Crime, Punishment and the Halo Effect of Corporate Social Responsibility

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Abstract

Three reasons are often cited for why corporate social responsibility is valuable: product quality signalling, delegated giving, and the halo effect. Previous tests focus on consumers and cannot easily separate these channels because consumers are affected by all three. We focus on prosecutors, who are only susceptible to the halo effect. Using prosecutions of the Foreign Corrupt Practices Act (FCPA), we find that more socially responsible firms pay $2.5 million or almost 50% of the median fine less for bribery. We use the FCPA's unexpected increase in enforcement to address reverse causality, rule out political donations as a confounding factor and text-mine case files for prosecutorial sentiment.

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1 Introduction

Social responsibility is an important aspect of corporate strategy. From Google to General Electric (GE) and Intel to Starbucks, corporations regularly spend hundreds of millions of dollars for community, philanthropic, environmental and employee satisfaction programs.[1] Similarly, they might forego billions in revenue streams that are morally questionable.[2] According to a 2009 McKinsey Survey of 300 Chief Financial Officers, investment professionals and corporate social responsibility practitioners, two-thirds of them embraced the notion that corporate social responsibility adds to shareholder value. They believed that the value added is tied to promoting a good corporate image.

Three reasons or economic channels through which strategic corporate social responsibility (CSR) might create value all revolve around improving corporate image.[3] The first channel is that CSR is costly signalling of product market quality (see, e.g, Milgrom and Roberts (1986)). An example of CSR as costly signalling is GE commercials on Sunday morning political talk shows that showcase GE's windmills in the wheat fields of the American heartland.

The second channel is that CSR is delegated giving, whereby firms are well-positioned to also help consumers engage in charitable giving (Becker, 1974a; Andreoni, 1989) because of complementarities involving goodness in the production function (see, e.g. Besley and Ghatak (2005)). In this case, consumers have delegated their giving to GE so that when they buy GE lightbulbs, they know they are contributing to the preservation of nature. The consumer would be willing to donate directly to this cause but GE is simply more

[1]For example, in the mid-2000s, Google initiated its famed 1% program, which invested 1% of its profits in philanthropic and non-profit interests. In the late 2000s, General Electric spent $160 million for community and employee philanthropic programs and earmarked billions more for the development of eco-friendly products. At the same time, Intel spent $100 million for global education programs and energy conservation (see, e.g., Hong, Kubik, and Scheinkman (2011)).

[2]The most recent high profile example is CVS Pharmacy's plan in 2014 to stop selling cigarettes at all retail locations. This move is forecasted to cost $2 billion a year in direct sales but their press release suggested that this strategy was meant to improve the company's image as a health-care provider (see, e.g., Cheng, Hong, and Shue (2013)).

[3]See Heal (2005) and Benabou and Tirole (2010) for reviews of the literature.

knowledgeable and economies of scale make them better able to contain the fall out of their supply chain.

The third channel for why CSR might be valuable is that it generates a halo effect, a cognitive bias long documented by psychologists (see, e.g., Thorndike (1920), Nisbett and Wilson (1977)) in which one's judgment of a person's character can be influenced by one's overall (and usually first) impression of him or her with little actual knowledge of the individual. Such halo effect considerations do influence how businesses are run. Car companies, for instance, will roll out what they call a halo vehicle, a particular model with special features that helps sell all the other models in the range. In other words, consumers use the fact that a firm cares about the wheat fields of America to (over-) extrapolate that it also produces great lightbulbs.

A large literature, dubbed "doing well by doing good", has long tried to separate these three channels using panel data on US corporations and their CSR activities (Benabou and Tirole (2010), Heal (2005), Margolis, Elfeinbein, and Walsh (2009) and Kitzmueller and Shimshack (2012)). Yet it has been difficult to separately identify the economic value of each of these three sources. The best evidence thus far has come from experiments. For instance, Elfenbein, Fisman, and McManus (2012) study eBay sellers to isolate a product signaling effect and Smith, Read, and Lopez-Rodriguez (2010) use student experiments to show that CSR might engender a halo effect for consumer products. But the extrapolative relevance of these experiments for large corporations has not been established. At the same time, field and case studies such as Vanhamme and Grobben (2009), who study corporate crises, and Barrage, Chyn, and Hastings (2014), who focus on British Petroleum's oil spill, establish the effectiveness of advertising in countering negative consumer perceptions. But even in these clever field or experimental studies, it is not always easy to separate costly signalling, delegated giving, and the halo effect. For instance, firm spending on CSR in order to better weather corporate crises might be consistent with all three channels.

One major reason for this difficulty is that all existing tests focus on consumers. However,

it is difficult to disentangle the three effects because consumers value all of them. To avoid this problem we focus on federal prosecutors, who are only susceptible to the halo effect. We study how these prosecutors choose to punish crimes by socially responsible corporations relative to non-responsible ones. These prosecutors do not consume a company's product when they hand down a sentencing decision, so they do not value signalling through advertising or product bundling with delegated giving. On the other hand, courtrooms are exactly the type of setting in which the halo effect is likely to manifest itself. The earliest psychology studies of halo effects focused on the classroom and judicial affairs and the notion that attractive people are thought by jurors to be less likely to commit a crime.

Our study uses data on the federal prosecution of the Foreign Corrupt Practices Act (FPCA) by the US Justice Department and the SEC in the period 1990-2013. We focus on the FPCA for three reasons. First, as we detail below, the sentencing guidelines in *A Resource Guide to the U.S. Foreign Corrupt Practices Act*, published by the Criminal Division of the U.S. Department of Justice and the Enforcement Division of the U.S. Securities and Exchange Commission, explicitly allow for prosecutorial discretion that takes into account firm character. This makes it likely that a firm's corporate social responsibility in other spheres of its business could be important in influencing the judgments of prosecutors.

Second, unlike other types of corporate crime such as accounting fraud, which almost always involves the CEO, CFO or other upper management, bribes often do not involve top firm executives.[4] While the fraud is committed by individuals farther down the organizational hierarchy, FCPA prosecutions typically also involve separate actions against the firm as a whole. This makes FCPA enforcement a more fitting setting than fraud to measure halo effects generated by firm image or reputation.

Third, unlike other crimes, the bribe amount and the value of business gained from the bribe offer a clear proxy for the harm done by the crime. Calculating the harm done by accounting fraud is more complicated. This measure is crucial in trying to identify a halo

[4]See Bergstresser and Philippon (2006) for instances and evidence of CEO manipulation and accounting fraud.

effect because it allows us to control for the severity of the crime. The most basic theory of fines, going back to Becker (1974b), shows that fines should rise as harm increases. In order to make sure we are not capturing a relationship between fines and harm, it is important to have a reliable measure of the latter.

A number of papers have studied the enforcement of the FCPA to determine what drives sanction amounts (see, e.g., Choi and Davis (2013) and Karpoff, Lee, and Martin (2014)). These papers show that fines rise with the bribe payment amount, as expected, and vary with a host of other characteristics, such as the country in which the bribe was paid. Following the Becker (1974b) and Polinsky and Shavell (1992) models of optimal fines, the standard approach in the empirical literature is to regress sanctions on bribe amounts and other explanatory variables. Traditional explanatory variables usually generate a sizeable R^2 of around .6 to .8. It is straightforward to map the halo effect to this setting if we assume that the prosecutors condition on firm attributes for CSR or goodness when forming an expectation of the level of harm. In the presence of a halo effect, we expect firms that conduct more CSR to be punished less, all else equal.

We measure corporate social responsibility using the most comprehensive and standard scores in the literature, the Kinder, Lydenberg and Domini (KLD) scores of CSR. KLD scores are developed by a for-profit company, akin to a credit rating agency. The scores measure firm-level social responsibility along the lines of community relations, product characteristics, environmental impact, employee relations, diversity and governance. KLD scans public databases, such as those on employee strikes and Environmental Protection Agency (EPA) violations, and uses a team of analysts to measure these and other social responsibility dimensions of firm production. We explain in Section 3 why these scores are a reasonable, albeit imperfect, proxy for socially responsible expenditures.

Our most conservative estimate is that a one point increase in the KLD score results in an average reduction in sanctions of 2 million dollars. This is a substantial change in punishment, equal to 40% of the median sanction or 10% of the mean sanction. The point

estimates reach as high as 4 million dollars for a one point increase in KLD. According to KLD guidelines, a one point increase in KLD requires a firm to change one corporate social responsibility indicator from a concern to neutral, or from neutral to a strength. For example, a company would need to implement a "notable strong retirement benefits program". If it had an underfunded or subpar retirement benefits program in place, it would need to improve its funding or increase benefits.

We then break down KLD scores into their subcomponents to determine which ones are most relevant for FCPA fines. Categories related to products, employees, diversity, and community have the strongest explanatory power, whereas environment and governance do not. We include in regression specifications firm size and industry KLD controls, so that our effects are not driven by heterogeneity in either of these firm characteristics.

There are three main concerns with our baseline results, which we address in turn. The first is the concern of reverse causality, i.e. concern about the FCPA leads certain firms to strategically choose KLD scores. To show that this is not the case, we exploit the fact that the FCPA only became widely enforced after 2007 and show that KLD scores in 2007 and various measures of lagged KLD scores are also negatively correlated with sanctions. We view these past CSR scores as predetermined and not in response to FCPA fines. In other words, we use lagged KLD scores to avoid the possibility of reverse causality.

A second key concern is that KLD scores may affect FCPA fines because high KLD firms might undertake less harmful bribes. To this end, we examine whether firm KLD scores are correlated with the characteristics of bribes. Using a variety of metrics, we find no fundamental difference in the bribing behavior of more or less socially responsible firms. This implies that the halo effect is illusory in nature rather than real.

A third key concern is that high KLD firms might be more politically connected or more cooperative after the bribe has been discovered. Prosecutors may take into account the lobbying power of firms to avoid angering those that are more powerful. In order to test this, we show that sanctions are not lower for those firms that contribute more to political

campaigns. Prosecutors might also deal more leniently with compliant firms, since FCPA rules allow for prosecutorial discretion when it comes to cooperation with the investigation. However, earlier work by Choi and Davis (2013) finds that measures of cooperation or compliance do not explain the cross-sectional variation in the sanction amounts. As a result, it is unlikely that high KLD firms are more cooperative or collaborative. To confirm this, we text-mine the press releases upon settlement of each FCPA case in our sample and measure the frequency of words such as "cooperation" and "compliance". Indeed, we find that high KLD firms are not more likely to be cooperative.

We then use text mining to go one step further and establish that the effects of KLD stem from the positive emotions of the prosecutors. Interestingly, we find that in contrast to the text-mining results for cooperation, positive emotional or sentimental words are associated with high KLD firms. In other words, it appears that the lower sanctions obtained by high KLD firms are reflected in the emotional or sentimental tones of their press releases. And similar to Choi and Davis (2013), we find that the frequency of words reflecting cooperation or compliance does not explain the sanction amount. In fact, even when we control for this measure of collaboration, KLD still leads to lower sanctions.

A contribution of our paper is to place a value on KLD scores. These measures of CSR have been criticized for the difficulty of quantifying their benefits. As far as we know, this is also the first paper to examine the effect of corporate social responsibility on the determinants of corporate punishment. Our goal in this paper has simply been to cleanly measure the halo effect in the context of large corporations. Our findings are relevant to a broader scope of situations. If halo effects are present for prosecutors, they are also likely to affect consumers and regulators. Our paper contributes to a burgeoning literature on moral finance as argued for in Haidt, Hirshleifer, and Teoh (2013) and Erhard and Jensen (2013) and also the already important literature of behavioral corporate finance (see Baker and Wurgler (2011) for a survey).

Our work, however, cannot pin down how important such halo considerations are for

corporations when they make their optimal CSR choices, only that there are such effects associated with these choices. Indeed, recent and well-identified work shows that there is likely to be over-investment in CSR due to agency problems in the first place (see e.g., Bertrand and Mullainathan (2003), Cronqvist, Heyman, Nilsson, Svaleryd, and Vlachos (2009), Hong, Kubik, and Scheinkman (2011), Cheng, Hong, and Shue (2013)). On the other hand, some have argued there is not enough CSR because stock markets are too short-termist (Bolton and Samama (2013)) and do not value the intangible aspects of CSR enough (Edmans (2011)).

Our results do, however, suggest that such halo effects apply for prosecutors or regulators as well as consumers. So firms might very well have a strategic motive to be socially responsible as a form of insurance in case of unanticipated bad events associated with having to deal with regulators.

Our paper proceeds as follows. We provide background on FCPA sentencing guidelines, particularly as it relates to discretion over company character, in Section 2. We describe the KLD scores in Section 3. We summarize our sample in Section 4. We collect our main empirical methodology and results in Section 5. We conclude in Section 6.

2 FCPA and Sentencing Guidelines

The Foreign Corrupt Practices Act (FCPA) of 1977 was passed in response to the realization that bribery was prevalent and the idea that bribery by some US firms was detrimental the the reputation of US firms overall. The report to the House of Representatives that initially introduced the FCPA outlined the reasoning behind this legislation. In recent years, more than 400 companies admitted making illegal payments to foreign government officials, 117 of which were in the Fortune 500.[5] These actions undermine the free market system championed by the U.S. and harm foreign policy by lowering its credibility. Not only were these actions judged as harmful, but a survey of corporations cited in the report indicated

[5]http://www.justice.gov/criminal/fraud/fcpa/history/1977/houseprt-95-640.pdf

that bribery was not deemed necessary by companies in a variety of industries and of various sizes. As a result, the FCPA made it illegal for any US issuer, domestic concern, or other person to bribe a foreign official in order to influence his acts or decisions or those of his government or political party.

The number of cases prosecuted under the FPCA has grown rapidly in recent years, prompting Choi and Davis (2013) to name the anti-bribery provisions of the FCPA as the most important rules in the regulation of US business abroad. As shown in Figure 1, there were quite few cases against corporations in the 1990s and early 2000s but the number ballooned after 2007. A total of 15 cases were brought against corporations in the period 1991-2000 but this rose to 185 in 2001-2010. This is partially due to the changing nature of US business involvement. At least twenty percent of the cases in the 2000s took place in Iraq and at least 15 percent took place in China. The increasing popularity of the FCPA was also due to the growing use of deferred prosecution and non-prosecution agreements (DPAs and NPAs) to settle these charges. This made it easier for prosecutors to pursue numerous cases. Regardless of the reasons, this surge in FCPA enforcement allows us to shed light on prosecutorial practices by comparing sanctions for companies with differing levels of corporate social responsibility.

The enforcement approach of the FCPA is detailed in *A Resource Guide to the U.S. Foreign Corrupt Practices Act*, published in the Criminal Division of the U.S. Department of Justice and the Enforcement Division of the U.S. Securities and Exchange Commission. The penalties detailed in this guide explicitly allow for prosecutorial discretion, as we have detailed in the Introduction. The initial "offense level" depends on the details of the bribe, such as the amount of money paid and the cooperation of the offender. This base is then scaled by a "culpability score" which can reduce the fine to 5% of the base or raise it to 400%. This culpability score depends on firm characteristics such as the size of the organization, prior misconduct and the character of the company. This discretion makes FCPA sanctions highly susceptible to the halo effect. Although the prosecutors do not consider the company's

product or attitude toward employees when deciding on a sanction, it is quite likely that a firm's reputation for social responsibility would influence his or her opinion of the severity of the crime.

The prosecutor's opinion is particularly influential for the enforcement of the FCPA. This is because most cases are decided by the prosecutor rather than a judge. The prevalent use of DPAs and NPAs in the criminal charges handled by the Department of Justice means that charges are not actually filed against many companies. In the cases when companies are actually charged, they are likely to be resolved through a plea agreement. The civil cases handled by the Securities and Exchange Commission follow a similar theme, with most resolved through a settled civil complaint. Both of these policies give prosecutors a good deal of discretion in setting sanction amounts.

3 Feasibility of Measuring Social Responsibility?

To measure corporate social responsibility, we use annual scores compiled by Kinder, Lydenberg and Domini (KLD) Research & Analytics, Inc. These scores were first collected in 1991 for 488 firms and coverage grew over the years to include 2,894 firms in 2009. After 2009, the calculations of KLD scores changed. Therefore we use current KLD score to measure firm goodness if the FCPA action was before 2009. If the action is in 2009 or later, we use the KLD score from 2009. On average there are roughly 1,486 firms covered in every year. To calculate corporate social responsibility, firms are graded on roughly 60 indicators. Each indicator represents a strength or a concern in one of six major areas: community, corporate governance, diversity, employee relations, environment, and product. The total strengths, net of the total concerns, are summed together to calculate a single KLD score.

The advantages and disadvantages of the KLD score as a measure of firm goodness have been thoroughly explored in Cheng, Hong, and Shue (2013) and Hong, Kubik, and Scheinkman (2011). The disadvantage is that, like most ratings produced by commercial

firms, there is a black-box aspect to the KLD score. Ideally, one would have data on dollar amounts spent on corporate social responsibility. Unlike an extra dollar of charitable donations, it is unclear what exactly an increase in the KLD score represents. As a result, there is skepticism about what exactly these scores capture. One particular concern is that CSR is nothing more than cynical greenwashing with little economic implications. This greenwashing comprises nothing more than some year-end reports about various recycling initiatives or seminars that are not very costly.

However there is mounting evidence in the literature that the equal-weighted KLD scores are indeed informative of corporate social responsibility. First, Chatterji, Levine, and Toffel (2009) find that KLD scores which capture the past environmental performance of firms also forecast the probability of future pollution and environmental regulatory violations reasonably well. Second, Cheng, Hong, and Shue (2013) provide some anecdotal evidence using the famous examples of Apple and Google for the effectiveness of KLD scores in picking up the timing of changes in social responsibility. Third, Hong, Kubik, and Scheinkman (2011) show that a principal components analysis places roughly equal weights across five dimensions of CSR: community relations, product characteristics, environmental impact, employee relations, and diversity. They show that there is a common component in firm scores. Firms that score well in one dimension (e.g. community) also score well in another (e.g. environment). If the KLD scores only represented greenwashing, we would expect firms with very poor scores in one area make up for it in another by appearing more environmentally friendly. This does not appear to be the case.

Fourth, Cheng, Hong, and Shue (2013) also gathered donation data from the Chronicles of Philanthropy for approximately 100 large firms each year, chosen from Fortune magazine's list of top revenue-producing firms in the US. They find that equal-weighted KLD scores predict donations well in annual levels. Fifth, KLD scores are widely used by socially responsible investment (SRI) funds to screen out irresponsible companies from their indexes. SRI funds typically own stocks with the highest KLD scores within an industry. Additionally,

Hong and Kostovetsky (2012) find that money managers of non-SRI funds who have, on net, contributed towards Democratic candidates in elections, and whose political values are thus likely to favor social responsibility, tilt their portfolios toward firms with the highest KLD scores within industries. DiGiuli and Kostovetsky (2011) find that firms with Democratic CEOs are also more likely to have higher KLD scores. In other words, these KLD scores are correlated with the values of investors and CEOs. In sum, the preponderance of the evidence establishes KLD as an informative measure of a firm's genuine attempts to address the impact of their production on society.

4 Data, Sample and Summary Statistics

We start with a sample of 271 cases against corporations starting in 1991, the first year in which KLD scores are available. The data on FCPA cases is taken from the website of the law firm Shearman & Sterling LLP. In 101 of these cases, we can match the defendant's name to a company name in the KLD database. The characteristics of these cases are summarized in Table 1. The average firm involved in one of these FCPA cases has a market capitalization (Market Cap) of 27.86 billion dollars, with a median of 5.7 billion. These are larger than the average firm for which KLD is measured, consistent with the fact that multinational firms are larger and also have more opportunities to engage in foreign bribery. The mean and median KLD score are both around -1. In contrast, the average KLD across all firms surveyed in similar years is 0.1 and the median is 0.[6] US Company is a dummy variable that is equal to 1 if the firm is headquartered in the US and zero otherwise. The majority of these companies, 87%, are headquartered in the US, as expected given the jurisdiction of the FCPA.

Table 1 also describes the details of the bribes for which the firms are being prosecuted. The mean sanction is 20.3 million dollars and the median is 5.23 million dollars. The mean

[6]Notice that the KLD scores of firms in the FCPA sample are slightly lower than those of other firms. This suggests that higher KLD firms are less likely to be prosecuted under the FCPA. This could be due to a number of different factors, one of which is a halo effect in the selection of firms to prosecute.

bribe involves a payment (Payments) of 9.26 million dollars. The median payment is 2 million dollars. The number of years of bribery (i.e. how long the bribes went on) has a mean of 5.78 years and a median of 5 years. The FCPA cases also report the value of business gained by the firm as a result of the bribes. The mean gain is calculated to be 300 million dollars with a median of 98.2 million dollars. Emphasizing the fact that these bribes are committed by larger firms, in 51.5% percent of the FCPA actions related companies are involved, generally subsidiaries.

Many of the cases span multiple countries and jurisdictions; 40% take place in more than one country and 15% are part of a foreign investigation. The data also imply that the bribes in question are usually related to a wider pattern of firm bribery. Eighty percent of offending firms are involved in multiple ongoing trials at once, although these tend to be clustered in time since only 7% of cases stem from a repeat offense by a firm. This reinforces the idea that bribery is a necessary cost of doing business in a number of countries and industries.

Tables 2 and 3 further explore the types of industries and countries involved in these cases. We use the Fama-French 17 industry portfolios to classify firms but only 12 of the industry classifications have some representation. The majority of cases are assigned to the "Other" industry, meaning their industries are specific enough that they do not belong to any of the sixteen other broad industry classification. The most commonly represented industries are machinery, oil and food. In line with the report to the House of Representatives, offenses do not appear to be concentrated in any one industry.

There is also a good deal of disparity across countries, with a majority of bribes taking place in China (28 cases) and Iraq (20 cases). In this table, we do not display all countries but just those with at least 3 FCPA violations. The total number of observations is greater than the 101 cases in our sample because each FCPA case may involve multiple countries.

5 Results

5.1 Motivating Regression Specifications

There is a sizeable literature in law and economics going back to Becker (1974b) that has examined the determinants of sanctions or fines (see Polinsky and Shavell (1992) for a review of the modeling). Recent papers examining the empirical specifications for the FCPA include Choi and Davis (2013) and Karpoff, Lee, and Martin (2014). The optimal fine derived in the most basic version of Becker-Polinsky-Shavell type model has the following form:

$$E[Sanction_i] = a + E[Harm_i]/k$$

where $E[Sanction]$ is the expected sanction or fine, conditional on getting caught. It is set equal to a, a constant that captures the fixed cost of enforcement, and the expected harm done by the crime $E[Harm_i]$ divided by the detection probability k. The intuition for this optimal fine is that sanctions are set to recoup the fixed costs of enforcement for society and to equate the firm's expected sanction (the sanctions level times the probability of detection) with the expected harm. Because the firm trades off the private benefits of the bribe with the expected sanction, it will only choose to bribe when the private benefit outweighs the total harm. Note that the expected sanction conditional on getting caught rises as the probability of detection k falls.

As we discuss below, the empirical literature uses the size of the bribe as a proxy for the expected harm done in FCPA cases, i.e.

$$E[Harm_i] = B_i$$

where B_i is the amount of the bribe payments. Another measure of the expected harm might be the value of business obtained through the bribe. In some instances, the size of the firm might also serve as a proxy for harm, assuming harm scales by size. We will consider all

these measures of expected harm in our empirical analysis.

Our regression specification is then motivated by a model where

$$E[Harm_i|KLD_i] = -cKLD + dB_i,$$

whereby prosecutors assume a high KLD firm imposed less harm for any given bribe size B_i. This halo effect is in the spirit of psychology studies like Thorndike in which jurors assume some positive trait (such as good looks) spills over into estimates of guilt or harm.[7]

Substituting the above expression for $E[Harm_i|KLD_i]$ into the equation for optimal sanction gives us an expression for $E[Sanction_i|KLD_i]$, the expected sanction upon getting caught, conditional on KLD. This motivates the regression specification for our test of the halo effect from corporate social responsibility. We estimate

$$p_i = \beta_0 + \beta_H KLD_i + \beta_B B_i + \beta_F X_i + \varepsilon_i$$

where the outcome variable p_i is the punishment, as measured by the sanction assigned for FCPA case i. The variable KLD_i is the firm's overall KLD score in our main specification and the coefficient β_H identifies the halo effect. It represents the change in punishment for bribery offenses for firms with higher corporate social responsibility, holding all else equal.

In subsequent regressions we also explore the importance of various subcategories of KLD. The details of the bribe are captured by B_i and firm characteristics are represented by X_i. In choosing relevant bribe, firm, and country characteristics, we were guided by our reading of the *Resource Guide* and by factors that Choi and Davis (2013) found relevant.

For every bribe we include the amount of bribe payments and the value gained by the firm as a result of the bribe. When these variables are missing, we use the sample mean and include an indicator for missing variables. We also include in B_i the number of years

[7] One might also think that d is a function of KLD where $d'(KLD) < 0$. This would be true if prosecutors assumed that every dollar of bribery translated into less harm for good firms. We have examined both settings but our baseline case is the simpler one.

the bribe spans and indicators for whether there are multiple parties involved in the bribe, whether it is being investigated by a foreign entity, whether it occurred in multiple countries, and whether it is a repeat offense by the firm. We also include fixed effects for the year in which the FCPA case was resolved.

At the firm level, we control for whether the offender is a US company and also for a quadratic function of its market capitalization. This quadratic specification helps us conserve on degrees of freedom while allowing for potentially non-linear effects of market capitalization on fines. Our main specification uses firm KLD without accounting for industry. However, we have also tried to account for the fact that more socially responsible industries may be looked upon more favorably in general. We have tried controlling for industry fixed effects and have also tried controlling for the average KLD score of a firm's industry, to reduce the number of explanatory variables. Results do not change quantitatively after controlling for average industry KLD and are qualitatively similar but understandably less significant when we use industry fixed effects instead.

5.2 Baseline Results

The results of the regression analysis are presented in Table 4. Due to the small size of our sample, we are highly sensitive to relying on outliers for our result. To moderate the potential influence of outliers, we show the results for a number of different specifications. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%.

In all three specifications of Table 4 firms with higher KLD receive significantly lower sanctions, all else equal. The results in column (3) reflect our preferred regression specification, which is careful to avoid any effects that may be driven by outliers. The coefficient on KLD is -1.805 and is significant at the 5% level. This means that a one point increase in KLD score results in an average reduction in sanctions of 1.805 million dollars. The median sanction amount is 5.23 million dollars and the mean sanction amount is 20.3 million dollars.

Therefore a one point increase in KLD corresponds to decline equal to 35% of the median sanction and 9% of the mean sanction. By both measures, this is a sizeable change in punishment. A one standard deviation increase in KLD within the bribe sample would shift the KLD score up by 2.83 points, resulting in a sanction reduction of roughly 5.1 million dollars.

It is also instructive to consider the effects of other covariates on the FCPA sanction. As found in the literature, the bribe payment amount (Payments) is associated with a higher sanction amount, although it is not statistically significant. A one million dollar increase in payments is linked to an increase in the resulting sanction of .599 million dollars. So a one point increase in KLD offsets roughly an additional 3 million dollars in bribe payments. The amount of value gained from the bribe (Value) also has a positive coefficient, although it is much smaller but more significant than that on Payments. Because Value has quite a large standard deviation, the small coefficient still has a large economic effect in explaining sanctions. The relative larger importance of payments suggests that prosecutors consider bribe payments a better signal of harm than the value of business earned.

The other bribe characteristics to consistently and significantly affect sanctions relate to concurrent domestic and foreign investigation. This effect can be interpreted as a reaction to the true harm of a bribe. If the bribe under question is involved in ongoing foreign investigation, the sanction is 16.95 million dollars higher on average, and this is highly significant. This is consistent with the model of optimal fines if foreign involvement is an additional measure of harm. Similarly bribes in multiple countries receive 7 million more in sanctions than those that are narrower in scope. It seems that there being a repeat offender actually leads to a lower sanction, and this is because earlier investigations are usually linked to the same actions as later ones, so the firms have already been partially punished.

By including both bribe payments, value and many other key bribe characteristics in our regression specification, we believe that we have picked up the heterogeneity in actual harm done by the bribes. This is reinforced by the high R^2 values for these regressions. Our inclusion of firm market capitalization and year fixed effects ensures that we are not identifying

differences in bribe harm between big and small companies or time trends. Therefore, we can reasonably interpret the coefficient on KLD as the effect of firm-specific corporate social responsibility on sanctions, holding fixed the harm of the bribe.

Our baseline results are quite consistent across our three specifications. Figure 2 demonstrates the raw data used to arrive at the relationships in each column. The three sub-figures plot the relationship between the sanction assigned to the case and the firm's KLD. Notice that even as more observations are winsorized, sanctions still decline with KLD.

One worry raised by the above results is that corporate social responsibility may be correlated with the types of countries in which firms are willing to bribe. Bribery may be punished more harshly when committed in countries less equipped to battle corruption or countries in which the reputation of the US is more important. To control for this possibility, we match in a number of country-specific variables for each country in which a bribe takes place. If the FCPA case covers multiple countries, we take the average over all countries involved. We control for the amount of US foreign direct investment (FDI) into the country in 2004, in millions. Bribery may be more harshly punished if it takes place in countries with valuable ties to the US. We also control for the country's gross national income per capita, in dollars, as well the Worldwide Governance Indicators (WGI) measures for government effectiveness and rule of law. Government effectiveness deals with issues such as the efficiency of the bureaucracy, education, and the extent to which there is trust in the government. The rule of law measure considers issues such as violent crime and property rights. For these four measures, we are able to match the data to these country-level variables for 77 of the 101 cases.

The results of these regressions are displayed in Table 5. Even taking into account country characteristics, it is still true that higher KLD firms are punished less for bribery. In fact the point estimates are slightly larger. For columns (1) and (2), the coefficients on KLD are similar to those in Table 4. However the point estimate for column (3) increases from -1.805 in Table 4 to -2.467 in Table 5. As this is our preferred specification, we estimate that a one

point increase in KLD leads to nearly 2.5 million dollars less in sanctions.

Notice that the coefficients on payments and value remain similar. In the first two columns, the amount of bribery payments increases sanctions assigned. In the third column, once data is winsorized at the 95% level, the value gained from the bribe becomes a more important predictor of sanctions. The other explanatory variables shown in Table 4 are not displayed but have similar coefficients. On the other hand, the newly added variables are generally not statistically significant.

Up until now, we have treated SEC and DOJ prosecutions of the same crime as different observations. In Table 6, we combine the SEC and DOJ sanctions when the firm subsidiary, country, and year are the same. This provides a robustness check to make sure that our results are not driven by joint decision-making by the DOJ and SEC. We show the results of regressions including country variable controls. Notice that the point estimates on KLD in columns (1) and (2) are larger in magnitude than before. A one point increase in KLD decreases the resulting sanction by 3.8 million dollars, using the results from column (1). In column (2) the decreases is 4.1 million dollars. Both estimates are significant at the 10% level. The point estimate from column (3) is -1.4 million dollars, which is slightly smaller but similar to that of Table 4.

To investigate what exactly drives the halo effect in corporate sentencing, we can break KLD down into its components, the six areas in which companies can demonstrate their responsibility. In Table 7 we display the estimates of β_H if we run the main regression using each subcategory of KLD in turn, rather than overall KLD. We include both bribe and country variable controls, as well as year fixed effects, which are all omitted for brevity. Two of the six categories seem to be consistently significant while two more are consistently negative but are not statistically significant. These results suggest that the halo effect is mostly generated by responsible behavior towards the community and responsible products.

Community KLD, which measures the altruism of the company towards the community where the firm's operations are located, comes in with the largest point estimates, between

-11and -12 million dollars for all three specifications. These estimates are all significant at the 10% level. The estimated effects of the product KLD score are also large. Product KLD is focused on product quality, the strength of the firm's R&D program, and the provision of products to the economically disadvantaged. The score is lowered by poor product safety, questionable advertising practices, and anti-trust violations. In the three specifications, the coefficients range from -3.6 to -5.2 million dollars. Again, all coefficients are significant at the 10% level.

Turning to the diversity KLD score, we find point estimates again range from around -4.7 to -5.8, although none are statistically significant. This category of KLD attempts to capture how well a company promotes diversity and how accepting it is of the needs of its employees. It includes measures of the promotion of women and minorities, the presence of women and minorities on the board of directors and in businesses with which it contracts, programs enabling work/life balance, employment of the disabled, and tolerant policies towards gays and lesbians.

The next row shows the employee relations score, which is determined by union relations, employee involvement in firm profits (though stock options, etc), the strength of health and safety programs, and the strength of retirement benefits. Across all three specifications, the coefficients on employee KLD are all large and negative, similar in magnitude to the effects for product and diversity KLD. In our preferred specification (column (3)) the estimate is statistically significant at the 10% level and suggests that a one point increase in employee KLD decreases sanctions by around 6.3 million dollars. The last two rows show that environment KLD and corporate governance KLD have positive point estimates and are not statistically significant at any point.

This makes it clear that our baseline effect, which uses total KLD, averages across these disparate subcategory effects. Earlier we estimated that a one point increase in KLD results in a 2.5 million dollar reduction in sanctions. For the subcategories of community, product, diversity, and employee KLD, the effects are always larger. They range from a minimum

decrease of 3.6 million dollars to a maximum of 11.9 million dollar in sanction reduction for a one point increase in one of these four subcategories. Taken all together, these results imply that prosecutors consider a firm's behavior in sentencing, especially towards its community.

5.3 Addressing Reverse Causality

The first concern that accompanies our baseline results is reverse causality. In the first three rows of the Table 8, we address the worry that KLD scores might be driven by FCPA proceedings. If firms changed their CSR efforts to compensate for bribery allegations, our specification would suffer from an endogeneity problem. A negative correlation between KLD scores and sanctions could be caused by firms with less egregious violations using KLD to overcome the bad publicity. To make sure this is not the case, we use KLD lagged by one, two, and three years as the explanatory variable. Each column is defined as in previous tables and each row shows the result of using a different lagged measure of KLD as opposed to the contemporaneous KLD that is the baseline specification explored in Table 5. The regression specification controls for country-level variables, recreating the regressions shown in Table 5. In all three cases, the coefficients in column (3) are statistically significant at the 5% level and the effects are similar in magnitude to that of the current KLD score.

To further alleviate the worry that KLD scores might be partially caused by FCPA sanctions, we use KLD scores that predate the stringent enforcement of the FCPA. Even if firms were not responding directly to FCPA sanctions, it could be true that decisions about KLD scores could take into account the likelihood of FCPA prosecution. To show that this is not the case, in the last row of Table 8 we exploit the fact that the FCPA only became widely and unexpectedly enforced in 2007. We use as the explanatory variable the KLD score prior to the expansion of FCPA prosecution. In every year prior to 2008 we use that year's KLD but we use 2007 KLD for all cases prosecuted on or after 2007. Before 2007, very few FCPA cases were prosecuted and there was virtually no concern about the enforcement of the law. This explosion of caseload right after 2007 is readily seen from Figure 1. Because of this

it is unlikely that firms considered FCPA repercussions when deciding their CSR strategy in 2007. Nevertheless, these 2007 KLD scores are still negatively correlated with sanctions and are of similar economic magnitudes to our base specification. The estimate from our preferred specification in column (3) is again significant at the 5% level.

The tests above demonstrate that prosecutorial decisions are driven by KLD scores. Using lagged KLD scores we show that FCPA actions are driven by KLD, rather than vice versa. We use pre-2007 KLD scores to show that our results are not driven by the joint determination of bribery violations and KLD after the FCPA became widely enforced.

5.4 Similarity of Underlying Bribe Characteristics

A second key concern is that KLD scores may influence FCPA fines through a channel other than the halo effect. So far we have shown that high KLD scores are linked to lower sanctions. However, there could be unobserved differences between the bribes of low and high KLD firms. These differences could be the driving force behind lower sanctions, rather than the KLD scores themselves.

If high KLD firms actually have a lower propensity to bribe or if they engage in less harmful bribery, prosecutors might push for lower sanctions for these reasons, rather then because of the halo effect. This could arise if firm make joint decisions about KLD and bribery and the firms that chose high KLD also chose less harmful bribes. In this section we show that unobserved differences in bribes are not likely and therefore the halo effect is the correct interpretation.

In order to investigate whether bribes are likely to differ on unobservable characteristics, we look at whether there are any differences in the observable characteristics of bribery. Are high KLD firms less likely to bribe than low KLD firms? We saw earlier that within the sample of firms prosecuted under the FCPA, average KLD is -1 and the standard deviation is 2.83. In contrast, the sample of all firms with KLD scores in similar years has a mean of 0.1 and a standard deviation of 1.54. Although the mean KLD score is lower in the bribe

sample, the standard deviation is higher. This fact suggests that firms with a wide range of KLD scores engage in bribery. It is not the case that FCPA actions are concentrated amongst firms with low KLD scores.

In Table 9 we explore how bribe characteristics vary with KLD, conditional on having been caught bribing. If it were true that high KLD firms tend to engage in less harmful bribes, we would expect bribe payments and bribe value to decrease with KLD, as well as the likelihood of other harmful bribe characteristics. In order to investigate these relationships, Table 9 shows the relationship between bribe characteristics and KLD, after controlling for year fixed effects, an indicator for DOJ cases, an indicator for US companies, a quadratic function of market capitalization, and the country variables discussed earlier.

The first result in Table 9 shows how bribe payment amounts vary with firm KLD. The three columns correspond to the specification used in earlier tables. Column (1) includes all observations, column (2) is winsorized at the 2.5% and 97.5% levels, and column (3) is winsorized at the 95% level. In addition to the controls mentioned above, we also control for indicators for multiple countries, repeat offenses, investigations of related parties, and for the number of years of bribery. We see that in all columns, there is no significant relationship between KLD and payments, and the point estimates are not consistently negative across specifications. The second result in the table studies the relationship between KLD and the value gained from bribery. Again, there are no significant relationships and the coefficients are not consistently negative.

The third result in Table 9 estimates the relationship between KLD and three other relevant bribe characteristics. Because these are variables without any outliers, we do not repeat the winsorized specifications of the previous tables. We find that higher KLD firms do not engage in more expansive bribes, as measures by the involvement of multiple countries and the number of years of bribery. They are also just as likely to involve a subsidiary, which might signify that top officials were less involved.

The fact that the bribes of high and low KLD firms are similar on observables makes

it unlikely that they differ along unobservables, which are likely to be less important in determining sanctions. There is little evidence that the bribes of high KLD firms are less likely to be harmful, as measured by observable characteristics. This supports the conclusion that good and bad firms engage in similar bribery and that the variation in sanctions is driven by prosecutorial bias rather than by the true harm of the bribe. Therefore the relationship we find is likely due to the halo effect and not bribe propensity or characteristics.

5.5 Ruling Out Political Donations

The third concern is that sanctions are driven by political considerations rather than corporate social responsibility. If more image-conscious firms tend to be more politically involved, as well as more socially responsible, prosecutors might wish to favor such firms. In this case, political action would be an important omitted variable in the baseline regression.

If existent, this political bias could manifest itself in two different ways. The first is that more liberal firms, those more likely to be associated with the Democratic party, tend to be more socially responsible (Giuli and Kostovetsky, 2014). If prosecutors from the DOJ and SEC favor Democrats, this affiliation could lead to lower fines. This would be plausible if the prosecutors were indeed liberal. However, it is important to note that the explosion in FCPA enforcement was driven not by Democrats, but by Republicans. Prosecutions picked up sharply in 2007, under the leadership of appointees of George W. Bush. Leading the charge were a Republican deputy attorney general, assistant attorney general, and new assistant chief of the DOJ's Fraud Section, who is known as a conservative pundit.[8] Therefore it would seem that political favoritism is not responsible for the beneficial treatment of more socially responsible firms.[9]

The other way in which political bias might influence the assignment of FCPA fines is if

[8]The rise of FCPA enforcement under this leadership is described by the law firm Gibson, Dunn & Crutcher LLP: http:www.gibsondunn.compublicationspagesFCPAEnforcementExplosionContinues.aspx

[9]If political considerations were key, we might also expect to see differential treatment of more socially responsible firms under Democratic and Republican administrations. Instead, the effect of KLD on sanctions does not differ systematically with the party in power.

more socially responsible firms are also more politically active in general, and this affects the career concerns of prosecutors. Then KLD may capture the effect of political clout rather than CSR. In order to address this issue, we collect data on firm's donations to politicians and elections. The Federal Election Commission records contributions from all individuals and firms of at least $200, as long as they are not made through a Political Action Committee. This provides a measure of how politically active each company is.

Donations allow us to construct two measures of political influence. Lagged donations, those between ten and five years before the FCPA action, capture historical political involvement. These contributions precede FCPA action and therefore are unlikely to be related to recent charges. Recent donations, those beginning five years before the FCPA action, potentially reflect responses to prosecution. This would pick up increases in political contributions meant to sway prosecutors during the time the fine is determined. The median firm in the sample does not have any documented contributions in any of these years. However, the mean contribution for the lagged five years is $103,000, with a standard deviation of $211,000. The mean contribution for the five years preceding the FCPA fine is $50,000, with a standard deviation of $226,000. These numbers reflect the wide dispersion of political involvement amongst prosecuted firms. It seems that involvement in FCPA actions causes firms to dampen their political contributions rather than increase them.

First we investigate the relationship between political donation and corporate social responsibility. Table 10 shows how political donations vary with KLD, after controlling for year fixed effects. The first column focuses on lagged donations, those from 10 to 5 years before the resolution of the FCPA action. The second column focuses on recent donations, during the 5 years prior to the FCPA action. In both cases, donations are actually negatively related to KLD scores, although this is not statistically significant. The more socially responsible firms are actually those that are historically less politically active. The dependent variable is measured in millions of dollars, so a one-point increase in KLD is associated with $13,000 fewer in donations. This suggests that rather than going hand in hand, political

activity is either orthogonal to CSR or may be alternate routes to achieving influence. The result from the second column also implies that less socially responsible firms do not try to make up for it through political donations during the FCPA investigation. This casts doubt on the idea of political donations as a driver of sanction outcomes.

However, we can further verify that political donations are not likely to influence sanctions. We directly test the relationship between donations and FCPA fines in Table 11. These regressions revisit the baseline specification for the effects of KLD on sanctions but also control for the amount of recent political donations by the company. The main takeaway from this table is that the effects of KLD remains the same as before. One extra point of KLD is associated with a 2.5 million dollar reduction in sanctions, and this result is statistically significant at the 5% level. Meanwhile, the coefficients on donations are never significant. A qualitatively similar pattern emerges when using lagged donations, rather than recent donations. Therefore it is not true that the link between CSR and sanctions is driven by political considerations.

5.6 Ruling out Compliance or Cooperation

A third key concern and more subtle worry related to political capital from donations is that high KLD firms might be more cooperative or compliant after the bribe has been discovered. Since sanctions do depend on a firm's willingness to cooperate with authorities, perhaps the relationship between KLD and sanctions might be due to omitted variables related to cooperation.

To deal with this issue, we use text-mining to score the press release upon the settlement of every case. We measure the frequency with which words like "cooperation" or "compliance" occur within the document. More specifically, we take all the press releases associated with our cases and create a list of all the words (nouns, verbs, adjectives and adverbs) and the frequency of their occurrence. We then take only the words which occur at least 150 times, for a total 377 words. We assign each word a score of 2, 1, 0, -1, or -2. Words that reflect

cooperation or compliance get a score of 2. Words that reflect non-cooperation or non-compliance get a score of -2. For instance, the word "compliance" occurs 1632 times and gets a score of 2. The word "cooperation", which occurs 266 times, also gets a score of 2. In contrast, the words "guilty" and "offense" get a score of -2. We then sum these scores to get a Collaboration Score for each case.[10]

We then go beyond measures of collaboration by using the two leading text mining algorithms, LIWC and SentiWordNet, to measure positive emotional or sentimental words associated with the press releases. There is a long history in psychology and linguistics of inferring emotional or mental states from written passages.[11] One benefit of these two algorithms is that the dictionaries for LIWC and SentiWordnet are obtained using training samples from the broader population rather than legal documents.[12] In other words, while we focused on words associated with cooperation or non-cooperation when building our dictionary, the dictionaries for LIWC and SentiWordNet are built to pick up broader sentiment. Both programs have a filter for scoring positive or negative sentiment. For the 'SentiWordNet' method, we scan press releases, extract words from them, and then sum up the scores for all words to produce a score for the whole passage.[13] For the 'LIWC' method, we similarly generate the score by using software from LIWC.[14]

In Table 12, we provide summary statistics for these three text-mining scores. The mean collaboration score is -18.9 and the median is -17.5. However, there is a significant standard deviation of 16.2. The Positive Emotion score has a mean of 2.58 and a median of 2.44. These two numbers are comparable to what LIWC reports as their benchmarks for the

[10]For instance, the press release for the case against Johnson & Johnson, which can be found in the following link from the DOJ (http://www.justice.gov/opa/pr/2011/April/11-crm-446.html), received a Collaboration Score of -8.

[11]see Christopher Potts' website for a tutorial http://sentiment.christopherpotts.net/

[12]Another popular algorithm, named General Inquirer from Harvard University, is widely used in classifying sentiment from financial media (see, e.g., Tetlock (2007)). General Inquirer gives very similar in terms of results to LIWC.

[13]The official website is http://sentiwordnet.isti.cnr.it and the documentation of SentiwordNet 3.0 is http://nmis.isti.cnr.it/sebastiani/Publications/LREC10.pdf

[14]The software us available on its official website at http://www.liwc.net and a description is available at http://www.liwc.net/howliwcworks.php.

non-legal text documents in their database. The standard deviation of the LIWC score is .711. The Senti Score from SentiWordNet has a mean of 2.17 and median of 1.98 with a larger standard deviation of 1.73. Notice we have focused on positive emotions, although a negative emotion score is also available. We have also used these programs to generate negative emotion scores but these are typically far lower than what is reported for non-legal texts. That is, it appears that these legal documents avoid using negative sentiments and so there is not much variation across cases. As such, we can only focus on positive emotions in our attempt to identify the halo effect. Fortunately, psychology studies of the halo effect have also as well emphasized positive emotions.

In Table 13, we find that high KLD firms are more likely to have positive sentiment in their press releases, as measure by the SENTI score, but no more likely to have higher collaboration scores. For the Positive Emotion score from LIWC in column (1), the coefficient on KLD is .073 with a T-statistic of 1.59. For the SENTI score in column (2), the coefficient is .222 and it is significant at the 10% level. In column (3), we regress our collaboration score on KLD and find no effect. The coefficient is .823 and the T-statistic is 0.72. In other words, it appears that the lower sanctions obtained by high KLD firms are reflected in the emotional or sentimental tones in these press releases and are not driven by differences in collaboration.

Finally, in Table 14, we re-run our baseline regression of sanctions on KLD (from Table 5) but now also control for the Collaboration Score. Not surprisingly, our baseline results are largely unchanged. This analysis serves to rule out heterogeneity in collaboration as the channel through which high KLD firms have lower sanctions. This finding, in conjunction with Table 13, identifies the halo effect as the most likely mechanism for the lower sanctions for high KLD firms.

6 Conclusion

Corporate social responsibility is becoming an ever more important part of corporate strategy. As a result it is increasingly important to understand what motivates CSR and how it can benefit companies. The three leading theories of strategic corporate social responsibility all identify corporate image as a key factor but isolating these empirically has been a challenge. This task is made all the more challenging by the fact that consumers value all three effects.

We are able to isolate the halo effect by focusing on federal prosecutors, who do not consume company products and are therefore unsusceptible to product signalling or warm glow. We study their punishment of crimes by socially responsible corporations. Using data on the prosecution of the Foreign Corrupt Practices Act (FCPA) by the US Department of Justice and the SEC, we find that firms with higher social responsibility scores, as measured by KLD scores pay $2.5 million or 50% less than the median fine for bribing foreign officials.

Due to our limited sample size, we focus our efforts in showing that our results are robust to outliers and alternative explanations. Comfortingly, our results do not rely on outliers and are robust to winsorization. We argue that KLD is not chosen strategically in response to FCPA fines by showing that previous KLD can predict fines and that bribe characteristics do not change with KLD. Given the high R^2 of our regressions, we believe it is likely that we controlled for much of the heterogeneity in fines. We also use text-mining techniques to rule out cooperation as the mechanism behind our findings and rule in sentimental or halo effects. Overall our results are economically and statistically robust, strengthening the evidence for an illusory halo effect in the punishment of corporate crime.

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Figure 1: FCPA Actions by Year

Note: All FCPA actions are show by the year in which the case was filed.

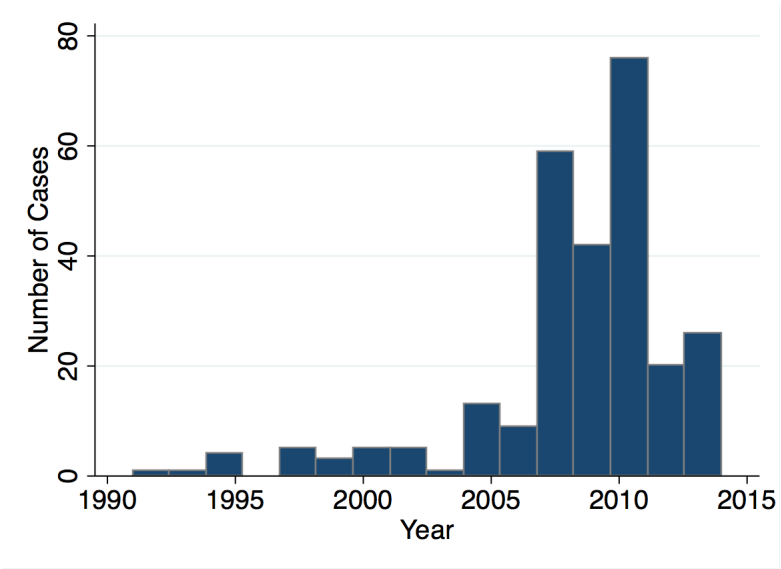
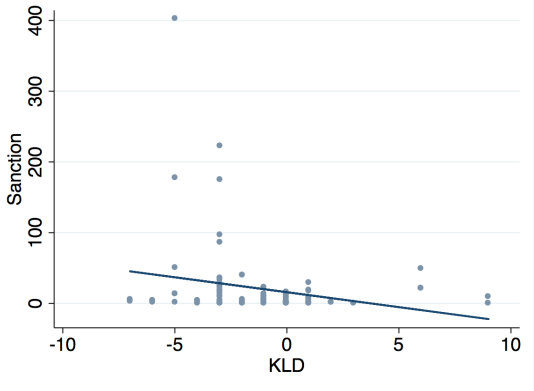


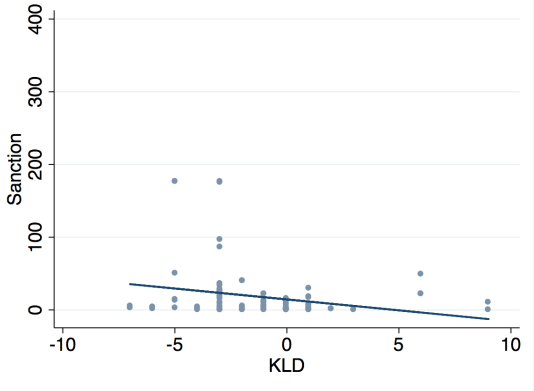
Figure 2: Sanctions by KLD

Note: The figures show the raw relationship between the sanction amount and KLD. Sub-figure (a) includes all observations. In sub-figure (b) the sanction amount is winsorized at 2.5% and 97.5%. In sub-figure (3) the sanction amount is winsorized at 95%.

(a) All Observations



(b) Winsorized at 2.5% and 97.5%



(c) Winsorized at 95%

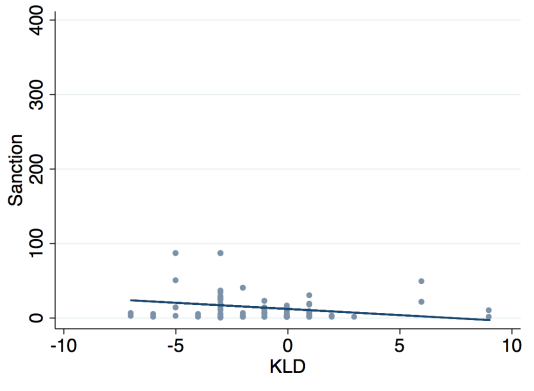


Table 1: Summary Statistics

Note: Summary statistics are shown for the 101 FCPA cases that match to KLD data. Market capitalization, sanction, payments, and value are measured in millions of dollars.

	Mean	Median	StDev
Market Cap	27,863	5,725	55,342
KLD	-1.06	-1	2.83
US Company	.871	1	.337
Sanction	20.3	5.23	51.9
Payments	9.26	2	27.2
Value	300	98.2	892
# Years Bribery	5.78	5	3.21
Related Party Involved	.515	1	.502
Foreign Investigation Ongoing	.149	0	.357
Multiple Countries	.396	0	.492
Multiple Ongoing Trials	.802	1	.4
Repeat Offense	.0693	0	.255

Table 2: Cases by Industry

Note: Industries are are shown for the 101 FCPA cases that match to KLD data. Industries are defined as the 17 Fama-French industry portfolios.

Food	10
Oil	13
Apparel	2
Chemicals	3
Consumer Goods	9
Construction	3
Steel	2
Fabricated Products	2
Machinery	19
Transportation	5
Utilities	2
Other	31
Total	101

Table 3: Cases by Country

Note: The country in which bribery occurred is shown for the 101 FCPA cases that match to KLD data. For brevity, we only display the countries for which there are more than 3 FCPA cases. The number of observations is greater than 101 because each FCPA case can involve multiple countries.

Angola	4
Argentina	8
Bahrain	4
Brazil	5
China	28
Croatia	4
Egypt	6
Greece	7
India	10
Indonesia	12
Iraq	20
Kazakhstan	4
Mexico	5
Nigeria	9
Poland	6
Russia	6
Saudi Arabia	4
South Korea	4
Thailand	9
Turkey	4
United Arab Emirates	7
Venezuela	4
Total	170

Table 4: Effect of KLD on Sanctions

Note: The dependent variable in all regressions is the sanction assigned by the prosecutor. All regressions include year fixed effects, an indicator for DOJ cases, an indicator for US companies, and indicators for whether payments or value are missing. Market capitalization, sanction, payments, and value are measured in millions of dollars. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
KLD	-2.148*	-2.168*	-1.805*
	(-2.62)	(-2.98)	(-2.58)
Payments	0.759	0.687*	0.599
	(1.34)	(2.07)	(1.52)
Value	0.020	0.016	0.041*
	(1.39)	(1.64)	(2.24)
Market Cap	0.000	0.000	0.000
	(0.84)	(1.03)	(1.41)
Market Cap ^ 2	-0.000	-0.000	-0.000
	(-0.31)	(-0.44)	(-0.76)
Related Party Involved	1.820	3.612	3.355
	(0.58)	(1.51)	(1.45)
Foreign Investigation Ongoing	19.499*	18.968*	16.950*
	(3.10)	(4.17)	(4.25)
Number of Years of Bribery	-1.084	-0.315	0.900
	(-0.68)	(-0.30)	(1.24)
Multiple Countries	14.389*	12.144*	6.970+
	(2.89)	(2.82)	(1.70)
Multiple Ongoing Trials	-10.037+	-6.089+	-5.212
	(-1.94)	(-1.76)	(-1.58)
Repeat Offense	-23.890*	-23.381*	-20.983*
	(-2.85)	(-3.00)	(-3.03)
Observations	101	101	101
R^2	0.830	0.878	0.747

Table 5: Effect of KLD on Sanctions, With Country Variables

Note: The dependent variable in all regressions is the sanction assigned by the prosecutor. All regressions include year fixed effects, an indicator for DOJ cases, an indicator for US companies, and indicators for whether payments or value are missing. Also omitted for brevity but included in the regression are all variables shown in Table 4. Market capitalization, sanction, payments, and value are measured in millions of dollars. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
KLD	-2.701^{+}	-2.414^{+}	-2.467*
	(-1.70)	(-1.87)	(-2.59)
Payments	1.077^{+}	0.852*	-0.168
	(1.82)	(2.26)	(-0.38)
Value	0.010	0.011	0.058*
	(1.16)	(1.58)	(3.69)
Market Cap	-0.000	-0.000	0.000
	(-0.73)	(-0.44)	(0.46)
Market Cap ^ 2	0.000	0.000	-0.000
	(0.95)	(0.67)	(-0.15)
US FDI to Country	-0.000	-0.000	-0.000
	(-0.42)	(-0.75)	(-1.09)
Government GNI	0.001	0.001	0.000
	(1.21)	(1.53)	(0.49)
Government Rule of Law	9.443	-0.436	-7.748
	(0.61)	(-0.03)	(-0.69)
Government Effectiveness	-36.450	-27.693	-10.371
	(-1.44)	(-1.35)	(-0.70)
Observations	77	77	77
R^2	0.830	0.880	0.767

Table 6: Effect of KLD on Combined Sanctions

Note: The dependent variable in all regressions is the sum of SEC and DOJ sanctions. Multiple observations are combined into one when the SEC and DOJ take action against the same company, in the same country, and the same year. The regression specifications are the same as in Table 5. Country Vars refers to controls for US FDI to the country in which bribes occurred, as well as that country's GNI, rule of law, and government effectiveness. Market capitalization, sanction, payments, and value are measured in millions of dollars. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
KLD	-3.843^{+}	-4.106^{+}	-1.416
	(-1.95)	(-1.84)	(-1.31)
Payments	1.223	1.773*	-0.846
	(1.20)	(2.04)	(-0.90)
Value	0.039	0.031	0.067*
	(1.50)	(1.28)	(2.54)
Market Cap	0.000	0.000	0.000
	(0.47)	(0.68)	(1.15)
Market Cap ^ 2	-0.000	-0.000	-0.000
	(-0.26)	(-0.45)	(-1.04)
Number of Years of Bribery	2.274	2.154	2.664*
	(1.26)	(1.09)	(2.01)
Related Party Involved	1.438	3.503	4.589
	(0.15)	(0.33)	(0.64)
Foreign Investigation Ongoing	39.434*	46.220*	24.964*
	(2.42)	(2.16)	(2.66)
Multiple Ongoing Trials	-23.156*	-31.320*	-3.383
	(-2.26)	(-2.78)	(-0.43)
Multiple Countries	-0.837	-1.319	4.350
	(-0.07)	(-0.10)	(0.50)
Repeat Offense	-24.794	-24.969	-31.721^{+}
	(-1.35)	(-1.31)	(-1.93)
Observations	56	56	56
R^2	0.965	0.921	0.775

Table 7: Effect of KLD Subcategories on Sanctions

Note: The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as in Table 5 but differ in the variable used for KLD. Each row represents a separate regression, where KLD is measured by using a different subcategory. There are 77 observations in each regression. For brevity, only the coefficients on KLD are displayed. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
Community KLD	-11.648^{+}	-11.876*	-11.038*
	(-1.81)	(-2.13)	(-2.41)
Product KLD	-5.167^{+}	-4.533*	-3.594^{+}
	(-1.87)	(-2.06)	(-1.82)
Diversity KLD	-5.843	-4.977	-3.688
	(-1.57)	(-1.64)	(-1.58)
Employee KLD	-5.243	-4.340	-6.305^{+}
	(-1.32)	(-1.16)	(-1.71)
Environment KLD	4.833	3.647	-1.034
	(1.55)	(1.38)	(-0.47)
Corp Gov KLD	3.672	4.897	3.877
	(0.82)	(1.21)	(0.97)

Table 8: Effect of Prior KLD on Sanctions

Note: The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as in Table 5 but differ in the variable used for KLD. For brevity, only the coefficients on KLD are displayed. KLD $t-n$ is the KLD score lagged n years. KLD 2007 is the KLD score in year 2007, or the year of the case if it preceded 2006. There are 75 observations in the regression using KLD t-1, 72 for KLD t-2, 67 for KLD t-3, and 71 for 2007 KLD. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
KLD t-1	-2.584	-2.312^{+}	-2.354*
	(-1.52)	(-1.71)	(-2.54)
KLD t-2	-1.891	-1.956	-1.959*
	(-1.02)	(-1.37)	(-2.14)
KLD t-3	-2.528	-2.521	-2.374*
	(-1.14)	(-1.53)	(-2.23)
2007 KLD	-1.997	-1.347	-2.667*
	(-1.15)	(-0.98)	(-2.62)

Table 9: The Effect of KLD on Bribe Characteristics

Note: The dependent variable in the first table is the size of the payment made in violation of the FCPA. The dependent variable in the second table is the value the firm gained as a result of the bribery action. Payments and value are measured in millions of dollars. In the first two tables, column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), sanction, value, and payments are winsorized at 95%. The third table includes all observations and the dependent variables are an indicator for whether the bribery occur in multiple countries, the number of years over which the bribery takes place, and whether the FCPA actions involve a subsidiary. All regressions include year fixed effects, an indicator for DOJ cases, an indicator for US companies, a quadratic in market capitalization, and the country variables shown in Table 5. In the first two tables there are other independent variables omitted for brevity: indicators for multiple countries, repeat offenses, investigation of related parties, and the number of years of bribery. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Payments	(2) Payments	(3) Payments
KLD	-1.415	-0.514	0.560
	(-0.70)	(-0.44)	(1.59)
Observations	66	66	66
R^2	0.748	0.770	0.767

	(1) Value	(2) Value	(3) Value
KLD	22.724	30.323	-1.232
	(0.20)	(0.37)	(-0.07)
Observations	56	56	56
R^2	0.594	0.478	0.627

	Multiple Countries	Number of Years of Bribery	Involved a Subsidiary
KLD	0.019	0.227	-0.016
	(0.66)	(1.24)	(-0.55)
Observations	77	77	77
R^2	0.416	0.435	0.521

Table 10: Effect of KLD on Donations

Note: The dependent variable in both regressions is political donations, in millions of dollars. The first column measures all donations from ten years before the FCPA action up until 5 years before the action. the second column measures all donations starting from five years before the FCPA action. The only explanatory variable is KLD. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1)	(2)
	Donations 10 to 5 Years Prior	Donations 5 Years Prior
KLD	-0.013	-0.012
	(-1.10)	(-1.63)
Observations	100	100
R^2	0.282	0.685

Table 11: Effect of KLD on Sanctions, with Recent Donations

Note: The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as those in Table 5 but include an additional explanatory variable: political donations, in millions of dollars. These include all donations given in the five years leading up to the FCPA action. Market capitalization, sanction, payments, and value are in millions of dollars. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
KLD	-2.654	-2.426^{+}	-2.468*
	(-1.64)	(-1.86)	(-2.59)
Donations 5 Years Prior	7.219	-1.851	-0.060
	(0.50)	(-0.18)	(-0.01)
Payments	1.082^{+}	0.851*	-0.168
	(1.80)	(2.23)	(-0.38)
Value	0.010	0.011	0.058*
	(1.12)	(1.56)	(3.63)
Market Cap	-0.000	-0.000	0.000
	(-0.75)	(-0.42)	(0.45)
Market Cap ^ 2	0.000	0.000	-0.000
	(0.96)	(0.65)	(-0.14)
Number of Years of Bribery	1.900	1.652	2.165^{+}
	(1.32)	(1.33)	(1.84)
Related Party Involved	-10.496	-8.170	-2.085
	(-1.19)	(-1.19)	(-0.41)
Foreign Investigation Ongoing	4.604	9.829	17.878*
	(0.43)	(1.13)	(2.53)
Multiple Ongoing Trials	-20.134*	-13.572*	-8.661
	(-2.05)	(-2.01)	(-1.56)
Multiple Countries	2.205	0.269	0.663
	(0.22)	(0.03)	(0.11)
Repeat Offense	-18.378	-14.547	-18.137
	(-1.32)	(-1.18)	(-1.57)
Observations	77	77	77
R^2	0.830	0.880	0.767

Table 12: Summary Statistics of Press Release Scores

Note: Summary statistics are displayed for the three different types of scores assigned to the text. Each score is calculated by text-mining the DOJ or SEC press release for each case and counting the frequency of occurrence of different types of words.

	Mean	Median	StDev
Collaboration Score	-18.9	-17.5	16.2
Press Positive Emotion	2.58	2.44	.711
Press SENTI Score	2.17	1.98	1.73

Table 13: Effect of KLD on Press Releases

Note: The dependent variables in all regressions are the three different scores of the FCPA press releases. Each score is calculated by text-mining the DOJ or SEC press release for each case. The explanatory variables are the same as those in Table 5. Market capitalization, sanction, payments, and value are measured in millions of dollars. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1)	(2)	(3)
	Postive Emotion	SENTI Score	Collaboration Score
KLD	0.073	0.222^{+}	0.823
	(1.59)	(1.91)	(0.72)
Payments	-0.000	0.023	0.197
	(-0.01)	(1.26)	(1.22)
Value	0.000	-0.000	-0.000
	(0.64)	(-0.89)	(-0.07)
Market Cap	-0.000	-0.000	0.000*
	(-0.36)	(-1.27)	(2.06)
Market Cap ^ 2	0.000	0.000	-0.000*
	(0.16)	(1.19)	(-2.06)
Number of Years of Bribery	-0.044	0.052	-2.685*
	(-0.65)	(0.46)	(-2.38)
Related Party Involved	0.163	-0.773	-19.633*
	(0.55)	(-1.50)	(-3.32)
Foreign Investigation Ongoing	0.170	-2.032*	-11.930
	(0.31)	(-2.43)	(-1.20)
Multiple Ongoing Trials	-0.124	1.282	17.225*
	(-0.33)	(1.23)	(2.40)
Multiple Countries	0.652^{+}	0.253	-4.184
	(1.81)	(0.35)	(-0.63)
Repeat Offense	0.006	1.798^{+}	35.968*
	(0.01)	(1.69)	(2.76)
Observations	75	69	69
R^2	0.512	0.729	0.758

Table 14: Effect of KLD on Sanctions, with Collaboration Score

Note: The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as those in Table 5 but include an additional explanatory variable: the collaboration score of the text. The score is calculated by text-mining the DOJ or SEC press release for each case. Market capitalization, sanction, payments, and value are in millions of dollars. Column (1) includes all observations. In column (2), sanction, value, and payments are winsorized at 2.5% and 97.5%. In column (3), these variables are winsorized at 95%. Standard errors are robust and clustered at firm level. $* \ p < .05$, $+ \ p < .10$

	(1) Sanction	(2) Sanction	(3) Sanction
KLD	-3.183	-2.909^{+}	-2.864*
	(-1.60)	(-1.79)	(-2.53)
Collaboration Score	0.357	0.192	0.296^{+}
	(1.23)	(0.91)	(1.71)
Payments	1.064^{+}	0.862*	-0.205
	(1.68)	(2.08)	(-0.45)
Value	0.010	0.010	0.059*
	(1.03)	(1.53)	(3.76)
Market Cap	-0.001	-0.000	-0.000
	(-1.33)	(-0.98)	(-0.48)
Market Cap ^ 2	0.000	0.000	0.000
	(1.50)	(1.15)	(0.70)
Number of Years of Bribery	3.192	2.244	3.030^{+}
	(1.45)	(1.34)	(1.98)
Related Party Involved	-5.441	-5.602	2.777
	(-0.65)	(-0.93)	(0.61)
Foreign Investigation Ongoing	7.161	12.230	19.102*
	(0.58)	(1.26)	(2.70)
Multiple Ongoing Trials	-35.104^{+}	-23.222^{+}	-18.405^{+}
	(-1.99)	(-1.84)	(-1.81)
Multiple Countries	4.689	2.728	3.812
	(0.42)	(0.30)	(0.57)
Repeat Offense	-31.651^{+}	-23.493	-30.655^{+}
	(-1.70)	(-1.42)	(-1.99)
Observations	69	69	69
R^2	0.836	0.890	0.787