method I use to elicit each worker’s reservation wage (the lowest wage the worker is willing to accept) is based on the Becker-DeGroot-Marschak method (Becker DeGroot and Marschak 1964), commonly used in experimental economics to ensure incentive compatibility in responses about willingness to pay. That is, by only allowing those workers who indicated that they would be willing to accept the amount that is subsequently offered to complete the job, workers have the incentive to report their true wage preferences.

---

14 Charitable donations were later made to the 5 nonprofit organizations.
After those willing to accept the offered wage completed the job and those unwilling were informed that the offered wage was lower than they were willing to accept, workers were surveyed to gather information on demographic and other worker characteristics. Lastly, workers were asked to answer optional multiple choice questions not required for payment and were informed that their answers would be helpful to the company (six questions providing feedback about the job). As the base payment for this job was in exchange for answering a series of questions, and many AMT jobs are comprised entirely of answering survey questions, answering optional survey questions in this context can be interpreted as completing extra work for the employer. This can thus be interpreted as a measure of “going above and beyond” what a worker is contractually obligated to do as part of his or her job. Workers were paid automatically at the end of the job.

5.2. Sample

Five hundred workers living in the United States were recruited on AMT for this field experiment. Only those workers with a HIT approval rating of 95% or higher were allowed to complete the job. A cutoff of 95% is very common in AMT job postings since employers want to screen out workers who use automated programs to complete HITs and try to ensure that the output is high quality. Fifty observations were dropped due to either: repeat IP addresses, which suggest that a worker may have participated in the field experiment more than once; not completing the entire HIT; non-monotonic responses to the reservation wage question (e.g., a worker who answered that they would accept a wage of 11 cents but not 12 cents); or other
indications that the workers may not have been paying attention to the job and simply clicked through the responses as quickly as possible\textsuperscript{15}. The resulting sample size is 450 workers.

Table 3 presents summary statistics for workers in the sample: demographic characteristics, AMT experience characteristics, and charitable characteristics. These characteristics were self-reported by the workers at the end of the job.

Most workers complete jobs on AMT for the purpose of payment (66\%). The majority of workers stated that their employer’s commitment to the broader community is important to them (63\%). The majority stated that they would work harder for an employer that gives back to the broader community (57\%), while less than half stated that they would be willing to accept a lower salary/payment from an employer that gives back to the broader community (37\%).

***Insert Table 3 here***

There were no statistically significant differences between the mean demographic, AMT experience, or charitable characteristics listed in Table 4 for the CSR and control groups, confirming that randomization was done well and suggesting that the findings are not biased by differences in such characteristics across conditions.

5.3. Variable Construction

5.3.1. Dependent Variables. \textit{Reservation wage} is a continuous variable measured as the lowest wage each worker indicated that he/she would accept for completion of the one-minute image interpretation task. \textit{Answered optional questions} is a binary variable coded as 1 if the worker answered any of the optional questions not required for payment and is coded as 0 if the worker did not. This represents extra effort or extra work put forth by the worker on the job and is a proxy for extra-role prosocial behavior in this context.

\textsuperscript{15} E.g., individuals who responded that their age was 0 or above 100
5.3.2. Independent Variables. CSR is a dummy coded as 1 if the worker received any type of information about the corporate philanthropy program and is coded as 0 if the worker received no information about the corporate philanthropy program.

5.3.3. Control Variables. Control variables are constructed from survey answers 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). The following variables were interacted with the independent variable Reservation wage in various specifications of the analysis. Top performer is a proxy for worker performance using the rating that an AMT worker received based on his/her performance on past HITs. Top performer is a dummy variable equal to 1 if the worker had a HIT approval rating of 100 (the highest possible rating) and equal to 0 otherwise. Stated would reduce salary for CSR is a dummy variable equal to 1 if the worker agreed or strongly agreed with the statement “I would accept a lower salary/payment from an employer that gives back to the broader community than from an employer that does not give back to the broader community” and equal to 0 if the worker strongly disagreed, disagreed, or neither agreed nor disagreed. Stated would work harder for CSR is a dummy variable equal to 1 if the worker agreed or strongly agreed with the statement “I would work harder for an employer that gives back to the broader community than for an employer that does not give back to the broader community” and equal to 0 if the worker strongly disagreed, disagreed, or neither agreed nor disagreed. Stated

---

16 The HIT approval rating is a score logged by AMT that indicates the proportion of a worker’s previous AMT HITs that have been approved. If an employer reviews a worker’s output and is dissatisfied, that employer can reject the worker’s HIT and refuse payment. Employers have the ability to screen workers based on their HIT approval ratings, making this a very relevant and actionable performance measure. Only workers with a HIT approval rate greater than or equal to 95 (out of 100) were recruited for this HIT.
employer commitment imp. is a dummy variable equal to 1 if the worker agreed or strongly disagreed with the statement “My employer’s commitment to the broader community is important to me” and equal to 0 if the worker strongly disagreed, disagreed, or neither agreed nor disagreed.

5.4 Results

Table 4 reports mean reservation wage and likelihood of answering the optional questions for the entire AMT sample and by condition. Reservation wage is the lowest wage each worker indicated that he/she would accept for completion of the one-minute image interpretation task. The mean reservation wage for the entire sample was $0.14. As Columns 2 and 3 demonstrate, receiving a philanthropy message has a marginally significant negative effect on reservation wage compared to the control, which received no philanthropy message ($0.139 vs. $0.156, p < 0.10). Although the $0.02 difference is a small absolute amount, it is important to note that in the context of AMT wages, where the average wage is approximately $0.08 per minute (Ipeirotis, 2010), a wage difference of $0.02 per minute represents a 25% wage differential. Furthermore, a reservation wage difference of $0.02 represents a decrease of 12% compared to the average reservation wage for the job in this sample.

Eighty-seven percent of all workers in the sample answered the optional questions. Workers who received a philanthropy message were more likely to answer the optional questions than workers in the control group (0.89 vs. 0.81, p < 0.05).

The mean reservation wages and likelihoods of answering the optional questions for workers receiving the four different philanthropy messages (reported in Columns 3-7) were statistically equivalent, suggesting that H1c is not supported. There was no statistically significant difference in the effects on reservation wage or likelihood of answering the optional
questions from the way in which the philanthropy message was delivered (whether the message was general or tied to the job, solicited input or did not solicit input). These four conditions have thus been pooled under one “philanthropy message” or “CSR” condition in the analyses that follow.

***Insert Table 4 here***

The results of OLS regressions are reported in Table 5. Model 1 shows that receiving a philanthropy message resulted in a marginally significantly lower average reservation wage ($β = -0.02, p <0.10$), supporting H1b. Demographic control variables (gender, age, level of education, income, political affiliation, and race) were included in an alternate specification of Model 1 as a robustness check. Coefficients on the demographic variables were not statistically significant ($p >0.10$), nor did they alter the direction or significance of the coefficient of interest (CSR)$^{17}$.

Model 2 examines the effect of being a Top Performer on reservation wage. As would be expected, the highest performers command a wage premium: individuals with the highest HIT Approval Rating of 100 have a higher reservation wage ($β = 0.07, p <0.01$). This wage premium is qualified by a large negative interaction between Top Performer and CSR ($β = -0.06, p <0.01$). 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 in the absence of such information. This finding is robust to various specifications of the high performer variable. To investigate why the highest performing workers might exhibit a greater response to CSR, I compared the highest performers to the non-highest performers on a number of characteristics. Although there was no statistically significant difference in responses

$^{17}$ Furthermore, demographic characteristics were well randomized across treatment and control groups. These variables are thus not included in the regression models presented, but are available from the author upon request.
to explicit questions regarding the importance of the employer giving back to the broader community, a greater proportion of the highest performers indicated that they volunteered in 2011 (49% vs. 38%, \( p < 0.05 \)), suggesting that the highest performers may be more altruistically inclined.

Model 3 includes as interactions with the independent variable of interest responses to questions regarding stated behavior about corporate social responsibility. As part of the survey after completion of the job, participants were asked to indicate to what degree they agreed with the statement “My employer’s commitment to the broader community is important to me” on a 5-point Likert scale with 1 being “Strongly Disagree” and 5 being “Strongly Agree.” Those who agreed or strongly agreed with the statement exhibited a greater decrease in reservation wage from receiving information about a philanthropy message than those who strongly disagreed, disagreed or neither agreed nor disagreed (\( \beta = -0.04, p < 0.05 \)). The same is not true for those who agreed or strongly agreed with the statement “I would accept a lower salary/payment from an employer that gives back to the broader community than from an employer that does not give back to the broader community” (\( \beta = -0.01, p >0.10 \)). This finding is robust to an alternate specification of the stated preference variables (above vs. below the median response), suggesting the importance of eliciting revealed, rather than stated, preferences regarding individuals’ behavior, particularly in response to corporate social responsibility.

***Insert Table 5 here***

To begin to explore the mechanisms driving the effect of receiving information about the company’s corporate philanthropy program on workers’ reservation wage, I analyzed self-reported survey data collected from individuals in the CSR treatment group (who received information about the firm’s corporate philanthropy program). These workers were asked to
indicate their agreement with the following statements\(^{18}\) using a 5-point Likert scale with 1 being “Strongly Disagree” and 5 being “Strongly Agree”: 1) “Learning about the charitable giving program made me think of this employer in a positive light”; 2) The charitable giving program was a signal to me that this employer was trustworthy”; 3) “The charitable giving program was a signal to me that this employer is not greedy”; 4) “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”; 5) “Learning about the charitable giving program makes me feel that I am doing good by working with this employer.” The direction and statistical significance of the relationship between responses to these statements and reservation wage supports the tenets of the mechanisms underpinning signaling theory (proxied by statements 1 through 4) and social identity theory (proxied by statement 5), although causality cannot be established. Using binary statement variables (1 if the individual “Agreed” or “Strongly Agreed” with the statement and 0 otherwise), regressions of each statement variable (as the IV) on reservation wage (as the DV) with demographic control variables included resulted in negative coefficients (each between -$0.01 and -$0.03) that were highly statistically significant ($p < 0.01$). These relationships were robust to various specifications of the dependent variables.\(^{19}\) This suggests that individuals who interpreted the charitable giving program as a signal of the firm’s values and trustworthiness (proxied by Statements 1 through 4) were willing to accept a lower wage, as would be extrapolated from signaling theory; and likewise, that individuals whose self-image was positively affected by the firm’s charitable giving program (proxied by Statement 5) were willing to accept a lower wage, as would be extrapolated from social identity literature. Because agreement with these statements was not exogenous in the study, I cannot infer a causal

\(^{18}\) Presented in random order.

\(^{19}\) Responses to each of the statements were highly correlated; these findings are also robust to various specifications using merged indices of statement responses. Regression results are available from the author upon request.
relationship but rather a simple correlation in the direction that is consistent with the respective theories.

Logistic regressions exhibited in Table 6 provide insight into the drivers affecting whether workers completed extra work by answering optional survey questions not required for payment, a proxy for extra-role prosocial behavior. Model 1 demonstrates that receiving a philanthropy message resulted in a higher probability of answering optional questions ($p < 0.05$), supporting H2. A marginal effects analysis provides a sense of the effect size. This analysis shows that the probability of answering the optional questions increases by 8% for workers in the CSR treatment condition. In Model 2 I control for characteristics of workers that affect their likelihood of answering the optional questions. Intuitively, whether a worker completed the image interpretation job would likely affect his/her experience on the HIT and thus the likelihood that he/she would go above and beyond for the employer. Likewise, workers of certain demographic characteristics could be more likely to go above and beyond for an employer. Model 2 shows that controlling for whether or not the worker completed the image interpretation job and gender does not change the fact that receiving a philanthropy message results in a higher probability of answering optional questions ($p < 0.05$). Other demographic variables, when included in alternate specifications of the regressions as robustness checks, did not alter the direction or significance of the coefficients of interest.\(^{20}\) Model 3 includes as interactions with the independent variable of interest responses to questions regarding stated behavior about corporate social responsibility. Those who agreed or strongly agreed with the statement “My employer’s commitment to the broader community is important to me” were in practice less likely to answer the optional questions than those who strongly disagreed, disagreed or neither

\(^{20}\) Furthermore, demographic characteristics were well randomized across treatment and control groups. These variables are thus not included in the regression models presented, but are available from the author upon request.
agreed nor disagreed \( (p < 0.05) \). Those who agreed or strongly agreed with the statement “I would work harder for an employer that gives back to the broader community than for an employer that does not give back to the broader community” were neither more likely nor less likely to answer the optional questions than those who strongly disagreed, disagreed or neither agreed nor disagreed \( (p > 0.10) \). These findings are robust to an alternate specification of the stated preference variables (above vs. below the median response), reiterating the importance of eliciting revealed, rather than stated, preferences regarding individuals’ behavior, particularly in response to corporate social responsibility.

***Insert Table 6 here***

6. Discussion and Conclusion

This paper provides causal empirical evidence that CSR decreases employee salary requirements and suggests that CSR increases the likelihood employees will engage in extra-role prosocial organizational behavior – a willingness to ‘go above and beyond’ for the firm. Given that the importance of these employee outcomes to firm performance has been established (e.g., Larkin et al. 2010, Carnahan et al. 2012, Koch and McGrath 1996, Shaw et al. 2013) and because this paper provides causal empirical evidence of the mechanism in the first link in the ‘CSR - employee outcomes- firm performance’ chain, these findings support the notion that the employee is an important mechanism through which CSR can influence firm performance. This is consistent with the literature that suggests that it is through the firm’s stakeholders that CSR influences firm performance (e.g., Hillman and Keim 2001, Baron 2001, Barnett 2007, Casadesus-Masanell et. al. 2009, Servaes and Tamayo 2013). This is also consistent with applications of social identity theory and signaling theory to CSR, which suggest that employees
gain utility from working at socially responsible firms (Ashforth and Mael 1989, Dutton and Dukerich 1991, Turban and Greening 1997, Albinger and Freeman 2000, Backhaus Stone and Heiner 2002, Delmas and Pekovic 2012, Greening and Turban 2000, Rupp et al. 2006, Fombrun and Shanley 1990, Waddock and Graves 1997, Turban and Greening 1997, Godfrey Merrill and Hansen 2009). The finding that CSR resonates even more strongly with higher performing workers, causing them to be willing to give up the wage differential they otherwise demand, 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).

The misalignment of stated and revealed behavior in this study highlights the importance of eliciting revealed, as opposed to stated, preferences and behavior for future empirical studies, particularly in domains where one would expect that stated responses might be inflated due to social desirability (List and Gallet 2001). In empirical studies of relationships between the firm and individual-level stakeholders, this paper highlights that caution should be taken in using self-reported hypothetical individual-level survey data to measure effects of firm inputs on individual-level stakeholder outputs. Indeed, the findings of this study help corroborate the notion that individuals do not necessarily behave the way they say they will behave (List and Gallet 2001).

Given the context of the field experiments in online labor marketplaces, this study suggests that CSR can play a role in the strategic management of a particular type of human assets, ‘virtual’ human assets (Gibson and Cohen 2003; Kirkman et al. 2004), which represent a shift away from the traditional employer-employee relationship in the changing world in which firms operate (Prahalad and Hamel 1996, Lowendahl and Revang 1998, Chesbrough and Teece 2012).
Indeed, the use of online marketplaces is becoming increasingly popular among firms (The Economist 2010), particularly startups and smaller businesses. It is a means to access low cost labor and skills not present in an organization without having to hire full-time employees in times of economic challenges (Noveck 2009, O’Conner 2013). Understanding how firms can strategically manage ‘virtual’ human assets through online labor markets will become increasingly important, certainly for the study of entrepreneurship and small business, and also increasingly for the strategy field in general. This paper suggests the relevance of future exploration into the use of intrinsic motivation and rewards, as opposed to simply extrinsic incentives, as a means to manage these virtual human assets.

Of course, an important limitation of the use of a field experiment in a particular setting is its external validity. AMT HITs tend to be micro-tasks for very small amounts of pay and are thus not characteristic of typical jobs that would be completed by an employee working full-time for a firm. Elance jobs, although much more typical of the types of jobs completed by employees in large firms, are nevertheless managed and completed online, unlike most employer-employee relationships. Caution must be taken when generalizing this paper’s findings to firms where employees work in-house and the duration of the employer-employee relationship is longer term.

Another limitation is the simple operationalization of CSR in these field experiments. The description of UrGift.In’s socially responsible intent in the Elance study is quite typical of that of many startup and small businesses that do not have much information other than intent to share with prospective employees. The description of the corporate philanthropy program in the AMT study is also not that dissimilar from that of many actual firms that send employees emails or printed reports informing them about the company’s charitable giving. Furthermore, each study

21 The increasing relevance of these ‘virtual assets’ was highlighted during the Plenary ‘The Future of Strategy in a Transient Advantage World’ at the Strategic Management Society conference in Atlanta, on September 29, 2013.
used a discrete type of CSR (a corporate philanthropy in the AMT study and a company’s socially responsible intent in the Elance study) by design to prevent problems associated with aggregating varied CSR constructs in empirical research (Chatterji and Levine, 2006; Chatterji, Levine and Toffel, 2009). However, I recognize that a firm’s CSR programs can be more interrelated and complex than the CSR programs described in this paper, and the results of this paper thus cannot be so easily generalized to firms whose CSR programs are very interconnected in nature. Furthermore, it is important to note that the lack of a differential effect on reservation wage between a charitable giving program that involves employee participation versus one that does not as found in the AMT study may not apply to programs that involve employees in a more integrated manner (for example, corporate charity days or employee volunteer programs).

From a practical perspective, this paper suggests that managers involved in the recruiting and hiring process should highlight their firm’s corporate philanthropy programs and socially responsible intent. It furthermore suggests that dissemination of this information in print (that is, in recruiting documents, presentations at career fair events, etc.) can be effective. It is helpful for inferring practical recruiting implications for the firm and its managers that information about the firm’s CSR takes place at an initial and very short-term interaction with the firm in these studies. It is at the onset of the employee-employer relationship that initial salary negotiations take place, and this initial salary goes on to have resounding longer-term salary implications throughout the lifetime of an employee at a firm (since raises are often calculated as percent increases in salary). This paper suggests that, when managing virtual employees and short-term contractors, sharing information about a firm’s CSR programs can influence the salary that these employees are willing to accept and can motivate them to go above and beyond for the firm.
The methodology used in this paper – random assignment of firm-level conditions through field experiments implemented in online marketplaces – can be applied to and help establish causality when studying other relationships of relevance to the strategic management field, in particular, where employee outcomes are the dependent variable. I encourage strategy and management researchers to view online labor marketplaces not simply as access to individuals willing to participate in online experiments or answer surveys, but also as a setting in which to conduct field experiments with a real labor market.

This paper establishes a causal relationship between CSR and important employee outcomes. It leaves unexplored for future research analysis of which types of firms stand to benefit the most from this mechanism. This paper focused on particular CSR activities: a declaration of socially responsible intent in the Elance field experiment and corporate philanthropy in the AMT field experiment. In future work one could analyze whether these effects hold for other types of CSR and whether different CSR policies/activities act as substitutes or complements. Although the AMT study was limited to US workers, participants in the Elance study were geographically diverse, suggesting that the effects are not limited to US workers. There are future opportunities to study how the effects identified in this paper vary by geographic origin and location of workers. The type of worker performance studied in this paper was willingness to complete extra work unrewarded for payment, an example of extra-role prosocial organizational behavior. Future work could distinguish between this worker performance outcome and other types of worker performance outcomes such as accuracy or effort put forth on work explicitly required by the firm (in-role performance). Also, this paper does not measure a potential selection effect of CSR on employee performance, but rather, isolates a treatment effect of CSR on employee performance. Future work could study the
selection effect. There is also opportunity for future research to assess whether the effects found in this paper vary by the amount or stock of type of CSR activity and over time.
References


The Economist. 2010. A clouded future: online services that match freelancers with piecework are growing in hard times. 13 May http://www.economist.com/node/16116919.


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


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


### Figures and Tables

#### Figure 1. Elance Message Received by Condition

<table>
<thead>
<tr>
<th>Control group</th>
<th>CSR treatment group</th>
</tr>
</thead>
</table>

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. Amazon Mechanical Turk Message Received by Condition

<table>
<thead>
<tr>
<th>Control group</th>
<th>Philanthropy treatment groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General message without input</td>
</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

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.

In the meantime, we'd like to tell you about one of our philanthropic programs.

**Charitable Giving Program**

We have a longstanding tradition of giving back to the communities where our workers live and work.

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.

In 2011, we donated 1% of our profit to 5 charities.

With this goal, we will donate $0.10 to a charity when you finish this HIT.

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:

- 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.
- Please select the nonprofit charity below to receive this donation.
- One of the below five charities, selected at random, will receive the donation.

- **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.
### Table 1. Elance Worker Characteristics: Summary Statistics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>College degree (Y=1, N=0)</td>
<td>0.84</td>
<td>0.37</td>
</tr>
<tr>
<td>Years of work experience</td>
<td>10.86</td>
<td>8.15</td>
</tr>
<tr>
<td>Female (Y=1, N=0)</td>
<td>0.65</td>
<td>0.48</td>
</tr>
<tr>
<td>Living in Asia (Y=1, N=0)</td>
<td>0.45</td>
<td>0.50</td>
</tr>
<tr>
<td>Living in US (Y=1, N=0)</td>
<td>0.37</td>
<td>0.49</td>
</tr>
<tr>
<td>Living in Europe (Y=1, N=0)</td>
<td>0.06</td>
<td>0.24</td>
</tr>
<tr>
<td>Living in Central or South America (Y=1, N=0)</td>
<td>0.05</td>
<td>0.22</td>
</tr>
<tr>
<td>Living in EU (Y=1, N=0)</td>
<td>0.03</td>
<td>0.19</td>
</tr>
<tr>
<td>Living in Canada (Y=1, N=0)</td>
<td>0.02</td>
<td>0.15</td>
</tr>
<tr>
<td>Bid Amount ($)</td>
<td>100.00</td>
<td>92.2</td>
</tr>
</tbody>
</table>

Note: N=83, except for Female (N=78)

### Table 2. Results of OLS Regression for Elance Bid Amount (USD)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>-53.77***</td>
<td>-46.12**</td>
</tr>
<tr>
<td></td>
<td>(19.64)</td>
<td>(20.65)</td>
</tr>
<tr>
<td>2nd Job Posting</td>
<td>5.46</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(26.15)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61.18***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(21.97)</td>
<td></td>
</tr>
<tr>
<td>College Degree</td>
<td>17.64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(19.87)</td>
<td></td>
</tr>
<tr>
<td>Years of Work Experience</td>
<td>1.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.07)</td>
<td></td>
</tr>
<tr>
<td>Living in US</td>
<td>10.52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(29.91)</td>
<td></td>
</tr>
<tr>
<td>Living in Asia</td>
<td>22.84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(22.69)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>123.98***</td>
<td>33.97</td>
</tr>
<tr>
<td></td>
<td>(19.8)</td>
<td>(26.68)</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td>78</td>
</tr>
</tbody>
</table>

Notes: Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses. The dependent variable is bid amount in US dollars. * p<.10, ** p<.05, *** p<.01.
Table 3. Amazon Mechanical Turk Worker Characteristics: Summary Statistics

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (Y=1, N=0)</td>
<td>0.45</td>
<td>0.50</td>
</tr>
<tr>
<td>Age</td>
<td>30.00</td>
<td>11.00</td>
</tr>
<tr>
<td>Democrat (Y=1, N=0)</td>
<td>0.44</td>
<td>0.50</td>
</tr>
<tr>
<td>Republican (Y=1, N=0)</td>
<td>0.14</td>
<td>0.34</td>
</tr>
<tr>
<td>Independent (Y=1, N=0)</td>
<td>0.30</td>
<td>0.47</td>
</tr>
<tr>
<td>Other political affiliation (Y=1, N=0)</td>
<td>0.10</td>
<td>0.30</td>
</tr>
<tr>
<td>White (Y=1, N=0)</td>
<td>0.77</td>
<td>0.42</td>
</tr>
<tr>
<td>Black (Y=1, N=0)</td>
<td>0.08</td>
<td>0.27</td>
</tr>
<tr>
<td>Hispanic (Y=1, N=0)</td>
<td>0.05</td>
<td>0.20</td>
</tr>
<tr>
<td>Asian (Y=1, N=0)</td>
<td>0.12</td>
<td>0.32</td>
</tr>
<tr>
<td>Pacific islander (Y=1, N=0)</td>
<td>0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>College degree (Y=1, N=0)</td>
<td>0.51</td>
<td>0.50</td>
</tr>
<tr>
<td>Income (&lt;$30K=1, $30-60K=2, &gt;$60K=3)</td>
<td>1.90</td>
<td>0.82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AMT experience characteristics</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>HITs per week in the last month (&lt;10 = 1, 10-49=2, 50-100=3, &gt;100=4)</td>
<td>2.33</td>
<td>1.04</td>
</tr>
<tr>
<td>HIT approval rate (95%=1, 96%=2, 97%=3, 98%=4, 99%=5, 100%=6)</td>
<td>4.63</td>
<td>1.32</td>
</tr>
<tr>
<td>Primary reason complete HITs on AMT (Y=1, N=0): 'The money I earn on AMT is my primary source of income.'</td>
<td>0.12</td>
<td>0.33</td>
</tr>
<tr>
<td>Primary reason complete HITs on AMT (Y=1, N=0): 'The money I earn on AMT is not my primary source of income, but is the main reason I complete HITs on AMT.'</td>
<td>0.54</td>
<td>0.50</td>
</tr>
<tr>
<td>Primary Reason Complete HITs on AMT (Y=1, N=0): 'It is a productive use of my free time.'</td>
<td>0.30</td>
<td>0.46</td>
</tr>
<tr>
<td>Primary Reason Complete HITs on AMT (Y=1, N=0): 'It is fun.'</td>
<td>0.04</td>
<td>0.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charitable characteristics</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donated money to a charity or nonprofit in 2011 (Y=1, N=0)</td>
<td>0.53</td>
<td>0.50</td>
</tr>
<tr>
<td>Volunteered with charity or nonprofit in 2011 (Y=1, N=0)</td>
<td>0.41</td>
<td>0.49</td>
</tr>
<tr>
<td>Agree or strongly agree (Y=1, N=0): 'My employer's commitment to the broader community is important to me.'</td>
<td>0.63</td>
<td>0.48</td>
</tr>
<tr>
<td>Agree or strongly agree (Y=1, N=0): 'I would accept a lower salary/payment from an employer that gives back to the broader community than from an employer that does not give back to the broader community.'</td>
<td>0.37</td>
<td>0.48</td>
</tr>
<tr>
<td>Agree or strongly agree (Y=1, N=0): 'I would work harder for an employer that gives back to the broader community than for an employer that does not give back to the broader community.'</td>
<td>0.57</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Note: N=450
### Table 4. Mean Reservation Wage and Likelihood of Answering Optional Questions, by Condition (Amazon Mechanical Turk)

<table>
<thead>
<tr>
<th></th>
<th>Entire sample</th>
<th>No phil. message (control)</th>
<th>Any phil. message</th>
<th>General phil. message without input</th>
<th>General phil. message with input</th>
<th>Tied-to-job phil. message without input</th>
<th>Tied-to-job phil. message with input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation wage</td>
<td>14.2</td>
<td>15.6</td>
<td>13.9</td>
<td>13.3</td>
<td>14.4</td>
<td>14.2</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>(8.8)</td>
<td>(8.2)</td>
<td>(8.9)</td>
<td>(8.8)</td>
<td>(8.9)</td>
<td>(8.9)</td>
<td>(9.2)</td>
</tr>
<tr>
<td>Answered questions</td>
<td>0.87</td>
<td>0.81</td>
<td>0.89</td>
<td>0.91</td>
<td>0.89</td>
<td>0.89</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>(0.33)</td>
<td>(0.40)</td>
<td>(0.31)</td>
<td>(0.28)</td>
<td>(0.30)</td>
<td>(0.31)</td>
<td>(0.34)</td>
</tr>
<tr>
<td>N</td>
<td>450</td>
<td>94</td>
<td>356</td>
<td>91</td>
<td>79</td>
<td>92</td>
<td>94</td>
</tr>
</tbody>
</table>

Notes: Unit for reservation wage means is cents. Unit for answered optional questions is percent. Standard errors are reported in parentheses.

### Table 5. Results of OLS Regressions for Reservation Wage (Amazon Mechanical Turk)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>-1.74*</td>
<td>0.69</td>
<td>1.38</td>
</tr>
<tr>
<td></td>
<td>(0.97)</td>
<td>(1.29)</td>
<td>(1.78)</td>
</tr>
<tr>
<td>Top Performer</td>
<td>6.92***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x (Top Performer)</td>
<td>-6.12***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stated Employer Commitment Imp.</td>
<td></td>
<td>8.08**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.87)</td>
<td></td>
</tr>
<tr>
<td>CSR x (Stated Employer Commitment Imp.)</td>
<td></td>
<td>-4.39**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.19)</td>
<td></td>
</tr>
<tr>
<td>Stated Would Reduce Salary for CSR</td>
<td></td>
<td>-2.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.76)</td>
<td></td>
</tr>
<tr>
<td>CSR x (Stated Would Reduce Salary for CSR)</td>
<td></td>
<td>-1.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.04)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>15.60***</td>
<td>12.60***</td>
<td>14.85***</td>
</tr>
<tr>
<td></td>
<td>(0.85)</td>
<td>(1.15)</td>
<td>(1.61)</td>
</tr>
<tr>
<td>N</td>
<td>450</td>
<td>394</td>
<td>450</td>
</tr>
</tbody>
</table>

Notes: Estimated coefficients of OLS regressions are reported, with robust standard errors in parentheses. The dependent variable is reservation wage in cents. * p<.10, ** p<.05, *** p<.01.
Table 6. Results of Logistic Regression for Answered Optional Questions

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>0.65**</td>
<td>0.64**</td>
<td>1.57***</td>
</tr>
<tr>
<td></td>
<td>(0.31)</td>
<td>(0.32)</td>
<td>(0.55)</td>
</tr>
<tr>
<td>Completed Image Interpretation Job</td>
<td>0.75**</td>
<td>0.79**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.36)</td>
<td>(0.35)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.95***</td>
<td>0.92***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.32)</td>
<td>(0.33)</td>
<td></td>
</tr>
<tr>
<td>Stated Employer Commitment Imp</td>
<td></td>
<td>1.36*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.70)</td>
<td></td>
</tr>
<tr>
<td>CSR* (Stated Employer Commitment Imp)</td>
<td>-1.69**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.77)</td>
<td></td>
</tr>
<tr>
<td>Stated Work Harder for CSR</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.70)</td>
<td></td>
</tr>
<tr>
<td>CSR* (Stated Work Harder for CSR)</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.78)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.44***</td>
<td>0.91</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>(0.26)</td>
<td>(0.29)</td>
<td>(0.47)</td>
</tr>
<tr>
<td>N</td>
<td>450</td>
<td>450</td>
<td>450</td>
</tr>
</tbody>
</table>

Notes: Estimated coefficients of logistic regressions are reported, with robust standard errors in parentheses. The dependent variable is a dummy variable equal to 1 if the worker answered any of the optional questions and equal to 1 if the worker did not answer any of the optional questions. * p<.10, ** p<.05, *** p<.01.