

# Crime, Punishment and the Value of Corporate Social Responsibility\*

Harrison Hong<sup>†</sup>      Inessa Liskovich<sup>‡</sup>

September 18, 2017

## Abstract

Using enforcements of the Foreign Corrupt Practices Act, we find that socially responsible firms receive more lenient settlements from prosecutors and have higher resulting market valuations. Corporate social responsibility (CSR) is uncorrelated with bribe attributes, which should entirely determine sanctions following Becker (1974). It is also not an explicit factor in sentencing guidelines. Yet, a one standard deviation increase in CSR is associated with 5 million dollars less in fines, or 25% lower than the mean and less costly subsequent monitoring. High CSR firms outperform low CSR firms by 2.4% in the six months following the announcement of the settlement.

---

\*We thank Enrichetta Ravina, David Hirshleifer, Christopher Schwarz, Tim Loughran, Ray Fisman, Jonathan Karpoff, Jennifer Arlen, Laura Starks, Alex Mas, Will Dobbie, Alex Edmans, Jeffrey Wurgler and seminar participants at the American Finance Association 2016, UC Irvine, the European Finance Association Meetings 2015, University of Hong Kong, Insead Capitalism and Society Conference, McCombs Brown Bag, UT Austin Applied Microeconomic Seminar, Princeton Labor Economics Lunch, NBER Corporate Finance Meetings Spring 2015 and Aalto School of Business for helpful comments. This paper was previously titled "Crime, Punishment and the Halo Effect of Corporate Social Responsibility".

<sup>†</sup>Princeton University, Department of Economics, and NBER, email: hhong@princeton.edu.

<sup>‡</sup>UT Austin McCombs, Department of Finance, email: inessa.liskovich@mcombs.utexas.edu.

# 1 Introduction

Social responsibility is an important aspect of corporate strategy. Corporations regularly spend hundreds of millions of dollars on community, philanthropic, environmental and employee satisfaction programs.<sup>1</sup> According to a 2009 McKinsey Survey, two-thirds of CFOs and three-quarters of investment professionals embraced the notion that corporate social responsibility, or CSR, adds to shareholder value. In particular, they believed that the value added is tied to promoting a positive corporate image.<sup>2</sup>

A large literature, dubbed “doing well by doing good”, has rightly recognized the importance of trying to ascertain the strategic value of CSR. The existing approach has been to use panel data to associate stock market valuation or firm profitability with a firm’s CSR activities.<sup>3</sup> Yet it is difficult to tease out causality in these settings. It may be that more profitable firms are more likely to engage in CSR, rather than CSR leading to higher profitability.

In this paper, we propose a novel setting to link stock market valuation to CSR by examining the influence of firm CSR on penalties issued by the US Department of Justice and the SEC for violations of the Foreign Corrupt Practices Act (FCPA) and then to study how the stock market reacts to the announcement of these penalties. Our setting offers a number of advantages relative to earlier approaches. The first is that this is a setting in which we would not expect CSR to affect outcomes through channels other than through prosecutors taking into account a firm’s CSR attribute in sentencing. This allows our strategy to more cleanly measure the effects of CSR than the previous literature.

Starting with Becker (1974), a body of work has argued that optimal penalties are proportional to the expected harm caused by the crime. This understanding offers us a clear

---

<sup>1</sup>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.

<sup>2</sup>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.

<sup>3</sup>See (Benabou and Tirole, 2010; Heal, 2005; Margolis, Elfeinbein, and Walsh, 2009; Kitzmueller and Shimshack, 2012) for reviews.

benchmark against which to measure deviations due to CSR. In theory, FCPA settlements should be completely determined by the characteristics of the bribe (Becker, 1974; Polinsky and Shavell, 1992) and the firm's cooperation with the investigation (Arlen, 1994; Arlen and Kraakman, 1997). This theoretical underpinning is confirmed by the sentencing guidelines issued by the DOJ. They specify that prosecutors should take into account severity of the bribe in calculating the fine amount. There is no mention of a firm's CSR as a factor.<sup>4</sup> As such, the effect that we measure is not hardwired into sentencing guidelines.

Our strategy then takes advantage of these clear guidelines by measuring the effect of CSR on penalties, after controlling for bribe harm. Fortunately, FCPA cases come with detailed information on bribe characteristics such as the size of payments and the number of years the bribery persisted. These attributes allow us to proxy for expected harm as well as any underlying differences in the bribing behavior of firms. These cases are also accompanied by prosecutorial press releases, which we are able to analyze to determine whether the firm was considered to be cooperative or compliant (see Choi and Davis (2013)) and whether there were other terms of the settlement such as costly mandated monitoring.

Not only is there a clear benchmark against which to judge FCPA settlements, but violations are not likely to be linked to CSR. Unlike other types of corporate infractions such as accounting fraud, which almost always involve the CEO, CFO or other upper management, bribes usually do not involve top firm executives.<sup>5</sup> Instead, the fraud is often committed by employees farther down the organizational hierarchy. This makes it less likely that the CSR decisions of top executives are directly relevant to the case. Moreover, the widespread use of foreign bribery due to its positive NPV (Karpoff, Lee, and Martin, 2015) means that unlike numerous other judicial settings, the FCPA is not likely to capture firms that are far outside the norm.

---

<sup>4</sup>In fact, it is not clear whether CSR should increase or decrease fines, if it was to play a direct role in FCPA outcomes. A firm with a socially responsible corporate image can end up doing more harm to society if its stakeholders were more trusting to begin with.

<sup>5</sup>See Bergstresser and Philippon (2006) for instances and evidence of CEO manipulation and accounting fraud.

All of the above suggest that CSR should not matter for sentencing, once we control for bribe characteristics and firm cooperations, absent prosecutorial leniency related to social responsibility. In other words, the absence of CSR in sentencing guidelines offers a clear null hypothesis. There should be no relationship between CSR and settlements barring prosecutorial bias. This stands in contrast to existing work which links CSR with stock market valuations, where reverse causality issues loom large.

The other main advantage of our approach is that the FCPA was not heavily enforced prior to 2007. As a result, settlements were not well understood or anticipated, so the FCPA announcements were likely to contain unanticipated news. This allows us to measure the stock price reactions to these announcements for more versus less socially responsible firms. We expect significant differences in market reactions for socially responsible versus other firms following the more favorable settlements for socially responsible firms, all else equal.

In other words, our strategy to establish a causal link from CSR to stock market valuation takes two steps. First, we show that socially responsible firms receive more lenient settlements from prosecutors. Second, we then link this more favorable settlement to higher stock prices for socially responsible firms by analyzing market reactions around the announcement of the settlement.

We measure corporate social responsibility using the widely-used 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.<sup>6</sup> The final KLD score for a firm is a sum of indicators for various attributes or actions related to corporate social responsibility. 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 “consistently [give] over 1.5% of trailing three-year net earnings before taxes

---

<sup>6</sup>There is also a subcategory for human rights, which we exclude because it went through a major overhaul in 2002 and is therefore not consistent throughout our sample period.

(NEBT) to charity” to get a strength. As we discuss in Section 3, many of the indicators such as having a funded retirement plan involve substantial resources.

We first establish that there are no differences in bribe characteristics across low versus high KLD firms. In particular, there is no evidence that high KLD firms engage in less harmful bribery. We also find that high KLD firms are no more likely to be cooperative or compliant with the investigation, as measured by the textual analysis of prosecutorial press releases. Therefore CSR should not be correlated with fines absent prosecutors being influenced by CSR relative to the optimal benchmark.

We then show that KLD significantly influences sanctions. Our best estimate is that a one-point increase in the KLD score results in an average reduction in sanctions of around 2 million dollars relative to the Becker-Polinsky-Shavell optimal fine benchmark. This is a substantial change in punishment, equal to 40% of the median sanction or 10% of the mean sanction. The point estimates from different specifications range from 1.5 to 2.5 million dollars for a one point increase in the KLD score.<sup>7</sup>

We also break down KLD scores into their subcomponents to determine which are the most relevant for FCPA fines. KLD scores regarding community, products, and employees have the strongest explanatory power, whereas governance does not. These findings indicate that our overall results are not driven by corporate social responsibility which may be correlated with poor oversight of bribery. Rather, it is driven by those aspects of social responsibility which are most visible to communities and consumers.

We also exploit the fact that the FCPA only became widely enforced after 2007 to address the possibility of reverse causality. We show that KLD scores in 2007 and various measures of lagged KLD scores are also negatively correlated with sanctions. These past CSR scores could not have been set in response to FCPA fines. So we can rule out the alternative hypothesis that fines influence CSR, rather than the other way around.

Although we have established a bias in sanctions, it could have various root causes.

---

<sup>7</sup>A one standard deviation increase corresponds to fines that are 25% lower than the mean.

Prosecutorial bias does not necessarily have to be due to their social responsibility. It could instead be due to other prosecutorial incentives such as wanting to curry favor with powerful firms. To deal with these concerns, we first show that sanctions are not lower for those firms that contribute more to political campaigns or engage in more lobbying of the DOJ or SEC and that the effect of CSR is robust to controlling for other firm attributes such as firm size or profitability. In other words, among all the obvious firm characteristics, CSR is the most powerful explanatory variable for the magnitude of FCPA fines.

To more directly test whether the effect we find is due to CSR and not to omitted variables, we test whether prosecutorial leniency is more responsive to CSR in more visible firms. Corporate reputation should not matter if that reputation is not widely known. However, if there are important firm factors that are correlated with CSR, we would not expect their importance to differ by firm visibility. We consider two measures of visibility. The first is a survey that exactly tracks visibility, the annual Harris Poll Reputation Quotient, by asking several thousand respondents each year (normal everyday individuals) to name the firms they perceive as having the best and worst reputations. The second is membership in the S&P 500, which has been shown to lead to more investor recognition and media coverage, all else equal (Chen, Noronha, and Singal, 2004). We find that the effect of CSR on fines is concentrated amongst the most visible companies, even controlling for firm size. Related, our KLD effect is distinct from a brand reputation effect, as measured by Businessweek 100 Top Brands list. While brand reputation might also be important in its own right, we find a much sharper KLD effect than a brand reputation effect, thereby pointing to the importance of CSR specifically.

Beyond fines, we can also glean from the prosecutorial press releases other terms of the settlement, including whether or not the firm is subject to follow-on reporting or independent monitoring. The legal fees required by such mandates can exceed the actual fines themselves. We find that high KLD firms not only have lower fines but slightly less onerous settlement terms. To the onerousness of the other terms of the settlement, we measure the tone of

the language used in FCPA press releases. We find that press releases for more socially responsible firms have more positive and less negative language, consistent with prosecutorial leniency and less costly legal compliance.

Given the size of the fines and subsequent legal costs, we expect that on the announcement of these settlements, high KLD firms ought to out-perform low KLD ones. Consistent with the preferential treatment by prosecutors being good news for high KLD firms, firms with higher KLD scores enjoy larger excess returns, an extra 2.4% in the six months after the announcement. This highlights the direct benefit of CSR to firm value via the prosecutorial decision. The magnitudes are modest in comparison to the existing literature. But they are in line with the costs of compliance throughout settlements and more cleanly attributed to the effect of socially responsible policies.

Our study focuses exclusively on fines levied in FCPA cases. Conditional on being prosecuted under the FCPA, we establish that a firm's corporate social responsibility is associated with lower fines relative to the benchmark of optimal fines. We might also be interested in testing for the effect of CSR in the decision of whether or not to prosecute firms that may have violated the FCPA. However, this is much more challenging because we do not observe the sample of cases under consideration for prosecution, so we focus only on conditional fines in this paper.

There are several plausible mechanisms for how our visible CSR effect might bias prosecutors, including the halo effect from psychology (as in Thorndike (1920) and Efran (1974), whereby prosecutors erroneously view bribery by socially responsible firms as less harmful), prosecutors might unconsciously take visible CSR as a mitigating factor that offsets the harm from the bribe even if it is not in sentencing guidelines, and spillovers from product market affect (since prosecutors are also potential consumers). Our work cannot pin down the source of the leniency toward CSR firms. It only establishes that socially responsible engagement leads to more lenient settlements (i.e. our estimates take into account the sum of all these channels) and that this affects stock prices. We leave it to future work to disentangle the

potential channels for this influence.

Our work cannot pin down whether the currently observed levels of CSR are optimal. Indeed, as we alluded to above, we are only measuring a small fraction of the potential marginal benefits of CSR whereas the marginal cost of obtaining a higher KLD score are quite substantial. Moreover, recent and well-identified work suggests that there may be over-investment in CSR due to agency problems (Bertrand and Mullainathan, 2003; Cronqvist, Heyman, Nilsson, Svaleryd, and Vlachos, 2009; 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 place enough value on the intangible aspects of CSR (Edmans, 2011). More broadly, 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 paper proceeds as follows. We provide background on FCPA sentencing guidelines in Section 2. We describe the KLD scores in Section 3. We describe and summarize our data 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.<sup>8</sup> These actions were thought to undermine the free market system championed by the U.S. and harm foreign policy by lowering its credibility. Not

---

<sup>8</sup><http://www.justice.gov/criminal/fraud/fcpa/history/1977/houseprt-95-640.pdf>



only were these actions judged as harmful, but a survey of corporations cited in the report indicated 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 FCPA have 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. But much of the increasing popularity of the FCPA was due to the growing use of deferred prosecution and non-prosecution agreements (DPAs and NPAs) to settle these charges. These 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. There is no mention of firm CSR as a mitigating factor that prosecutors need consider. Rather, 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 depends on firm prior misconduct and can reduce the fine to 5% of the base or raise it to 400%. Nonetheless, prosecutors have some sentencing discretion, which makes their FCPA sanctions susceptible to being influenced by a firm’s CSR attributes.

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 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. 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.

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. In Table 1, we list the firms with the highest and lowest KLD scores both within the sample of all firms with KLD scores and within firms that are in the FCPA sample. For the whole KLD sample, the most responsible firms have scores of 10, while the worst have scores of

-8. These extreme scores are not dominated by any particular industry. For instance, the technology giant IBM and ice cream company Ben and Jerry's top the list and Walmart the retailer and Goodyear Tire and Rubber round out the bottom of the list. We see similar dispersion for the FCPA list.

As we mentioned in the Introduction, a one point change is quite costly for the firm. One example we provided was changing to a well-funded retirement plan. Another indicator score is on firm philanthropy. A company would have to donate around a few percent of its capital expenditures each year to rank highly when it comes to philanthropic giving. Among the 60 indicators, there are some less costly than retirement plan funding or philanthropic giving. But presumably every firm can score well on the less costly indicators. Hence the dispersion of scores we are picking up reflect the more costly measures, which can be easily in the millions of dollars.<sup>9</sup>

Many of the companies on this list are well-known to consumers. One reason is that there is a positive correlation between KLD and the lists of top brands compiled by publications such as Businessweek and Forbes. The correlation is roughly 0.36, suggesting that KLD captures the types of firm characteristics that influence consumer and investor sentiment about the firm. It also suggests that the beneficial effect of CSR might come from a related source, which is how prosecutors perceive the brands of these companies. We will disentangle these related effects in our analysis.

## 4 Data 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

---

<sup>9</sup>Related, KLD scores have been shown to influence mutual fund managers' portfolios and in particular the portfolios of mutual funds marketed as being socially responsible (Hong and Kostovetsky (2012)). Socially responsible funds typically own stocks with the highest KLD scores within an industry.

in Table 2. 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.<sup>10</sup> 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 2 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 majority of the cases are settled through deferred prosecution or non prosecution agreements. Therefore the sanction amounts include civil and criminal penalties, disgorgement of profits (including pre-judgement interest), as well as any fines paid. The mean 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. Notice that on average the value of business gained is much larger than the sanction. This is to be expected because the value represents the revenue gained by the business, not the profit, and because for some bribes the value to a business could exceed the harm to society. Optimal fines do not aim to recoup the business gained due to the bribe but only the harm it caused.

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

---

<sup>10</sup>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 CSR effect in the selection of firms to prosecute. We discuss this at the end of the paper.

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. 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.

Tables 3 and 4 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.<sup>11</sup> 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 Optimal Fines Benchmark and Empirical Methodology

There is a sizeable literature in law and economics going back to Becker (1974) that has examined the determinants of sanctions or fines, notably modeled by Polinsky and Shavell (1992). Recent papers examining the empirical specifications for the FCPA include Choi and Davis (2013) and Karpoff, Lee, and Martin (2015). The optimal fine derived in the most basic version of Becker-Polinsky-Shavell type model has the following form:

---

<sup>11</sup>In the sample, these include firm that deal with data processing, computer systems, radio and communications equipment, among others.

$$E[Sanction_i] = a + kE[Harm_i]$$

where *Sanction* is the sanction or fine. It is set equal to  $a$ , a constant that captures the fixed cost of enforcement, and is proportional to the harm done by the crime  $E[Harm_i]$ .<sup>12</sup> 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 scaled by 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.

The empirical literature on the FCPA has used observable bribe characteristics to proxy for the harm done in each bribery case, i.e.

$$E[Harm_i] = \beta_B B_i$$

where  $B_i$  includes variables such as the size of the bribe payment, the estimated value that the firm gained from the bribe, and the number of years over which the bribery occurred. The types of countries in which the bribe occurred may also influence harm. Another important determinant of optimal fines following corporate crime is cooperation and compliance with the authorities, as detailed by Arlen (1994) and Arlen and Kraakman (1997). More cooperative firms should be assigned lower fines, all else equal, because they reduce the fixed cost of investigation for prosecutors. To account for this enrichment of the benchmark model, we control for these variables in later specifications. We will consider all the above bribe characteristics, and more, in our empirical analysis.

We will show below that *KLD* is uncorrelated with  $B_i$ , making it unlikely that *KLD* is a proxy for higher order moments of  $B_i$  or unobservable bribe characteristics. This motivates the regression specification for our test of the effect of corporate social responsibility. We

---

<sup>12</sup>The coefficient reflects factors such as the probability of detection.

estimate

$$Sanction_i = \beta_0 + \beta_K KLD_i + \beta_B B_i + \varepsilon_i \quad (1)$$

where the outcome variable  $Sanction_i$  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. As we detailed earlier, FCPA sentencing guidelines do not list CSR as a mitigating factor. Since CSR is uncorrelated with  $B_i$  as we show below, our null hypothesis is that  $\beta_K = 0$  under the benchmark of optimal fines by unbiased prosecutors. So  $\beta_K$  measures the effect of CSR on sentencing. It represents the change in punishment for bribery offenses for firms with higher corporate social responsibility, holding all else equal. As we alluded to in the Introduction, there can be a number of plausible channels for why CSR might influence sentencing and we are capturing the totality of these channels.

In subsequent regressions we also explore the importance of various subcategories of KLD. In choosing relevant bribe and country characteristics for  $B_i$ , we are 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 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, whether it is a repeat offense by the firm, and whether the offender is a US company. We also include fixed effects for the year in which the FCPA case was resolved and an indicator for whether the prosecution was by the DOJ or SEC.

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.

Of course, our firm KLD might be spuriously picking up a correlation with other firm characteristics that drive sanctions. One alternative explanation is that high KLD firms might simply be more profitable and hence wield greater influence with the DOJ or SEC. To deal with this and related alternative explanations, we also estimate extend our baseline sanctions specification to

$$Sanction_i = \beta_0 + \beta_K KLD_i + \beta_B B_i + \gamma X_i + \varepsilon_i, \quad (2)$$

where  $X_i$  represents a set of other firm characteristics such as firm profitability or firm lobbying activity. We will show that KLD is the strongest predictor of sanctions of all corporate characteristics that one might expect to influence sanctions.

Of course, there are nonetheless potential omitted variables. One strategy to deal with these concerns is to use the idea that a firm's CSR policy can only influence prosecutors to the extent that the firm's reputation is known. Prosecutors, as far as we can tell from their sentencing guidelines, are not supposed to take into account a firm's CSR attributes. However, if they were systematically taking into account an omitted variable related to CSR, we would expect the effect to persist for all firms. If, on the other hand, their leniency was the result of bias, the effect of CSR on sanctions ought to be stronger for highly visible and well known firms to the public at large. We will construct two proxies for visibility and estimate the following equation:

$$Sanction_i = \beta_0 + \beta_K KLD_i + \beta_B B_i + \nu Visibility_i + \delta KLD_i \times Visibility_i + \varepsilon_i, \quad (3)$$

where the coefficient of interest is  $\delta$ . We expect the coefficient of interest to be negative, i.e. the effect of KLD on sanctions should be stronger for more visible firms, when prosecutorial bias leads to deviation from the optimal fines benchmark.



## 5.2 Similar Bribe Characteristics in High and Low CSR Firms

In Table 5, we examine how KLD scores influence bribe characteristics. We show the relationship between KLD and every bribe characteristic that we have available and will use as an explanatory variable in our sanctions regressions. All regressions in this table include year fixed effects.

The first result in Table 5 shows how bribe payments and value vary with firm KLD. 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. Columns (1) and (3) include all observations while columns (2) and (4) are winsorized at the 95% level. We see that in all columns, there is no significant relationship between KLD and payments or between KLD and the value gained from bribery.

The second set of results focuses on the details of the bribery itself: whether it occurred in multiple countries, the number of years it spanned, and whether a subsidiary or related party were involved. The third set of results focuses on prosecution: whether this was a repeat prosecution under the FCPA, whether there was an ongoing foreign investigation or other trial, and whether the prosecution was by the DOJ.<sup>13</sup> The final set of results focuses on the characteristics of the countries in which the bribery occurred.

Although there are some statistically significant differences in bribe characteristics, they do not portray higher KLD firms as consistently engaging in either more or less harmful bribery. Higher KLD firms are less likely to have a related party involved, making the firm itself more culpable. These firms are also more likely to be involved in a foreign investigation, increasing the expected harm. However, countries in which they bribe tend to be slightly richer and have stronger rule of law and more effective governments, which might suggest that bribes are less harmful. Altogether it seems that while higher KLD firms vary slightly

---

<sup>13</sup>The repeat offense indicator generally measures staggered prosecutions. For all but one of the firms with a repeat offense, the offenses were discovered around the same time but prosecuted at different speeds. The one exception in our data is IBM, which faced a complaint in 2011 following a separate FCPA action in 2000. Despite being the only real repeat offender, IBM is also the most socially responsible firm in our sample.

on bribe characteristics, there is no indication that these differences display a systematic bias toward less harmful offenses.

When considering such a large number of dependent variables at once, it is important to remember that spurious but statistically significant coefficients might arise. To counteract this problem of multiple joint hypotheses, we apply the Bonferroni correction to the regressions in Table 5. After this correction, only the effects of KLD on Rule of Law are significant at either the 5% or 10% level. Even with this difference, the effect of KLD on sanctions extends far beyond the effects of rule of law.<sup>14</sup>

### 5.3 Firm CSR and Deviation from the Optimal Fines Benchmark

In short, there is little evidence that the bribes of higher KLD firms are less likely to be harmful. Yet, as we will now show, KLD ends up being one of the most significant explanatory variable for sanctions. The results of this sanctions regression analysis, our Equation (1) specification, are presented in Table 6. 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%.<sup>15</sup>

In all three specifications of Table 6 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 -1.736 and is significant at the 5% level. This means that a one point increase in the KLD score results in an average reduction in sanctions of 1.736 million dollars. The median sanction amount is 5.23 million dollars and the mean sanction amount is 20.3 million

---

<sup>14</sup>In Table 5 we estimate that a one point increase in KLD leads to an increase of 0.08 in Rule of Law. We later show in Table 7 that a one point increase in Rule of Law is associated with a 5.6 million decrease in sanctions. Multiplying the two together, this can only explain a decrease of 0.4 in the FCPA sanction.

<sup>15</sup>We have also run all regressions using the logs of sanctions, value, and payments. Results are qualitatively similar but have a lower  $R^2$ .

dollars. Therefore a one point increase in KLD corresponds to a decline equal to 33% 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 4.9 million dollars.

As a benchmark for comparing the explanatory power of KLD, 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 and is always statistically significant. A one million dollar increase in payments is linked to an increase in the resulting sanction of .975 million dollars. So a one point increase in KLD offsets roughly an additional 1.8 million dollars in bribe payments. The amount of value gained from the bribe (Value) also has a positive coefficient, although it is much smaller 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. These effects 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 20.14 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 7.4 million dollars more in sanctions than those that are narrower in scope. It seems that being involved in multiple ongoing trials and being a repeat offender both lead to a lower sanctions. This is understandable because earlier domestic investigations are almost always linked to the same actions as later ones, so these 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 year fixed effects ensures that we are not identifying time trends in FCPA sanctions.<sup>16</sup> 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 remaining source of confounding variation is that bribery harm maybe larger 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 7. Even taking into account country characteristics, it is still true that higher KLD firms are punished less for bribery. In fact the

---

<sup>16</sup>Roughly 45% of the variation is explained by KLD, payments and value. Another 15% is described by other bribe characteristics. Year fixed effects account for the remainder of the  $R^2$ . For all results in the paper, we have run equivalent regressions that also control for a quadratic in the firm's market capitalization, allowing for non-linear effects of market capitalization on fines. Results do not change, suggesting that we are not identifying differences between large and small firms. Firm size is not part of the optimal fines benchmark and we verify that it does not seem to drive fines.

point estimates are now slightly larger. For columns (1) and (2), the coefficients on KLD are slightly smaller but similar to those in Table 6. However the point estimate for column (3) increases from -1.736 in Table 6 to -2.298 in Table 7. As this is our preferred specification, we estimate that a one point increase in KLD leads to 2.3 million dollars less in sanctions.

Notice that the coefficients on payments and value remain similar for the most part. 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 6 are not displayed but have similar coefficients. On the other hand, the newly added country characteristics are generally not statistically significant. In sum, the effect of KLD is larger than many other explanatory variables

Up until now, we have treated SEC and DOJ prosecutions of the same crime as different observations. We have also run these regressions while combining the SEC and DOJ sanctions when the firm subsidiary, country, and year are the same. This provides a robustness check to ensure that our results are not driven by joint decision-making by the DOJ and SEC. Although omitted for brevity and available from the authors, the estimates are still generally significant at the 5% level and of similar magnitudes to prior estimates.

To add further credence to this argument, we check the effect of KLD on sanctions while not controlling for bribe characteristics. That is, we only control for year fixed effects and whether the firm was in the US. Regardless of winsorization, we find that the coefficients on KLD were similar to the specification with full controls. This demonstrates that bribe characteristics are likely to be orthogonal to the relationship between KLD and sanctions. Overall we can conclude that good and bad firms engage in similarly harmful bribery and that the variation in sanctions is driven by prosecutorial bias rather than by the true harm of the bribe.

## 5.4 Subcategories of CSR

To investigate what exactly drives the CSR effect in corporate sentencing, we can break KLD down into its components, the six areas in which companies can demonstrate their responsibility. In Table 8 we display the estimates of  $\beta_K$  if we run the main regression using each subcategory of KLD in turn, rather than overall KLD. Every entry in the table represents the the estimates from running a different regression, in which a different subcategory is substituted in for the overall KLD score in the original specification. We include both bribe and country variables, as well as year fixed effects, which are all omitted for brevity. Three of the six categories seem to be consistently significant while one is consistently negative but not statistically significant. These results suggest that the CSR effect is mostly generated by responsible behavior towards the community and employees, and by responsible products.

Community KLD, which measures the altruism of the company towards the communities where the firm's operations are located, comes in with the largest point estimates, between -10 and -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. Firms can improve their community KLD score by increasing their charitable giving, expanding their volunteer programs, or supporting housing or education partnerships. Community scores are lowered when their engage in controversial lending, negatively effect community economies, or have mobilized indigenous or general community opposition. Therefore this measure captures well some of the most visible aspect of a firm's reputation as a good corporate citizen.

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 -4.7 to -5.1 million dollars. All coefficients are significant at the 5% level. The strength of this relationship suggests that the visibility of a firm's products makes this KLD category an important driver of regulatory outcomes.

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 KLD. In our preferred specification (column (3)) the estimate is statistically significant at the 5% level and suggests that a one point increase in employee KLD decreases sanctions by around 7.1 million dollars.

Turning to the diversity KLD score, we find point estimates are around -1 and 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 last two rows show that environment KLD and corporate governance KLD occasionally have positive point estimates and are not statistically significant at any point. Environment KLD measures a company's engagement in environmental services, pollution prevention, recycling, and clean energy. The score is lowered by environmentally harmful hazardous waste, ozone depletion, emissions, pesticide production, and other environmental controversies. The corporate governance KLD score is raised by limited compensation to top management, transparent reporting, political accountability, and positive corporate culture. It is lowered by issues with all of the aforementioned, as well as specific accounting controversies.

The latter finding is an important piece of evidence that CSR is not a direct mitigating factor in FCPA sanctions. Although social responsibility is not an explicit mitigating factor, it may be that it measures aspects of firm performance and history that do serve to mitigate regulation. These potential factors would include involvement in accounting controversies and political accountability, defined as public policy leadership and transparency of political involvement. Both of these factors are measured and included in the corporate governance

KLD score. However, it does not seem that they lead to lower sanctions. So the effect of KLD on fines is not driven by firms that were involved in other types of transparency scandals. Instead, it is driven by how firms interact with their communities and consumers.

The results in Table 8 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 2.3 million dollar reduction in sanctions. For the subcategories of community, product, and employee KLD, the effects are always larger. They range from a minimum decrease of 3.5 million dollars to a maximum of 12 million dollars in sanction reduction for a one point increase in one of these three subcategories. Taken all together, these results imply that prosecutors consider a firm’s CSR behavior in sentencing.

## 5.5 Addressing Reverse Causality

One of the first concerns that accompanies our baseline results is reverse causality. 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. In the first three rows of the Table 9, we address the worry that KLD scores might be driven by FCPA proceedings. 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 7. Every entry in the table represents the the estimates from running a different regression. The regression specifications control for all other bribe characteristics, as well as country variables, recreating the regressions shown in Table 7. 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 did not choose KLD directly in response to FCPA sanctions, it could be true that decisions about KLD scores took into account the likelihood of FCPA prosecution. To show that this is not the case, in the last row of Table 9 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 2007 we use that year’s KLD but we use 2007 KLD for all cases prosecuted in or after 2007. Before 2007, very few FCPA cases were prosecuted and there was virtually no concern about the enforcement of the law. The explosion in the 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.

## 5.6 Accounting for Compliance or Cooperation

Having shown that KLD scores affect sanctions above and beyond what is warranted by bribe characteristics, we move on to show that this also exceeds the optimal fines driven by cooperation. In corporate criminal cases it is optimal for prosecutors to tie the sanction amount to the cooperation and compliance of the firm (Arlen, 1994; Arlen and Kraakman, 1997). So it is important to verify that any relationship between KLD and sanctions is not driven by more socially responsible firms being more cooperative with prosecution.<sup>17</sup>

In order to study this effect, we use the press releases of the DOJ and SEC that accompany the settlement of every FCPA case. To quantify the extent of each firm’s collaboration, we use textual analysis to score each press release. Following Choi and Davis (2013), we count the frequency of words like “cooperation” or “compliance”. More specifically, we take all

---

<sup>17</sup>Compliance with prosecution is especially important to control for because it may also alter the probability of detection in each firm.

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 Cooperation Score for each case. The mean cooperation score is -18.9 and the median is -17.5, as may be expected from states that detail wrongdoing. However, there is a significant standard deviation of 16.2.

In addition to using this measure of cooperation, we manually go through each press release to determine whether the firm’s cooperation was singled out as a redeeming factor. Noted cooperation is fairly common and in 71% of the press releases, a firm’s voluntary disclosure, remedial efforts, or other cooperation were singled out as a reason for lower sanctions. In Table 10, we re-run our baseline regression of sanctions on KLD (from Table 7) but now also control for the Cooperation Score and whether there was Noted Cooperation in the press release. The relationship between KLD and sanctions remains negative and significant in our preferred specification. To further demonstrate the divergence between KLD and cooperation, in column (1) and (2) of Table 15 we directly test the relationship between the two. Higher KLD scores do not lead to a significantly more cooperation. This analysis serves to rule out heterogeneity in cooperation as the channel through which high KLD firms have lower sanctions.

## **5.7 Accounting for Other Firm Characteristics**

We have established a bias in sanctions, a deviation from the optimal benchmark where unbiased prosecutors set fines taking into account only bribe characteristics and cooperation. But this prosecutorial bias need not be due to our CSR effect if CSR is correlated with other

firm attributes that might influence sentencing. One alternative explanation is that it could instead be due to biased incentives or conflicts of interest, where the prosecutors may take into account the political sway of firms to avoid angering those that are more powerful (Johnson, 1973).<sup>18</sup>

If existent, this political bias could manifest itself in two different ways. The first is if more liberal firms, those more likely to be associated with the Democratic party, tend to be more socially responsible. 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.<sup>19</sup> Therefore it would seem that political favoritism is not responsible for the beneficial treatment of more socially responsible firms.<sup>20</sup>

The other way in which political bias might influence the assignment of FCPA fines is if more socially responsible firms are 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. This could also be driven to firm size, as larger firms may have more political sway. To account for size, we control for a quadratic in market capitalization. In order to further address the issue of political power, we collect data on firm's donations to politicians and elections and their lobbying of both the SEC and DOJ. The Federal Election Commission records contributions from all individuals and firms of at least \$200, as long as they are not

---

<sup>18</sup>One might also worry that prosecutors are intentionally assigning lower sanctions to firms if their revenue is more likely to go to charitable purposes. However, considering the difference in sanctions is on the order of a few million dollars, it is unlikely that this contributes significantly to corporate social responsibility. A large part of the cost of being subject to an FCPA investigation is the legal fees.

<sup>19</sup>The rise of FCPA enforcement under this leadership is described by the law firm Gibson, Dunn & Crutcher LLP: <http://www.gibsondunn.com/publications/pages/FCPAEnforcementExplosionContinues.aspx>

<sup>20</sup>If political considerations were key, we might also expect to see differential treatment of more socially responsible firms under Democratic and Republican administrations. Instead, we found that the effect of KLD on sanctions does not differ systematically with the party in power, in tables not shown.

made through a Political Action Committee. This provides a measure of how politically active each company is. Lobbying data is available through [www.opensecrets.org](http://www.opensecrets.org), which lists the number of reports that are filed with every government agency in each year, as well as the client on whose behalf they are filed.

These data on contribution and lobbying allow us to construct two measures of political influence. Specifically, recent donations and lobbying, those in the five years prior to the resolution of the FCPA action, would pick up increases in political activity potentially meant to sway regulators. The median firm in the sample does not have any documented contributions in any of these years. However, the mean contribution for the five years preceding the FCPA action is \$50,000, with a standard deviation of \$226,000. These numbers reflect the wide dispersion of political involvement amongst prosecuted firms. The median firm is also not directly involved with lobbying the DOJ or SEC. Only 12% of firms engage in any lobbying activity in the five years prior to their FCPA settlement.

First we investigate the relationship between political activity and corporate social responsibility. Table 11 shows how political donations and lobbying vary with KLD, after controlling for year fixed effects. The first column measures the effect on total donations, in millions, during the 5 years prior to the FCPA action. The second column shows an indicator for whether the firm engaged in lobbying the relevant agency during the 5 years prior to the settlement. Donations are actually negatively related to KLD scores, although this is not statistically significant. The dependent variable is measured in millions of dollars, so a one-point increase in KLD is associated with \$12,000 less in donations. There is no relationship between lobbying and KLD scores. Taken together these results suggest that rather than going hand in hand, political activity is either orthogonal to CSR or in some forms may be an alternate route to achieving influence. In other words, those firms that are less socially responsible are left with less political capital and try to make up for this through political donations. This casts doubt on the idea of political connectedness as the driver of sanction outcomes.

However, we can further verify that political donations and lobbying are not likely to influence sanctions. We directly test the relationship between donations, lobbying, and FCPA fines in Table 12, i.e. our Equation (2) regression specification. 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 and an indicator for recent lobbying.

To further account for firm characteristics we also control for size, using a quadratic in firm market capitalization, as well as ROA. The main takeaway from this table is that the effects of KLD remain the same as before. One extra point of KLD is associated with a 2.4 million dollar reduction in sanctions, and this result is statistically significant at the 5% level. Meanwhile, the coefficients on donations and lobbying are usually negative but generally not statistically significant. The fact that ROA is also not significant suggests that our effect is not driven by some talented CEOs being better at generating firm profits and at evading sanctions. In sum, we conclude that KLD is the strongest explanatory variable when compared to other firm characteristics, that would be expected to influence sanctions.

## 5.8 Estimates using Interaction with Firm Visibility

In our context, we should observe that prosecutors are more influenced by CSR if they are more aware of a firm's socially responsible reputation. Firms that are more visible or recognizable to the public (which presumably includes prosecutors) will be easier to strongly associate with either high or low corporate social responsibility. Therefore we would expect prosecutorial bias to be stronger for more visible firms.

Our measure of Visibility is membership in the Harris Poll's Reputation Quotient Survey. This is an annual survey that asks respondents (normal everyday people or consumers) to name the companies with the 2 best and 2 worst reputations. These responses are combined to form a list of most visible companies. We measure visibility by using an indicator for being on the list of the 60 most visible companies in 2008, a year that is close to the years of FCPA prosecution in our sample.

To test whether this is the case, in Table 13 we compare the effect of KLD on sanctions for differently visible firms, i.e. our Equation (3) regression specification. The regressions shown in this table follow those presented before, but they allow effects to differ by firm visibility. Because visibility is likely to be highly correlated with size, all columns also control for a quadratic in market capitalization. In the first column, the effect of KLD is no longer large or significant, at  $-.408$ , but the coefficient on the interaction between Visibility and KLD is  $-5.761$  and is significant at the 5% level. The effect of KLD on sanctions is driven by highly visible firms, who are assigned a sanction that is 5.76 million dollars lower for every one point increase in KLD, and is not strong for less visible firms.

Another measure of visibility is membership in the S&P 500. Index members are widely followed by analysts, investors and media, making it more likely that prosecutors would be familiar with their reputations. In the second column we control for S&P 500 membership and its interaction with KLD. Again KLD on its own does not have a large or significant impact on sanctions. However, for firms that are in the S&P 500, a one point increase in KLD leads to 4.074 million less in sanctions. These differential effects for more and less visible firms confirm the influence of a firm's visible socially responsibility attributes for sentencing.

The final column controls for whether or not the firm's name is considered a top brand, according to The 100 Top Brands, a list compiled by Businessweek from 2001 through 2007. Firms with top brands are not only more visible to the public but are likely to have higher KLD scores. The coefficients on both KLD and Top Brand are both negative but only the coefficient on KLD is significant. The estimated effect of Top Brand is highly imprecise, partially reflecting the fact that only 13 firms in the FCPA sample appear in these lists. KLD has a similar effect to previous specification, leading to a 2.5 million dollar decrease in sanctions. This suggests that corporate social responsibility generates an effect distinct from and sharper than brand reputation.

## 5.9 Other Terms of the Settlement

We next look to prosecutorial press releases to be better able to measure the outcomes of each FCPA investigation. In addition to assigning a certain sanction amount, the DOJ and SEC put out a press release detailing the bribery itself and the resolution of the investigation. We have already used these press releases to fruitfully gauge cooperation. Now we will use them to measure other terms of the settlement beyond the pure monetary value of the sanction. In many cases, firms are required to take actions to avoid future violation of FCPA regulations, such as hiring an independent monitor or delivering periodic reports to regulators.

It is important to take into account these investigation costs because while sanctions are a large part of the FCPA, the costs of complying with prosecutors throughout the investigation are often even larger. The high toll of these costs has been noted in both the popular press<sup>21</sup> and legal publications Koehler (2014). The legal fees amassed by companies conducting internal investigations can, in a number of cases, overshadow the sanction amounts themselves.

To capture some measure of investigation costs, we focus on two concrete outcomes that are often mentioned by the FCPA in press releases: independent monitors and reporting. Both of these measures are commonly specified as a part of the FCPA settlement, and both incur hefty legal fees. In Table 14 we investigate whether these outcomes, like sanction amounts, are correlated with KLD. We estimate a linear probability regression, focusing on monitoring in the first column and reporting in the second column. We find that after controlling for all other bribe and country characteristics, firms with a one point increase in KLD are 4 percentage points less likely to require an independent monitor, although the t-statistic is only -1.57. The coefficient on reporting is also the right sign but not statistically significant.

Another way to capture the leniency of the settlement is to use press releases to capture the emotional content of the FCPA sentence. Although in some ways the statements are

---

<sup>21</sup><http://dealbook.nytimes.com/2012/03/05/the-mounting-costs-of-internal-investigations>

formulaic, there is considerable variation in phrasing and descriptions. Sometimes they stress the severity and illegality of the crime, and go out of their way to chastise the firm. Other times they stress the remedial efforts of the defendant. This is well illustrated in Figure 3, which contains the press release of the DOJ upon the resolution of the FCPA action against Tyson Foods, Inc. Note that although the third paragraph details the charge levied against the firm, the second paragraph consists of two quotes. One of these vilifies Tyson further, citing “false books and sham jobs”, while the other highlights the company’s “cooperation with the government investigation”.

Not only do these deviations shed a light on the emotional state of the prosecutors, they are a way to measure outcomes that are not easily quantifiable. In the case of Tyson Foods, the harsher tone set by the press release was predictive of the settlement outcomes. Not only did the company receive an abnormally high sanction given the bribe details but they bore a large investigation cost as well. Although only \$90,000 were paid as part of the bribe, and the value gained was \$880,000, the sanction assigned by the DOJ was \$4 million. The deferred prosecution agreement further states that on top of this cost, Tyson Foods subjected all six of its wholly owned overseas production facilities to thorough reviews, and agreed to conduct three follow-up reviews. This is despite the fact that only one subsidiary was involved in the wrongdoing. These additional costs of FCPA prosecution are likely to be an important driver of stock market reactions and are hard to gauge without close analysis of the press releases.

To this end, we first use three text mining algorithms to measure the positive and negative emotional or sentimental content of the press releases. There is a long history in psychology and linguistics of inferring emotional or mental states from written passages,<sup>22</sup> and this has been successfully applied in the context of financial markets as well by Loughran and McDonald (2011). To capture a wide range of emotional scores, we use the positive sentiment score from SentiWordNet, both positive and negative scores from LIWC, and negative scores

---

<sup>22</sup>see Christopher Potts’ website for a tutorial <http://sentiment.christopherpotts.net/>



developed by Loughran and McDonald (2011).<sup>23</sup> These algorithms score passages by using dictionaries trained on a broad population of documents. This allows us to rely on a large dataset that captures how humans tend to express their opinions in text, and how corporations convey negative news. In other words, while we focused on words associated with cooperation or non-cooperation when building the dictionary for our Cooperation score, the dictionaries for LIWC, SentiWordNet, and the Loughran-McDonald score (hereafter LM) are built to pick up broader 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.<sup>24</sup> For the LIWC method, we similarly generate the score by using software from LIWC.<sup>25</sup> For the LM approach, we count the number of words that have negative connotation in business terminology, as determined by Loughran and McDonald by looking at 10-Ks from 1994 through 2008.<sup>26</sup>

The positive emotion measures are similar to those found in the broader population of non-legal text documents. The Senti Score from SentiWordNet has a mean of 2.17 and median of 1.98 with a standard deviation of 1.73. The Positive Emotion score from the LIWC has a mean of 2.58 and a median of 2.44. The standard deviation of the score is smaller, at 0.71. This means that on average, positive words make up 2.58% of each documents in the FCPA sample. The LIWC negative emotion score is lower, at 0.67 and a standard deviation of 0.42. So prosecutors tend to use much more positive than negative words in the press releases. In order to verify that we are not mis-measuring negative words, we also use the LM negative word measure. It is significantly higher, with an average of 21.1 and a standard deviation of 14.1 in our sample. As expected from a negative news announcement,

---

<sup>23</sup>Another popular algorithm, named General Inquirer from Harvard University, is widely used in classifying sentiment from financial media, which generally tends to yield results very similar to LIWC.

<sup>24</sup>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>

<sup>25</sup>The software is available on its official website at <http://www.liwc.net> and a description is available at <http://www.liwc.net/howliwcworks.php>.

<sup>26</sup>We present the results of the simple proportion of negative words but all calculations are similar using the  $td.idf$  weighted measure.

the documents have more negative business words than the general sample of 10-Ks.

In columns (3) and (4) of Table 15, we find that higher KLD firms are more likely to have positive sentiment in their press releases, as measured by the LIWC Positive Emotion score. For the Senti score, the coefficient is .280 and has a t-statistic of 2.36. For the Positive Emotion score from LIWC, the coefficient on KLD is .070 and it is significant at the 10% level. This implies that a one point increase in KLD leads to a 10% increase in positive emotion relative to the mean. In the last two columns we measure the relationship between KLD and negative press releases. We find that there is no effect on the LIWC Negative Emotion measure but that the coefficient on the LM Negative measure, the more reliable score for business documents, is -2.851 and is significant at the 5% level, implying that a one point increase in KLD is associated with a 13% decrease in negative tone relative to the mean. Overall, it appears that high KLD firms get more lenient settlements beyond the sentencing as measured in the emotional or sentimental tones in these press releases.

## 5.10 Stock Market Price Reactions

We next study the stock market reactions following these press releases. A large body of recent research finds that positive sentiment is associated with higher stock prices (see, e.g., Tetlock (2007)). Therefore we expect that high KLD firms, because they have both lower fines and less negative press releases, ought to out-perform low KLD firms subsequent to announcement. The necessary assumption is that the market did not already anticipate all these outcomes, which we think is reasonable given that the FCPA only began to be heavily enforced during our sample and there was little history for the market to learn from. We measure abnormal returns preceding and following the announcement for every firm in order to track shareholder's reactions.

We are only interested in measuring the difference in price reactions between high and low KLD firms because ex ante, it is not clear whether the average stock price reaction to FCPA announcements should be negative, positive, or flat. On the one hand, the reminder

of the FCPA charges may make negative aspects of the firm more prevalent, or sanctions might be consistently higher than expected, as the DOJ and SEC crack down on bribery throughout the 2000s. In that case we would expect to see negative abnormal returns following announcements. However, if shareholders are generally able to accurately predict sanctions, we would expect to see no abnormal returns. On the other hand, it may be that FCPA announcements convey positive news. Sanctions might be lower than expected by the market, and these announcements also signal the end of a costly and uncertain process, the FCPA inquiry.<sup>27</sup>

The realized cumulative abnormal returns following these announcements are shown in Figure 4. Cumulative returns are measured starting 30 days prior to the FCPA press release and ending 120 days after. We follow the literature on earnings announcements (see, e.g., Bernard and Thomas (1990)) by using a wide window to track the effect of press release announcements. It can take the market as much as 120 days to fully recognize earnings news. It stands to reason that a similar horizon applies for FCPA news.

In the top graph, abnormal returns are measured relative to the Fama-French three factor model. In the lower graph, they are measured relative to weighted market returns. The solid lines mark average cumulative abnormal returns and the dotted lines represent 95% confidence intervals. The sample of FCPA firms is split into high KLD and low KLD firms to compare the effects for more or less socially responsible companies. It is apparent that regardless of the measure of abnormal returns, cumulative abnormal returns are positive in the months following the FCPA announcement, and this effect seems to be more pronounced for higher KLD firms.

To measure the effects of these press releases more formally, Table 16 shows daily abnormal returns in various periods relative to the announcement date. Following MacKinlay (1997), we regress abnormal returns on dummies for two periods. The first is an event win-

---

<sup>27</sup>Karpoff, Lee, and Martin (2015), for instance, who study not just the settlement announcements but also the initial announcements that the firm is subject to an FCPA investigation, find on average a small negative effect. This suggests that initial announcements are substantially negative given that the settlement announcements are on average positive.

dow of 5 days around the announcement: from 5 days before to 5 days after  $([-5, 5])$ . The second is the half year following the announcement: from 6 days after to 126 days after the event  $([6, 126])$ . For both time periods, we first allow the effect to vary linearly with a firm's KLD score in the first two columns.

From the first two columns it is clear that although there are no significant abnormal returns in the 5-day event window surrounding the announcement, abnormal returns are significantly higher in the months following the announcement, consistent with the graphical results in Figure 4. In both columns, the coefficients on  $[6, 126]$  demonstrate that daily abnormal returns are roughly 10 bps higher in the six months following the announcement (or a total of 12% over the six months). Interacting with KLD shows that although higher KLD firms do not experience any higher returns directly around the announcement, daily abnormal returns over the following 6 months rise by a statistically significant 2 bps daily for a one-point increase in KLD (or an additional 2.4% over the six months).

To verify that these abnormal returns only exist following FCPA announcement, Table 17 tests for abnormal returns around a different set of dates. Instead of studying returns around the date of the announcement, it focuses on returns 300 days after the announcement. The windows measures are from 295 to 305 days after the announcement and from 306 to 426 days after. Unlike the previous table, none of the coefficients are significant. There are no abnormal returns and this does not differ for firms with higher KLD scores.

## 5.11 Selection of Cases

Our study has focused exclusively on fines levied in FCPA cases. We take the FCPA cases as given and establish that CSR influences sentencing relative to the benchmark of optimal fines along the lines of Becker (1974) and Polinsky and Shavell (1992). However, there may also be our CSR effect in the selection of cases to prosecute, since prosecutors have discretion in that domain as well.

In Table 18 we examine whether firm KLD scores are correlated with the probability of

ending up in our FCPA sample. The regression estimates a linear probability model using all firms with a KLD score, and controls for an indicator for whether the firm is a US company and for year and industry fixed effects. Column (2) also controls for a quadratic in firm market capitalization. The coefficient on KLD is consistent across the two specifications, implying that a one point increase in KLD decreases the likelihood of ending up in the FCPA sample by 0.04 percentage points. In column (2) this is significant at the 10% level but it is still an economically small effect.

Because we cannot observe actual bribery, we do not know if this decreased likelihood of FCPA prosecution is due to lower incidence of bribery in higher KLD firms or if it is due to our CSR effect on prosecution. However, there is evidence to suggest that bribery is extremely common across many different types of firms, lending credence to the possibility that the CSR effect is at play. Indeed, the realization that bribery was widespread is what drove the passage of the FCPA. Although we cannot make any definitive statements about selection into the FCPA without more data on the pool of offenders, it is possible that all else equal, prosecutors are less willing to prosecute more socially responsible 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. We are able to measure a particular benefit of CSR by studying a novel setting. We compare the punishment of crimes by more and less 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 compare fines to the optimal fines benchmark following Becker (1974) and Polinsky and Shavell (1992). We find that firms with higher social responsibility scores, as measured by KLD scores, pay \$2 million dollars less, or 40% less than the median fine, for bribing foreign officials.

We establish that these results are not driven by reverse causality or outliers, and verify that our results are consistent with visible socially responsible firm actions leading to prosecutorial leniency. We use textual analysis to measure other dimensions of a more favorable settlement beyond fines and find that abnormal returns following FCPA fine announcements are higher for more socially responsible firms, highlighting an important channel through which CSR may benefit shareholders.

## References

- Arlen, J., 1994, “The potentially perverse effects of corporate criminal liability,” *The Journal of Legal Studies*, pp. 833–867.
- Arlen, J., and R. Kraakman, 1997, “Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes,” *New York University Law Review*, 72(4), 687.
- Baker, M., and J. Wurgler, 2011, “Behavioral corporate finance: An updated survey,” working paper, National Bureau of Economic Research.
- Becker, G. S., 1974, “Crime and punishment: An economic approach,” in *Essays in the Economics of Crime and Punishment*. UMI, pp. 1–54.
- Benabou, R., and J. Tirole, 2010, “Individual and Corporate Social Responsibility,” *Economica*, 77, 1–19.
- Bergstresser, D., and T. Philippon, 2006, “CEO incentives and earnings management,” *Journal of financial economics*, 80(3), 511–529.
- Bernard, V. L., and J. K. Thomas, 1990, “Evidence that stock prices do not fully reflect the implications of current earnings for future earnings,” *Journal of Accounting and Economics*, 13(4), 305–340.
- Bertrand, M., and S. Mullainathan, 2003, “Enjoying the quiet life? Corporate governance and managerial preferences,” *Journal of Political Economy*, 111(5), 1043–1075.
- Bolton, P., and F. Samama, 2013, “Loyalty-Shares: Rewarding Long-term Investors,” *Journal of Applied Corporate Finance*, 25(3), 86–97.
- Chen, H., G. Noronha, and V. Singal, 2004, “The price response to S&P 500 index additions and deletions: Evidence of asymmetry and a new explanation,” *The Journal of Finance*, 59(4), 1901–1930.
- Cheng, I.-H., H. Hong, and K. Shue, 2013, “Do Managers Do Good with Other People’s Money?,” working paper, National Bureau of Economic Research.
- Choi, S. J., and K. E. Davis, 2013, “Foreign Affairs and Enforcement of the Foreign Corrupt Practices Act,” working paper, NYU Law and Economics Research Paper No. 12-15; NYU School of Law, Public Law Research Paper No. 12-35, Available at SSRN: <http://ssrn.com/abstract=2116487>.
- Cronqvist, H., F. Heyman, M. Nilsson, H. Svaleryd, and J. Vlachos, 2009, “Do entrenched managers pay their workers more?,” *the Journal of Finance*, 64(1), 309–339.
- Edmans, A., 2011, “Does the stock market fully value intangibles? Employee satisfaction and equity prices,” *Journal of Financial Economics*, 101(3), 621–640.

- Efran, M. G., 1974, "The effect of physical appearance on the judgment of guilt, interpersonal attraction, and severity of recommended punishment in a simulated jury task," *Journal of Research in Personality*, 8(1), 45 – 54.
- Erhard, W., and M. Jensen, 2013, "Putting integrity into finance: A purely positive approach," working paper 12-074, Harvard Business School NOM Unit Working Paper.
- Haidt, J., D. Hirshleifer, and S. H. Teoh, 2013, "Moral Attitudes and Financial Decision-Making," working paper, UC Irvine Working Paper.
- Heal, G., 2005, "Corporate Social Responsibility: An Economic and Financial Framework," *Geneva Papers*, 30, 387–409.
- Henning, P. J., 2012, "The Mounting Costs of Internal Investigations," *The New York Times*.
- Hong, H., and L. Kostovetsky, 2012, "Red and Blue Investing: Values and Finance," *Journal of Financial Economics*, 103(1), 1–19.
- Johnson, J. N., 1973, "Influence of Politics upon the Office of the American Prosecutor, The," *Am. J. Crim. L.*, 2, 187.
- Karpoff, J. M., D. S. Lee, and G. S. Martin, 2015, "The Value of Foreign Bribery to Bribe Paying Firms," working paper, SSRN, Available at SSRN: <http://ssrn.com/abstract=1573222>.
- Kitzmueller, M., and J. Shimshack, 2012, "Economic Perspectives on Corporate Social Responsibility," *Journal of Economic Literature*, 50(1), 51–84.
- Koehler, M., 2014, "Foreign Corrupt Practices Act Ripples," *American University Business Law Review*, 3.
- Loughran, T., and B. McDonald, 2011, "When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks," *The Journal of Finance*, 66(1), 35–65.
- MacKinlay, A. C., 1997, "Event Studies in Economics and Finance," *Journal of Economic Literature*, pp. 13–39.
- Margolis, J. D., H. A. Elfeinbein, and J. P. Walsh, 2009, "Does it Pay to Be Good...And Does it Matter? A Meta-Analysis of the Relationship between Corporate Social and Financial Performance," *SSRN Working Paper no. 1866371*.
- of the U.S. Department of Justice, C. D., the Enforcement Division of the U.S. Securities, and E. Commission, 2012, *Resource Guide to the U.S. Foreign Corrupt Practices Act*.
- Polinsky, A. M., and S. Shavell, 1992, "Enforcement Costs and the Optimal Magnitude and Probability of Fines," *Journal of Law and Economics*, 35(1), 133–148.
- Tetlock, P. C., 2007, "Giving content to investor sentiment: The role of media in the stock market," *The Journal of Finance*, 62(3), 1139–1168.
- Thorndike, E. L., 1920, "A constant error in psychological ratings," *Journal of applied psychology*, 4(1), 25–29.



Figure 1: FCPA Actions by Year

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

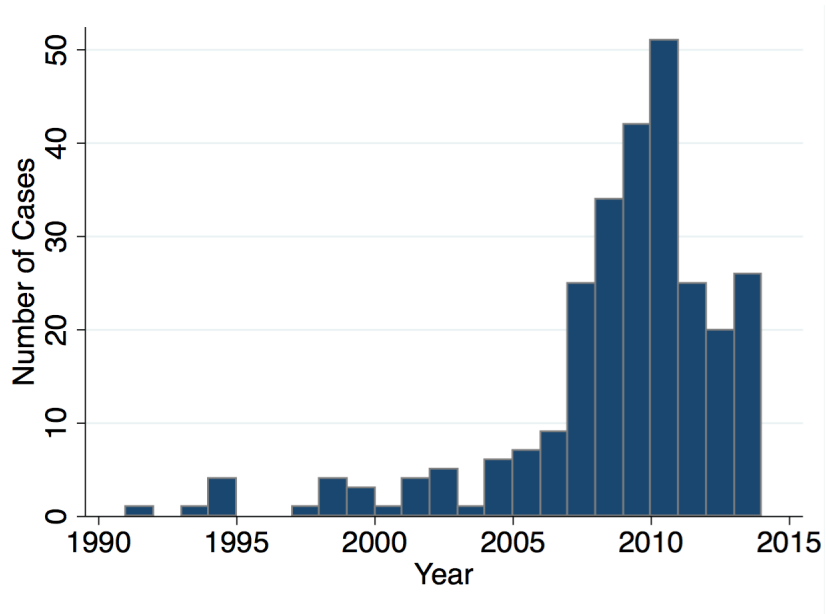


Figure 2: Sanctions by KLD

**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 (c) the sanction amount is winsorized at 95%.

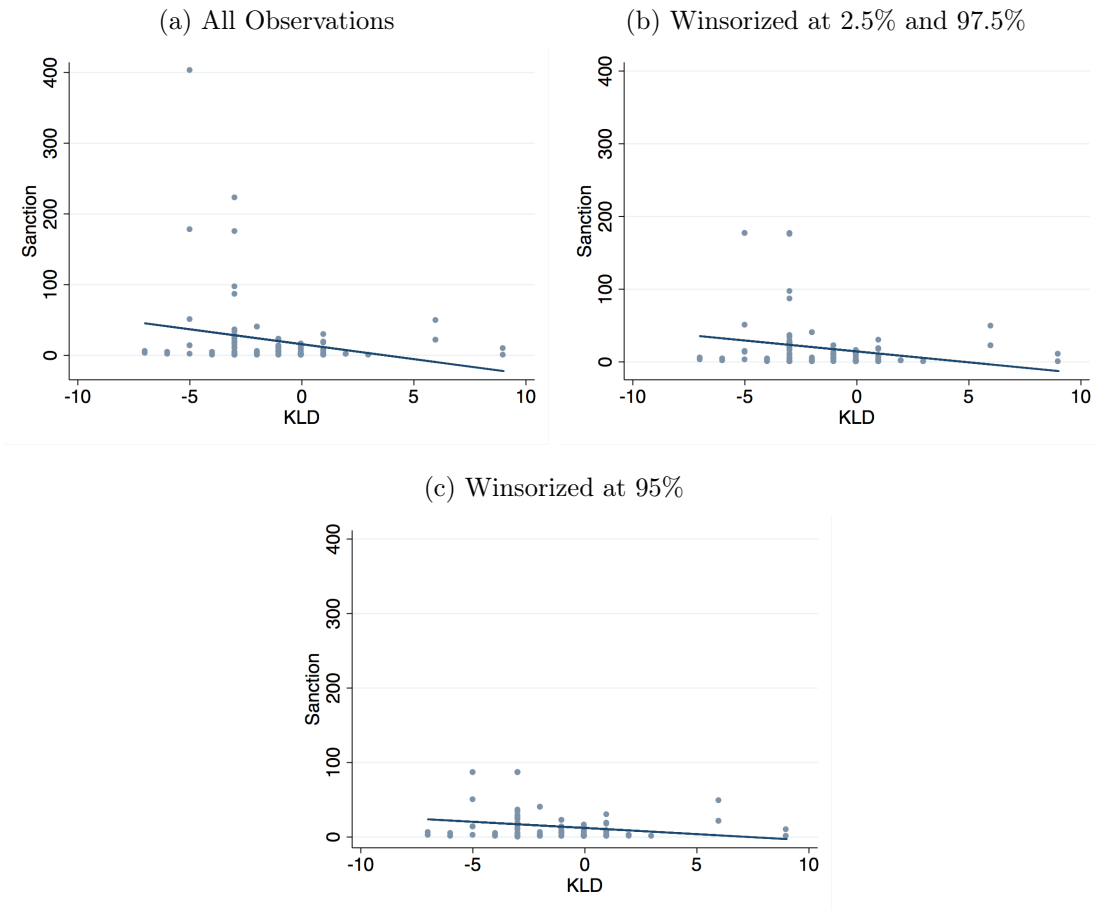


Figure 3: FCPA Press Release: DOJ on Tyson Foods (beginning)

**Department of Justice**

Office of Public Affairs

FOR IMMEDIATE RELEASE

Thursday, February 10, 2011

**Tyson Foods Inc. Agrees to Pay \$4 Million Criminal Penalty to Resolve Foreign Bribery Allegations**

WASHINGTON – Tyson Foods Inc. has agreed to pay a \$4 million criminal penalty to resolve an investigation into improper payments by company representatives to government-employed inspection veterinarians in Mexico, announced Assistant Attorney General Lanny A. Breuer of the Criminal Division and James W. McJunkin, Assistant Director in Charge of the FBI's Washington Field Office.

“Tyson Foods used false books and sham jobs to hide bribe payments made to publicly-employed meat processing plant inspectors in Mexico,” said Assistant Attorney General Breuer. “The penalty and resolution announced today reflect the company’s disclosure of this conduct, its cooperation with the government’s investigation and its commitment to implementing enhanced controls.”

A criminal information filed in U.S. District Court in the District of Columbia in connection with a deferred prosecution agreement charges Tyson with conspiracy to violate the Foreign Corrupt Practices Act (FCPA) and with violating the FCPA. Tyson, which is headquartered in Springdale, Ark., produces prepared food products. As part of a deferred prosecution agreement with the department, Tyson acknowledged responsibility for the actions of its subsidiaries, employees and agents who made improper payments to government-employed veterinarians who inspected two of its chicken processing plants in Gomez Palacio, Mexico.

Figure 4: Cumulative Abnormal Returns Around FCPA Announcements

**Note:** The figures show the cumulative abnormal returns around FCPA press releases, measured as time 0. Cumulative returns begin 30 days before the announcement and end 120 after. Sub-figure (a) measures returns net of 3 Fama-French factors. In sub-figure (b) returns are measured net of weighted market returns, from CRSP. High and Low KLD are defined as firms above and below the median KLD score in the FCPA sample. The dotted lines represent 95% confidence intervals.

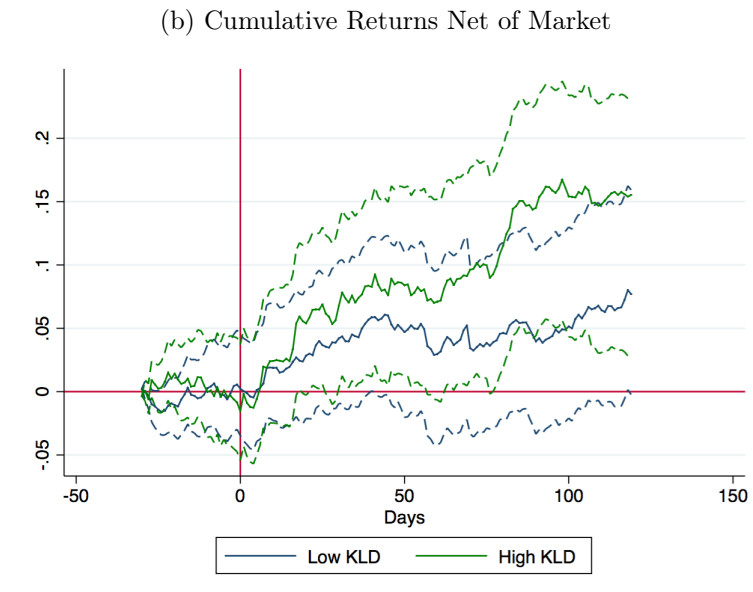
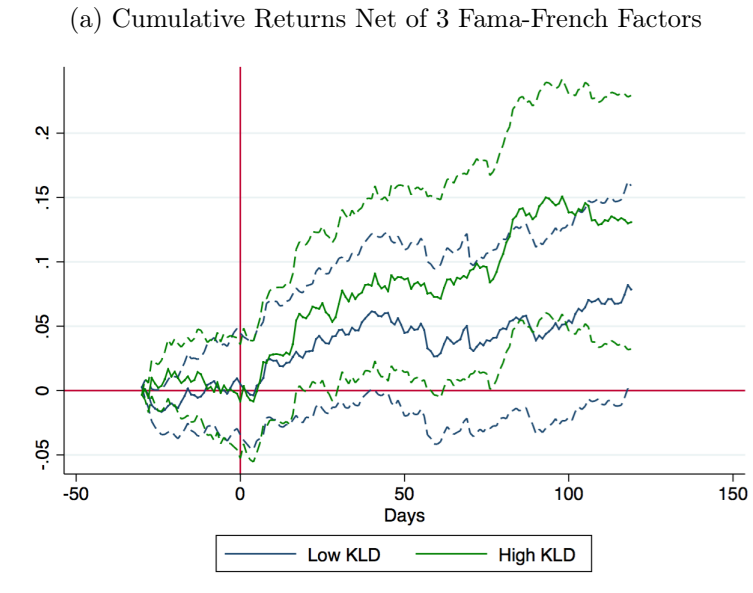


Table 1: High and Low KLD Firms

**Note:** The firms with the highest and lowest KLD scores are displayed, both within the sample of all firms with observable KLD scores, and within firms that are in the FCPA sample.

All Firms		FCPA Sample	
Xerox Corp	10	IBM	9
IBM	10	Johnson & Johnson	6
Hewlett-Packard	10	Nature's Sunshine	3
General Mills	10	Lucent Technologies	2
Ben & Jerry's	10	ITT	2
...	...	...	...
Wal-Mart Stores	-7	Con-way Inc.	-4
Chevron	-7	Tyco	-5
Conagra Foods	-8	Halliburton and KBR	-5
Goodyear Tire & Rubber	-8	Tyson Foods	-6
Republic Services	-8	El Paso Corporation	-7

Table 2: 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 (millions)	27,863	5,725	55,342
KLD	-1.06	-1	2.83
US Company	.871	1	.337
Sanction (millions)	20.3	5.23	51.9
Payments (millions)	9.26	2	27.2
Value (millions)	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 3: Cases by Industry

**Note:** Industries 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 4: 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 5: The Effect of CSR on Bribe Characteristics

**Note:** The regressions include all observations and the dependent variables cover all observable bribe characteristics. All regressions include year fixed effects. Payments and value are measured in millions of dollars. In the first panel covering bribe payments and value, columns (1) and (3) include all observations while columns (2) and (4) are winsorized at 95%. Standard errors are robust and clustered at firm level. \*  $p < .05$ , +  $p < .10$

	(1) Payments	(2) Payments	(3) Value	(4) Value
KLD	-2.994 (-1.53)	-0.291 (-0.98)	-73.115 (-1.06)	-1.062 (-0.13)
Year FE	Yes	Yes	Yes	Yes
Observations	101	101	101	101
$R^2$	0.263	0.184	0.167	0.114

	Multiple Countries	Years of Bribery	Subsidiary	Related Party
KLD	0.028 (1.45)	0.183 (1.19)	0.016 (0.67)	-0.059* (-2.40)
Year FE	Yes	Yes	Yes	Yes
Observations	101	101	101	101
$R^2$	0.213	0.263	0.329	0.249

	Repeat Offense	Foreign Investigation	Multiple Trials	DOJ
KLD	-0.003 (-0.19)	0.039* (2.03)	-0.028 (-1.63)	-0.013 (-0.84)
Year FE	Yes	Yes	Yes	Yes
Observations	101	101	101	101
$R^2$	0.287	0.247	0.262	0.034

	US FDI	Country GNI	Rule of Law	Govt Effectiveness
KLD	-920.432 (-0.65)	355.473+ (1.74)	0.083* (4.15)	0.067* (2.41)
Year FE	Yes	Yes	Yes	Yes
Observations	82	92	97	97
$R^2$	0.215	0.468	0.453	0.488

Table 6: Effect of CSR 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. 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)	(2)	(3)
	Sanction	Sanction	Sanction
KLD	-1.818* (-2.49)	-1.863* (-2.99)	-1.736* (-2.86)
Payments	0.879+ (1.68)	0.836* (2.67)	0.975* (2.07)
Value	0.018 (1.36)	0.015 (1.61)	0.039+ (1.94)
Related Party Involved	0.389 (0.12)	2.058 (0.82)	1.565 (0.63)
Foreign Investigation Ongoing	21.242* (3.10)	20.989* (3.80)	20.141* (4.02)
Number of Years of Bribery	-1.337 (-0.90)	-0.624 (-0.64)	0.739 (1.06)
Multiple Countries	15.379* (3.03)	13.238* (2.99)	7.445+ (1.77)
Multiple Ongoing Trials	-9.730+ (-1.93)	-6.022+ (-1.77)	-6.222+ (-1.82)
Repeat Offense	-15.675* (-2.23)	-15.084* (-2.32)	-13.040* (-2.18)
Year FE	Yes	Yes	Yes
Observations	101	101	101
$R^2$	0.825	0.866	0.714

Table 7: Effect of CSR 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 6. 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)	(2)	(3)
	Sanction	Sanction	Sanction
KLD	-1.649 <sup>+</sup> (-1.69)	-1.715* (-2.13)	-2.298* (-3.89)
Payments	1.076 <sup>+</sup> (1.87)	0.852* (2.28)	-0.040 (-0.08)
Value	0.010 (1.20)	0.010 <sup>+</sup> (1.69)	0.063* (3.88)
US FDI to Country	-0.000 (-0.63)	-0.000 (-0.91)	-0.000 (-1.24)
Government GNI	0.001 (1.58)	0.001 <sup>+</sup> (1.98)	0.000 (0.93)
Government Rule of Law	-0.291 (-0.02)	-5.768 (-0.48)	-5.613 (-0.53)
Government Effectiveness	-25.202 (-1.54)	-22.134 (-1.60)	-14.060 (-1.19)
Bribe X's	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	77	77	77
$R^2$	0.825	0.872	0.752

Table 8: Effect of CSR 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 7 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)	(2)	(3)
	Sanction	Sanction	Sanction
Community KLD	-11.990 <sup>+</sup> (-1.84)	-11.165 <sup>+</sup> (-1.98)	-10.487* (-2.29)
Product KLD	-5.013* (-2.62)	-4.676* (-2.73)	-5.139* (-2.83)
Diversity KLD	-1.158 (-0.54)	-1.023 (-0.64)	-0.771 (-0.61)
Employee KLD	-3.527 (-1.38)	-3.770 <sup>+</sup> (-1.73)	-7.124* (-3.28)
Environment KLD	3.735 (1.10)	2.210 (0.78)	-3.229 (-1.33)
Corp Gov KLD	1.265 (0.26)	1.925 (0.44)	-0.757 (-0.19)
Observations	77	77	77

Table 9: Effect of Prior CSR 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 7 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)	(2)	(3)
	Sanction	Sanction	Sanction
KLD t-1	-1.496 (-1.49)	-1.616 <sup>+</sup> (-2.00)	-2.188* (-4.00)
KLD t-2	-0.971 (-0.74)	-1.396 (-1.30)	-1.835* (-2.69)
KLD t-3	-1.520 (-1.07)	-1.964 <sup>+</sup> (-1.75)	-2.330* (-2.90)
2007 KLD	-1.490 <sup>+</sup> (-1.71)	-1.342 <sup>+</sup> (-1.85)	-2.107* (-4.02)

Table 10: Effect of CSR on Sanctions, with Cooperation Scores

**Note:** The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as those in Table 7 but include an additional explanatory variable: in columns (1)-(3) it is the cooperation score from textual analysis of the press release. In columns (4)-(6) it is a dummy variable indicating whether there was Noted Cooperation in the press release. The score is calculated by analyzing the DOJ or SEC press release for each case. 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)	(2)	(3)	(4)	(5)	(6)
	Sanction	Sanction	Sanction	Sanction	Sanction	Sanction
KLD	-1.921 (-1.35)	-2.123 <sup>+</sup> (-1.80)	-2.401* (-2.85)	-1.697* (-2.09)	-1.685* (-2.48)	-2.122* (-4.33)
Cooperation Score	0.212 (0.89)	0.103 (0.60)	0.239 (1.66)			
Noted Cooperation				-13.756 (-1.58)	-12.972 (-1.55)	-11.267 <sup>+</sup> (-1.71)
Payments	1.066 <sup>+</sup> (1.75)	0.855* (2.11)	-0.098 (-0.20)	1.154* (2.15)	0.915* (3.19)	0.221 (0.59)
Value	0.009 (1.04)	0.010 (1.63)	0.060* (3.91)	0.005 (0.84)	0.006 (1.32)	0.050* (3.18)
Bribe X's	Yes	Yes	Yes	Yes	Yes	Yes
Country X's	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	69	69	69	77	77	77
$R^2$	0.827	0.879	0.767	0.831	0.885	0.777

Table 11: Effect of CSR on Donations and Lobbying

**Note:** The dependent variable in both regressions is political donations, in millions of dollars. The first column measures all donations starting from five years before the FCPA action. The second column measures whether each firm filed a lobbying report with either the DOJ or SEC in the five years before the FCPA action. Both regressions control for year fixed effects. Standard errors are robust and clustered at firm level.  
 \*  $p < .05$ , +  $p < .10$

	Donations 5 Years Prior	Lobbying 5 Years Prior
KLD	-0.012 (-1.63)	0.013 (0.70)
Year FE	Yes	Yes
Observations	100	101
$R^2$	0.685	0.113

Table 12: Effect of CSR on Sanctions, with Recent Donations and Lobbying

**Note:** The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as those in Table 7 but includes a few additional explanatory variable: political donations, lobbying, a quadratic in market capitalization, and ROA. The donations measure includes all donations in the five years leading up to the FCPA action. The lobbying measure is an indicator for having lobbied the DOJ or SEC in the five years leading up to the FCPA action. Donations, 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)	(2)	(3)	(4)	(5)	(6)
	Sanction	Sanction	Sanction	Sanction	Sanction	Sanction
KLD	-2.640 (-1.60)	-2.412 <sup>+</sup> (-1.82)	-2.405* (-2.54)	-3.162 (-1.64)	-2.255 <sup>+</sup> (-1.72)	-2.347* (-2.42)
Donations 5 Years Prior	2.350 (0.17)	-5.120 (-0.48)	-5.396 (-0.62)			
Lobbying 5 Years Prior				32.104 (0.82)	-9.776 <sup>+</sup> (-1.76)	-3.709 (-0.80)
Payments	1.065 <sup>+</sup> (1.73)	0.836* (2.15)	-0.221 (-0.49)	1.209 <sup>+</sup> (1.89)	0.813* (2.09)	-0.242 (-0.55)
Value	0.010 (1.11)	0.011 (1.53)	0.059* (3.81)	0.003 (0.21)	0.013 <sup>+</sup> (1.85)	0.061* (3.96)
Market Cap	-0.000 (-0.70)	-0.000 (-0.38)	0.000 (0.54)	-0.000 (-0.60)	-0.000 (-0.45)	0.000 (0.51)
Market Cap <sup>2</sup>	0.000 (0.93)	0.000 (0.62)	-0.000 (-0.19)	0.000 (0.67)	0.000 (0.75)	-0.000 (-0.14)
ROA	-30.778 (-1.15)	-20.735 (-0.90)	-34.056 (-1.59)	-26.048 (-0.94)	-18.443 (-0.82)	-30.821 (-1.53)
Country X's	Yes	Yes	Yes	Yes	Yes	Yes
Bribe X's	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	77	77	77	77	77	77
$R^2$	0.831	0.880	0.772	0.842	0.883	0.772



Table 13: Effect of CSR on Sanctions, by Visibility

**Note:** The dependent variable in all regressions is the sanction assigned by the prosecutor. The regression specifications are the same as those in Table 7 but in the first column also includes a dummy for Visibility, as measured by membership in the Harris Poll's annual list of most visible companies in 2008, and an interaction between Visibility and KLD. The second column includes a dummy for S&P 500 membership and an interaction between S&P 500 membership and KLD. The third column includes a dummy for membership in Businessweek's list of The 100 Top Brands from 2001 through 2007. All columns also control for a quadratic in market capitalization. Market capitalization, sanction, payments, and value are in millions of dollars. These variables are winsorized at 95%. Standard errors are robust and clustered at firm level. \*  $p < .05$ , +  $p < .10$

	Sanction	Sanction	Sanction
KLD	-0.408 (-0.44)	-0.440 (-0.36)	-2.483* (-2.65)
Visibility	14.150 (1.12)		
Visibility x KLD	-5.761* (-2.29)		
S&P 500		-19.005+ (-1.92)	
S&P 500 x KLD		-4.047+ (-1.77)	
Top Brand			-4.466 (-0.24)
Payments	-0.233 (-0.55)	-0.314 (-0.69)	-0.161 (-0.35)
Value	0.037* (2.28)	0.048* (2.50)	0.058* (3.65)
Bribe X's	Yes	Yes	Yes
Country X's	Yes	Yes	Yes
Firm X's	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	77	77	77
$R^2$	0.794	0.808	0.767

Table 14: Effect of CSR on Other Outcomes

**Note:** The dependent variable in the first regression is a dummy variable indicating whether the company had to get an independent monitor as a part of the FCPA settlement. The dependent variable in the second indicates whether the company had to undergo periodic reporting to regulators. Otherwise the regression specifications are the same as in Table 7. Value and payments are winsorized at 95%. Standard errors are robust and clustered at firm level. \*  $p < .05$ , +  $p < .10$

	Monitor	Report
KLD	-0.043 (-1.57)	-0.015 (-0.73)
Payments	-0.014 (-0.96)	0.006 (0.69)
Value	0.002* (2.50)	-0.001* (-3.04)
Market Cap	-0.000* (-3.04)	0.000 (0.72)
Market Cap $\wedge$ 2	0.000* (2.63)	-0.000 (-0.37)
Return on Assets (Of Current Period)	-0.022 (-0.03)	1.101 (1.32)
Bribe X's	Yes	Yes
Country X's	Yes	Yes
Year FE	Yes	Yes
Observations	77	77
$R^2$	0.747	0.799

Table 15: Effect of CSR on Press Releases

**Note:** The dependent variables in all regressions are measures of cooperation or sentiment from FCPA press releases. Column (1) is the textual analysis cooperation scores, column (2) is a hand-collected dummy variable for noted cooperation, columns (3) and (4) are textual analysis scores for positive sentiment, and columns (4) and (5) are textual analysis scores for negative sentiment. Each score is calculated by analyzing the text of the DOJ or SEC press release for each case. The explanatory variables are the same as those in Table 7. Sanction, payments, and value are measured in millions of dollars. Standard errors are robust and clustered at firm level. \*  $p < .05$ , +  $p < .10$

	(1) Noted Coop.	(2) Coop.	(3) Senti	(4) LIWC Pos	(5) LIWC Neg	(6) LM Neg
KLD	-0.004 (-0.09)	0.165 (0.16)	0.280* (2.36)	0.070+ (1.74)	-0.033 (-0.94)	-2.851* (-2.48)
Payments	0.006 (0.62)	0.208 (1.31)	0.022 (1.26)	-0.000 (-0.03)	0.003 (0.49)	-0.246 (-1.23)
Value	-0.000+ (-1.93)	0.000 (0.17)	-0.000 (-1.22)	0.000 (0.58)	-0.000 (-0.32)	0.005* (2.10)
Bribe X's	Yes	Yes	Yes	Yes	Yes	Yes
Country X's	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	77	69	69	75	75	75
$R^2$	0.684	0.737	0.709	0.498	0.653	0.796

Table 16: Abnormal Returns Following FCPA Announcements

**Note:** The dependent variable is daily abnormal returns, calculated as daily returns net of either the Fama-French factors or net of value-weighted market returns from CRSP. Days are measured relative to the FCPA press release announcing the sanction for each FCPA violation. Generally SEC and DOJ announcements happen on the same day, although sometimes they are a few days apart. In that case we use the first announcement day as the date of the event. Explanatory variables include dummy variables indicating days in the 5-event window  $([-5, 5])$  or the six months following the event  $([6, 126])$ . The base period against which these indicators compare the same is from 30 to 5 days before the event. All specifications also control for KLD and interactions between these dummies and KLD. Standard errors are clustered for each FCPA announcement.

\*\*  $p < .01$ , \*  $p < .05$ , +  $p < .10$

	Returns Net FF	Returns Net Mkt
$[-5, 5]$	0.00036 (0.56)	0.00012 (0.18)
$[-5, 5] \times \text{KLD}$	0.00000 (0.01)	-0.00006 (-0.35)
$[6, 126]$	0.00095** (2.73)	0.00104** (2.94)
$[6, 126] \times \text{KLD}$	0.00018* (2.21)	0.00021** (2.74)
KLD	-0.00007 (-1.63)	-0.00006 (-1.41)
Observations	17751	18151
$R^2$	0.000	0.001

Table 17: Abnormal Returns Following Placebo Date

**Note:** The dependent variable is daily abnormal returns, calculated as daily returns net of either the Fama-French factors or net of value-weighted market returns from CRSP. Days are measured relative to the FCPA press release announcing the sanction for each FCPA violation. Generally SEC and DOJ announcements happen on the same day, although sometimes they are a few days apart. In that case we use the first announcement day as the date of the event. Dates used test for abnormal returns 300 days after the announcement, which serves as a placebo test. Explanatory variables include dummy variables indicating days in the 5-event window ([295, 305]) or the six months following the event ([306, 426]). The base period against which these indicators compare the same is from 30 to 5 days before the event. All specifications also control for KLD and interactions between these dummies and KLD. Standard errors are clustered for each FCPA announcement.

\*\*  $p < .01$ , \*  $p < .05$ , +  $p < .10$

	Returns Net FF	Returns Net Mkt
[295,305]	0.00159 (1.60)	0.00146 (1.55)
[295,305] x KLD	-0.00013 (-0.73)	-0.00009 (-0.53)
[306,426]	-0.00054 (-1.32)	-0.00060 (-1.52)
[306,426] x KLD	0.00002 (0.35)	0.00003 (0.41)
KLD	-0.00004 (-0.96)	-0.00004 (-1.05)
Observations	15068	15258
$R^2$	0.000	0.000

Table 18: The Effect of CSR on Probability of FCPA Offense

**Note:** The dependent variable is an indicator for whether a company was caught in violation of the FCPA. The regression uses all firms with a known KLD score. We estimate a linear regression model which controls for year and industry fixed effects. The first column controls for whether the company is in the US while the second column also controls for a quadratic in market capitalization, measured in in millions of dollars. Standard errors are clustered at the firm level. \*  $p < .05$ , +  $p < .10$

	(1)	(2)
	FCPA Offender	FCPA Offender
KLD	-0.0004 (-1.46)	-0.0004 <sup>+</sup> (-1.78)
US Company	-0.0039 (-1.51)	-0.0036 (-1.42)
Market Cap		0.0000* (3.73)
Market Cap $\wedge$ 2		-0.0000* (-3.29)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	40560	40473
$R^2$	0.003	0.006