The foreign corrupt practices act: How investors respond when violation severity and corresponding penalty (mis)match

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ABSTRACT

The Foreign Corrupt Practices Act (FCPA) has become a major focus for corporations, the Securities and Exchange Commission (SEC), and the Department of Justice (DOJ), as indicated by the dramatic increase in the number of FCPA enforcement actions and the level of civil and criminal penalties. Prior regulatory practice shows that the SEC and the DOJ struggle not only to evaluate the severity of a company's FCPA violation, but also to establish the penalty amount. Given the difficulty in assessing penalties, the severity of a company's FCPA violation at times appears mismatched with the size of the penalty. Leveraging signaling theory, this study predicts and finds that when a company's FCPA violation severity and the size of the penalty imposed are mismatched, investors experience ambiguity in assessing the company's future prospects and, in effect, are more likely to give the company the benefit of the doubt. In this case, investors' company risk assessments are dampened, and they show a higher willingness to maintain their investment in the company. However, when the severity of the company's FCPA violation and the penalty amount match, investors are less likely to experience ambiguity, which leads to higher company risk assessments and a lower willingness to maintain their investment in the company. In addition, the combination of a more severe FCPA violation and high penalty amount results in the highest risk assessment and lowest willingness to maintain the investment. These results provide ethical and practical considerations that regulatory bodies should weigh in evaluating sanctions.

1. Introduction

Congress established the Foreign Corrupt Practices Act of 1977 (FCPA) to prevent U.S. companies from engaging in bribery, defined as offering, providing, or promising to make monetary payments or providing anything else of value to foreign government officials, foreign candidates, or foreign political parties to influence regulation or receive a benefit (Darrough, 2010; Gibson Dunn, 2016; Karpoff, Lee, & Martin, 2012). The FCPA also makes illegal the use of accounting provisions to falsify records to hide fraud related to bribes, or to maintain weak internal controls that fail to detect such fraud (Darrough, 2010; Gibson Dunn, 2016; Kaikati, Sullivan, Virgo, Carr, & Virgo, 2000). Companies are required to maintain accurate accounting records and internal controls that provide reasonable assurance that illegal and unethical transactions are not occurring (Gibson Dunn, 2016; McGraw & Rufe, 2015; Rice, Weber, & Wu, 2015; Silvers, 2016; Witten, Parker,

Holtmeier, & Wille, 2010). Companies that cover up bribery by falsifying accounting records suffer greater damages and costs than companies that engage in bribery alone (Karpoff et al., 2012).[1]

Initially, the SEC and the DOJ did not aggressively enforce the FCPA, resulting in little impact on corporate culture and governance (Kaikati et al., 2000; Weismann, 2009; Weismann, Buscaglia, & Peterson, 2014). However, FCPA enforcement actions have increased significantly in recent years, affecting companies of all sizes (Howell & Macey, 2015). The SEC and the DOJ argue that increased enforcement, and disclosure of the violation severity and penalties imposed, will deter corrupt behavior and result in better-informed investors (DOJ and SEC, 2012; SEC, 2018). Prior research examines the role of the SEC (Iyer & Whitecotton, 2007; Nurunnabi, 2014), how the adoption of standards impacts corporate and stakeholder behavior (e.g., Ugrin, Mason, & Emley, 2017), and how accusations of illegal corporate activities impact corporate valuation (Bernile & Jarrell, 2009; Bernile, Jarrell, &

Mulcahey, 2007; Cheng, Crabtree, & Smith, 2009; Jain & Rezaee, 2007). I extend this line of research by examining how potentially conflicting signals regarding the severity of a corrupt act and the imposed penalty influence nonprofessional investor behavior.

According to recent Federal Sentencing Guidelines (FSG), the SEC and the DOJ have difficulty determining the actual benefit received by a violating company (violation severity) and thus, these agencies might struggle to assess the appropriate penalty. In addition, companies that self-report, cooperate, or accept responsibility are likely to receive lower penalties regardless of the severity of the violation (DOJ and SEC, 2020). Investors thus face situations where the penalty seems not to align with the violation severity. Little is known about how investors evaluate such situations and whether they will be motivated to hold or sell off investments in sanctioned companies depending on the combination of violation severity and penalty size. This study seeks to fill this gap.

Leveraging signaling theory, I predict that investors will struggle in assessing the risk of their continued investment in a company when the disclosure of the SEC and the DOJ's assessed severity of the firm's FCPA violation is inconsistent with the size of the corresponding penalty (i.e., *high* violation severity/*low* penalty or *low* violation severity/*high* penalty). In this case, I expect investors will be more likely to give the company the "benefit of the doubt" because they received conflicting signals about the company's behavior. Specifically, investors who receive inconsistent or mixed signals about a company's behavior are more likely to experience ambiguity in assessing the company's risk and thus assess lower company risk. Accordingly, they will be more willing to maintain their current level of investment in the company. However, when the severity of the reported violation and the size of the penalty match (either *high* violation severity/*high* penalty amount or *low* violation severity/*low* penalty amount), I expect investors to experience less ambiguity in interpreting the signal received (i.e., the regulators appear to be quite certain about the underlying facts and these facts lead to consistent judgments), and therefore, to assess higher company risk. Thus, in this situation they will be less likely to maintain their current level of investment, even in the low violation severity/low penalty scenario.

I use a 2 (violation severity: high/low) × 2 (size of the penalty: high/low) between-subjects experiment to test my predictions. One-hundred forty-three participants, gathered through Amazon Mechanical Turk (MTurk), proxy as nonprofessional investors. Participants first learned their role as a current investor in Power Manufacturing and then received a press release from the SEC that detailed Power Manufacturing's FCPA violation (high/low violation severity) and penalty size (high/low). I then provided participants Power Manufacturing's financial statements. Finally, participants made investment decisions, answered a post-experimental questionnaire, and completed a demographic questionnaire.

Results indicate that when the reported severity of a company's FCPA violation and the size of the corresponding penalty are mismatched (i.e., low FCPA violation severity/high penalty amount or high FCPA violation severity/low penalty amount), investors continue to maintain a larger portion of their current investment in the sanctioned company than when there is a match between these two factors. Further, results demonstrate that company risk mediates the relationship between the FCPA violation and penalty on investment decisions. Investors view their investment risk to be higher when the severity of the FCPA violation and the penalty amount match (i.e., low FCPA violation severity/ low penalty amount or high FCPA violation severity/high penalty amount) relative to when the FCPA violation severity and penalty are mismatched.

This study extends current research by providing empirical evidence about nonprofessional investors' responses to FCPA disclosures, an important issue given the continuing rise in enforcement actions by the SEC and the DOJ (Silvers, 2016). While prior research indicates these investors judge disclosures based on the level of severity (e.g., Hammersley, Myers, & Shakespeare, 2008; Rose, Norman, & Rose, 2010), my

results show that nonprofessional investors perceive that companies whose FCPA violation severity and penalty amount match are riskier since there is less ambiguity interpreting consistent signals about the company's violation and punishment. If the signals are inconsistent between the company's FCPA violation severity and penalty amount, investors experience greater ambiguity in interpreting the two inconsistent signals and thus, evaluate a lower company risk.

These results present a cautionary tale. Companies should cooperate with the SEC and the DOJ to mitigate reputational losses from FCPA violations, make ethical global decisions, implement an ethical corporate culture to ensure internal controls are effective in preventing FCPA violations, voluntarily self-report, and take full responsibility for their corrupt behavior (Cleveland, Favo, Frecka, & Owens, 2009; FSG, 2018; Kaikati et al., 2000; Sampath, Gardberg, & Rahman, 2018; Sampath & Rahman, 2018; Zhang, Yam, Kouchaki, & Zhang, 2019).

Some companies receive more leniency and a reduced penalty (Weismann, 2009) if they either cooperate, self-report, or accept responsibility (FSG, 2018), if regulators are dependent on that company's products or services (Stevenson and Wagoner 2011), or when regulators struggle to assess the true benefit the company received from the FCPA violation. From 2018 to 2019, six companies self-reported their FCPA violation and cooperated with the DOJ which accounted for approximately 12% of FCPA cases reported by DOJ.[2] Of the 26 companies investigated by the SEC in 2018–2019, eight companies (31%) self-reported and cooperated, twelve (46%) cooperated in some way, and two (8%) sporadically cooperated with the SEC. A total of four companies (15%) did not cooperate with the SEC.[3] Overall, this suggests that more companies are deciding to voluntarily self-report and cooperate with regulators. Companies who self-report, cooperate, or accept responsibility are eligible for a reduction between 25 and 50% below the low end of the U.S. Sentencing Guidelines fine range (FSG, 2018) with disgorgement of assets ranging from less than $100,000 to over $30 million, regardless of the monetary benefit received (i.e., violation severity) by the violating company (Vedder Price, 2020), suggesting that companies with high FCPA violations can still receive low penalties. Market value loss is related to the size of the penalty, where financial misrepresentation of the FCPA violation amounts to a reputational loss of up to 7.5 times the sum of all the penalties imposed (Karpoff, Lee, & Martin, 2008).

This study's results show that when the FCPA violation and amount of penalty are not consistently matched (i.e., low violation/high penalty or high violation/low penalty), investors might experience uncertainty in assessing the implications of the violation, creating uncertainty in the market. Regulators should exhibit caution in assessing companies' FCPA violations and leveling penalties as they can create market uncertainty potentially reducing the SEC's and DOJ's credibility to the public (e.g., Beneish, Billings, & Hodder, 2008; Bens, Cheng, & Neamtiu, 2016; Darrough, 2010). Although the mismatch of the FCPA violation and amount of penalty is evidenced in prior regulatory practice, psychology theory suggests that investors will struggle evaluating the company, and, therefore, might be more inclined to give the company the benefit of the doubt (Weismann, 2009; Weismann et al., 2014). Together, investors' company risk assessment and investment decisions might not be as significantly impacted when the company's FCPA violation severity and penalty amount are mismatched. Given the potential uncertainty that forms in the market when there is a mismatch between the FCPA violation severity and penalty size, the SEC and DOJ should be cautious when imposing penalty amounts that are significantly different from the

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[2] I reviewed DOJ's declinations in 2018–2019 which indicates the companies that voluntarily self-reported, cooperated, and made remedial changes to their FCPA compliance.

[3] I manually examined the SEC's civil litigation documents and the SEC's news releases in 2018–2019 to determine the companies that voluntarily self-reported, cooperated, and took remedial actions.

perceived FCPA violation severity. In sum, this study furthers the goals of the FCPA and the Organization for Economic Cooperation and Development (OECD) Convention on Bribery.

The remainder of this study is organized as follows: the second section discusses the background and theoretical lenses used to guide the predictions of FCPA violations and penalties on investment decisions. The third section identifies the research method and the experimental design. The fourth section provides the results of the analysis, and the fifth section summarizes the study, presents concluding remarks, limitations, and possible suggestions for further research.

2. Literature review and hypotheses

Under continued shareholder pressure to maximize wealth, companies are increasingly at risk of violating legislation such as the FCPA and making unethical decisions to meet shareholder demands (Sanyal, 2005). Companies sanctioned under the FCPA face both direct costs (i.e., criminal and civil penalties) and indirect costs (i.e., loss of reputation). Additionally, three out of five FCPA resolutions mandate ongoing internal investigations and compliance programs imposing further monetary costs on organizations, including, for example, increased audit fees (Lawson, Martin, Muriel, & Wilkins, 2019; Lyon & Maher, 2005). According to the FSG, enforcing a compliance program and a potential five-year probation period deters future FCPA violations.

When the SEC and the DOJ discover a company's FCPA violation through whistleblowing, audit, or voluntary disclosure, they release a public statement such as a press release. The statement details the FCPA violation, including the individuals and company involved, sections violated, civil and penalty amounts, and any additional ongoing investigations. Investors have access to this public disclosure, and therefore this statement can be harmful to the violating company's reputation as it identifies pertinent information about the company's past unethical behavior (e.g., Kedia & Philippon, 2009; Pelletier & Bligh, 2008). Regaining investors' trust can be challenging (Karpoff et al., 2008; New York Bar Association, 2011; Sampath et al., 2018), especially when the information disclosed by the regulators is nonfinancial and negative (Coram, 2009). Prior research suggests that individuals respond emotionally and negatively if they believe there is increased risk in maintaining their investment based on information disclosed (e.g., Kachelmeier, Majors, & Williamson, 2014).

The SEC and the DOJ evaluate the severity of a company's FCPA violation by examining its internal controls, the monetary amount of bribes paid, the number of countries and officials involved in receiving the bribe, and whether the company was intentionally falsifying records to hide fraud related to the bribes (Gibson Dunn, 2016). In addition to the difficulty of assessing the severity of the violation, the SEC and the DOJ also experience difficulty determining the penalty amount they should impose. The SEC and the DOJ base the size of the penalty on four factors: the company's involvement, the company's criminal history, FCPA violation severity, and obstruction of justice (FSG, 2018). While the violation severity should be reflected in the size of the penalty levied against a company (Pacini, 2012), the SEC and the DOJ often find it difficult to estimate the size of the benefits the company received. For example, Alstom admitted to paying more than $75 million in bribes to secure $4 billion in projects worldwide, with an estimated value earned of $300 million (DOJ, 2014). However, $300 million is an approximation and the actual value earned from violating the FCPA is highly subjective, complex, and difficult to calculate. Companies can also reduce the size of their penalty if they have an effective compliance and ethics program, self-report, cooperate with the SEC and the DOJ investigation, or accept responsibility for the corrupt behavior (FSG, 2018). For example, Daimler paid bribes to foreign officials, had an ineffective compliance program, and was highly involved in corrupt behavior, constituting a severe violation. However, Daimler's assessed penalty was 20% lower than the lower end of the fine determined under FSG because of Daimler's cooperation and remediation efforts (*United States*

Department of Justice Sentencing Memorandum, 2010). In contrast, if the company is uncooperative and intentionally falsifying accounting records, the SEC and DOJ struggle in assessing the appropriate amount of benefit received by the company for violating the FCPA. For example, in 2008, Siemens intentionally concealed corrupt payments and bribes and attempted to conceal the identity of those involved This lack of cooperation resulted in a higher assessed penalty amount, even though the violation's severity might be less pervasive relative to other companies within its industry (Cleveland et al., 2009).

Another factor influencing the size of the penalty levied is potential bias due to the regulators' dependence on the violating companies' products and services (Koehler, 2009). For example, BAE Systems PLC paid approximately $400 million in fines but was able to secure $6 billion in federal contracts within the year, suggesting that the SEC and the DOJ merely threaten private companies with fines but do not prevent sanctioned companies from securing future contracts with the United States. Investors might believe that FCPA penalties are simply a cost of doing business (Stevenson and Wagoner 2011).[4] This also leads to situations where large companies' FCPA violation severity does not match the penalty assessed. In sum, there can be substantial ambiguity in assessing both the violation severity and the corresponding penalty amount, suggesting ambiguity also exists when using the size of the penalty as a signal of investors' perceived company risk.

2.1. Signaling theory

Signaling theory focuses on how information is communicated and interpreted through signals or indicators (Karasek III & Bryant, 2012). Signals that are consistent improve the signaler's legitimacy and enhance the credibility of the information received. If signals are clear but misleading, they can be ineffective or damaging to the signaler (Connelly, Certo, Ireland, & Reutzel, 2011; Sanders & Boivie, 2004). However, mixed or inconsistent signals can lead the receiver to experience ambiguity in interpreting the information's message and credibility. In attempts to interpret the signal, the receiver might simply tolerate the ambiguity (Budner, 1962; Weisbrod, 2009) of the mixed or inconsistent signal, find the signal's information desirable,[5] and give the signaler the benefit of the doubt.

I believe investors will struggle in evaluating disclosures with mixed signals (i.e., a high FCPA violation severity but low penalty amount or low FCPA violation severity but high penalty amount). Because investors lack complete information about the FCPA violation and investigation into it, they are unable to make sense of and react appropriately to the ambiguous mixed signal (e.g., Bloom, Bond, & Van Reenen, 2007; Julio & Yook, 2012). Jiang, Lee, and Zhang (2005) argue that when information ambiguity occurs, investors develop a decision bias, commonly referred to as investor overconfidence. Investors begin to ignore the ambiguous signals and believe they have already considered all the relevant signals, causing market underreaction (Hirshleifer, Lim, & Teoh, 2009). In support of this, Jiang et al. (2005) find that when investors receive ambiguous information, they are more likely to exhibit overconfidence in their investment, limiting rational investment decision-making, and leading to market underreaction.

In addition, investors might not react negatively to an FCPA violation if they believe that the company overall benefited from the violation (Chang, 2019). Companies that self-report, cooperate, and accept responsibility usually receive less severe punishment and are less likely to

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[4] Sanyal (2005) finds that bribery might be viewed as a cultural or economic norm in some countries and impacts multinational companies' behavior (Sampath & Rahman, 2018), where bribery acts in less (more) corrupt countries lead to greater (lower) market penalties (Sampath et al., 2018). This further promotes the belief that violating the FCPA is simply a cost of doing business.

[5] Budner (1962) defined tolerance of ambiguity as individuals' willingness to find ambiguous information or situations desirable.

experience adverse long-term reputational effects (FSG, 2018). These limited effects lead to a mixed or inconsistent message regarding the FCPA violation and penalty amount (i.e., high violation severity/low penalty amount) (e.g., Karpoff, Lee, & Martin, 2017; Skjong & Øverland, 2018). If investors do not perceive the FCPA violation as leading to negative effects on the company's reputation, they will remain overconfident in their current investments (Daniel & Hirshleifer, 2015).[6] Overall, investors likely struggle to interpret the mixed or inconsistent signals of the company's violation severity and the regulators' imposed penalty and, in turn, will underreact to the mixed signal. Investors will be overconfident in their current investments making them less likely to divest.

Signaling theory also argues that consistent negative signals can influence the receiver's interpretation of the information. In contrast to the situation with mixed signals, I believe investors will struggle less when a company's FCPA violation and penalty amount match (i.e., low FCPA violation severity/low penalty amount or high FCPA violation severity/high penalty amount). When both the FCPA violation severity and the penalty amount are high, the negative consistent message signals that the company's behavior was not only severe but severe enough to incur a large penalty. This message is credible and unambiguous and therefore reduces any uncertainty about the company's behavior or the consequences of that behavior. Investors are more likely to pay attention (Daniel & Hirshleifer, 2015) and react adequately (Hirshleifer et al., 2009) to this information signal.[7] Because the information signals match, investors are less likely to experience ambiguity and more likely to believe the company will suffer long-term adverse reputational effects, resulting in perceptions of increased risk.[8] In this situation I expect investors to be more likely to sell their investment.

In sum, I predict that the severity of the FCPA violation will interact with the penalty levied by the SEC, and I state this hypothesis as:

H1. Investors' divestment will be lower (greater) when the FCPA violation and penalty size mismatch (match).

Investors attempt to assess the risk of their investments using company disclosures (Koonce, McAnally, & Mercer, 2005). As alluded to above, I believe perceptions of risk play a role in investor reactions to announcements related to FCPA violations. Consistent signals allow investors to be more confident in their belief about a violation's impact, potentially leading to increased perception of risk. In contrast, if investors tolerate the ambiguity when signals are mixed and give the company the benefit of the doubt, they will be less likely to perceive increases in company risk. As such, I believe perceptions of risk will differ across situations with consistent versus mixed signals regarding FCPA violation severity and the imposed penalty, leading to differing investment choices. I thus state the following mediation prediction:

H2. Investors' company risk assessment explains the effect of FCPA violation and penalty size on investors' investment decisions.

3. Research method

To test my hypotheses, I employed an experiment using a 2×2 between subjects' design with the violation severity (low vs. high violation severity) and the penalty (low vs. high penalty amount) as manipulated variables. A total of 143 non-professional investors completed the experiment.[9]

3.1. Participants

I solicited participants through Amazon Mechanical Turk (MTurk). Participants were required to reside in the United States, be 18 years or older, and have completed at least 500 MTurk assignments with at least a 95% approval rating. I screened participants using three questions: (1) Have you ever made personal investments in the common stock of a company? (2) Approximately how many years of personal investment experience do you have? (3) Approximately how many times have you purchased common stock of a company as a personal investment? To qualify for the survey, participants had to answer "yes" to question (1), one or more to question (2), and more than one to question (3). One hundred and sixty participants passed the screening questions and completed the experimental task.[10]

During the experiment, participants answered three comprehension check questions.[11] Participants who did not answer any of the three questions correctly were eliminated from the final sample. Participants were also given two manipulation check questions. The first manipulation check question asked participants to evaluate the violation severity on a 7-point Likert scale[12] based on their condition. All participants answered this manipulation question appropriately and none were eliminated.[13] The second manipulation check question asked participants to determine if "Power Manufacturing received a penalty of" either $45 million or $442 million. Only five participants failed the second manipulation check question regarding penalty and were eliminated. A total of seventeen participants were eliminated for failing the comprehension check questions and/or manipulation check questions.[14] The final sample size resulted in 143 participants with nonprofessional investor experience. Fifty-three participants (37.1%) were female[15] with an average of 17.71 years of full-time experience. Participants have an average of 9.01 years of buying or selling equity or debt. No differences were found across conditions due to gender, age, ethnicity, or education, suggesting randomization of conditions was successful.

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[6] Investors confident in their original investment decisions tend to have difficulty dealing with and accepting losses (Kahneman & Tversky, 1979; Thaler, 1980).

[7] This is empirically supported by prior archival research that finds that investors revise their expectations and react to information as the transparency and precision of that information improves, and the complexity and uncertainty of information reduces (Kim & Verrecchia, 1991; Soffer & Lys, 1999; You & Zhang, 2009). When this occurs, investors can properly modify their expectations about the company's future cash flows and adjust their current investments.

[8] Karpoff and Lott Jr (1993) report that the majority of a company's total losses in share value are attributable to negative reputational effects and Armour, Mayer, and Polo (2017) reports that companies' reputational damage equates to nine times that of the penalty assessed in the U.K.

[9] This study was approved by the Internal Review Board at the university where the study was conducted.

[10] According to findings from Owens and Hawkins (2019), compared to participants from Qualtrics, MTurk participants pay greater attention to experimental materials and participants are better representative of investors, suggesting that nonprofessional investors from MTurk are a representative sample of the population.

[11] The comprehension check questions were the following: 1. Are you a current investor in Power Manufacturing; 2. How much do you currently have invested in Power Manufacturing; 3. According to the United States Securities and Exchange Commission (SEC) is it illegal to make payments to foreign officials to receive an advantage regarding business transactions?

[12] The first manipulation check question asked participants to rate on a 1 (Strongly disagree) through 7 (Strongly agree) Likert scale the following question: Power Manufacturing's FCPA violation was severe.

[13] Participants correctly indicated the severity of the violation based on their condition (i.e., high/low FCPA violation).

[14] The results were not statistically different when including the seventeen participants who failed the comprehension check questions or manipulation check questions.

[15] One individual preferred not to answer.

3.2. Experimental task

Participants are asked to assume the role of an investor who has $10,000 of their $100,000 investment portfolio invested in Power Manufacturing Inc., a heavy manufacturing company. Participants learn that Power Manufacturing is in the heavy manufacturing industry.[16] and they received financial statements adapted from Riley, Semin, and Yen (2014) for the current and prior years to show slight growth over the two-year period. Power Manufacturing's financial statements represented the average financial information for a company in the same heavy manufacturing industry. Finally, participants received an SEC press release, a credible disclosure, indicating that Power Manufacturing violated the FCPA. Participants are randomly assigned to receive either a low or high violation committed by the company and a low or high penalty amount assessed by the SEC and the DOJ. Participants then make investment decisions. Participants then answer a risk questionnaire followed by manipulation check questions. Finally, participants complete a demographic and post-experimental questionnaire. They are thanked for their time and paid $3.00 on Amazon Mechanical Turk.

3.3. Independent variables

I manipulated two variables in the experiment: (1) the *violation severity*, and (2) the SEC and the DOJ corresponding *penalty*.[17] I manipulated *violation severity* by adjusting the amount of bribe the company paid to foreign officials and countries, the number of countries where the bribe was paid, and the quality of the company's internal controls.[18] I adapted the information in the experimental materials' SEC press release from information on the SEC website, with conditions representing low and high severity. The low violation severity condition states that the corporation benefited by $8 million after considering all costs, paid $12 million in bribes to Venezuela, and had weak internal controls regarding compliance. The DOJ's FCPA assessment also indicated that the benefit received by the company from the FCPA violation was low and the company's violation severity (i.e., falsifying accounting records, amount and number of bribes paid, and internal controls) was low. The high violation severity condition states that the corporation benefited by approximately $125 million after considering all costs, paid $500 million in bribes to China, Venezuela, Israel, and Russia, and had weak internal controls regarding compliance and accounting records. The high violation severity condition also stated that the employees' misconduct was prevalent on all levels and revealed a corporate culture inconsistent with the FCPA. The DOJ's FCPA assessment also indicated that the benefit received by the company from the FCPA violation was high and the company's violation severity (i.e., falsifying accounting records, amount and number of bribes paid, and internal controls) was high.

I also manipulated *penalty* as either a low or high amount. Based on an examination of the most recent FCPA violations and the financial statements of violators for the year of the violation, I calculated penalty size as a percentage of net income. Using this data and SEC and DOJ descriptions of the least and most severe penalties, I determined representative low penalties to be approximately 7.5% of reported net income, and representative high violation penalties at approximately 73.0% of reported net income.[19] For my experiment, this resulted in using a $45 million penalty in the low condition, and a $442 million penalty in the high condition. Fig. 1 shows the wording of the manipulations for the two independent variables.

3.4. Dependent variable

The dependent variable, participants' *investment*, was computed as investors' change in investment in Power Manufacturing ($10,000 minus ending balance in the investment account). Participants were initially asked to assume they had previously invested $10,000 of their $100,000 investment portfolio in the company's stock. After reading the case information, participants were asked several questions about the likelihood that they would sell their existing investment or invest more in the company. They were asked "Please slide the bar below to indicate whether you want to sell some of your current holdings or purchase some more stock. If you want to sell, please slide the bar to the left (to an amount lower than $10,000). If you want to purchase more stock, please slide the bar to the right (to an amount higher than $10,000)." The slider was initially anchored at $10,000, the amount currently invested. Participants were able to purchase another $10,000 in Power Manufacturing for a total investment of $20,000 or sell some or all of the initial $10,000 investment. The investment was then calculated as the change in their investment and used as the dependent variable.

Participants were then asked to provide their perceived company *risk* associated with FCPA violations. The risk scale was adopted and modified from Arnold, Bedard, Phillips, and Sutton (2011) and Koonce et al., 2005. The risk scale consisted of four questions[20] and was used to measure participants' company risk assessment[21] on a 7-point Likert scale.

3.5. Covariate

To control for participants' bribery perceptions, I created and validated a four-item measure. Participants indicated the extent to which they agreed or disagree with a statement on a scale of 1 (Strongly Disagree) to 7 (Strongly Agree). I conducted a factor analysis which indicated that all four items load on one factor. The four items are presented in the Appendix A.

4. Results

4.1. Descriptive statistics

Table 1 Panel A presents the change in investors' investment account for the four conditions. The more negative the value, the more the participant is willing to sell their investment. When the severity of the FCPA violation is high, but the penalty is low, the mean investment change is -$3541.47 (standard error = 739.38). When the severity of

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[16] According to Shah (2012), the heavy manufacturing industry has the highest risk of violating the FCPA.

[17] The current study explores the disclosure of mismatching vs. matching violation severity and penalty and therefore I do not manipulate or present participants information regarding companies' actions to minimize the penalty including self-reporting, cooperation, or acceptance of responsibility. I offer these actions as suggestions in the future research section.

[18] The amount of the bribe paid to foreign officials and countries, and number of countries where the bribe was paid were manipulated as either all high or all low. Sampath et al. (2018) also suggest that the market responds more negatively when there are multiple context-specific characteristics of the FCPA violation.

[19] The percentages of net income used to assess the penalty amount were gathered from the SEC and DOJ's descriptions of the most and least severe penalties.

[20] The following four questions were used in measuring company risk assessment: 1. The risks to the company from the FCPA violation cause me to worry. 2. The risk to the company from the FCPA violation are catastrophic. 3. I would voluntarily invest in a company that has a FCPA violation (reverse-coded). 4. Overall, the FCPA violation is risky to the company.

[21] Given the complexity of an FCPA violation and length of the experimental task, only the behavioral dimensions of risk (i.e., worry, management control, and catastrophic risk) were relevant and applicable to the study's task. Koonce et al. (2005) also measure several other dimensions (i.e., newness, immediacy, known by participant, known by management) which would not be applicable to the current study's design and therefore not measured.

Low Violation Severity	High Violation Severity
• Bribing foreign officials with a total of $12 million to design and construct metro transit lines in Venezuela	• Bribing foreign officials with a total of $500 million to design and construct metro transit lines in Venezuela, manufacturing plants in Israel, steel mills in China, and refineries in Russia
• Paid $10 million kickbacks (commissions) to force officials to illegally sell power stations, equipment, and machinery to businesses and consumers	• Paid $400 million kickbacks (commissions) to force officials to illegally sell power stations, equipment, and machinery to businesses and consumers • Failed to establish a "sufficiently empowered and competent" compliance department • Lacked sufficient anti-bribery compliance policies and procedures to control significant FCPA risks • Failed to appropriately investigate and respond to corruption issues
• Failed to discipline culpable employees • Lacked a mandatory FCPA training program	• Failed to discipline culpable employees • Lacked a mandatory FCPA training program • Failed to implement sufficient accounting and finance controls • Maintained extremely limited internal audit resources to support compliance efforts
• Earned $8 million in profits as a result of violations • The misconduct involved former senior management, and revealed a corporate culture long at odds with the FCPA. The tone at the top at Power Manufacturing was inconsistent with an effective FCPA compliance program.	• Earned $125 million in profits as a result of violations • The misconduct involved employees at all levels, including former senior management, and revealed a corporate culture long at odds with the FCPA. The tone at the top at Power Manufacturing was inconsistent with an effective FCPA compliance program and created a corporate culture in which bribery was tolerated and even rewarded at the highest levels of the company.
• DOJ FCPA assessment of amount earned from violation and the severity of the violation and bribe was indicated to be low	• DOJ FCPA assessment of amount earned from violation and the severity of the violation and bribe was indicated to be high
Low Penalty	High Penalty
• $45 million in fines of which $15 million paid to SEC and $30 million to DOJ	• $442 million in fines of which $214 million paid to SEC and $228 million to DOJ

Fig. 1. Manipulations of penalty and severity of violation.

FCPA violation is low, and the penalty is high, participants' mean investment change slightly increases, but remains a negative change, to -$3044.22 (standard error = 825.53). Interestingly, when the severity of the FCPA violation is low and the penalty is low, the mean investment change further decreases to -$4453.13 (standard error = 736.13). Findings suggest participants were likely to sell, but to a lower degree when the severity of the FCPA violation and penalty amount mismatch. In other words, participants were more likely to sell their investment when the violation's severity and penalty amount match at a low level than when either the penalty or the violation severity is high, but the other is low.

Additionally, as expected, the cell with the highest mean investment change is when the severity of the FCPA violation is high and the penalty is high, with a change of -$5325.01 (standard error = 744.14). These results suggest that participants sold most of their current investment when the severity of the violation is high, and the penalty is high. Hence, results suggest there is an interaction between the severity of the violation and the size of the penalty on investment decisions. Fig. 2 depicts the disordinal nature of the interaction.

Participants also answered questions related to their perception of

the company's risk. Table 1 Panel B presents the descriptive statistics for company risk assessment. In the case of a mismatch between the FCPA violation severity and the penalty amount, the results show that when there is a high violation and low penalty, investors perceived the company risk to be higher (mean = 5.28; standard deviation = 1.16) relative to when the violation is low, and the penalty is high (mean = 4.78; standard deviation = 1.07). Interestingly, when a company has a low violation severity and low penalty (i.e., matching condition), investors' company risk assessment is still relatively high (mean = 5.09, standard deviation = 1.06). This difference is marginally statistically different than when the violation is high and penalty is low ($t = -1.59$, two-tailed, $p = 0.058$, untabulated) but not when the violation is low and penalty is high ($t = 0.748$, two-tailed, $p = 0.457$, untabulated). This might be because investors do not struggle to assess consistent information signals and are able to react to the company's unethical behavior relative to when information signals are mixed and inconsistent. When signals are mixed, investors might struggle assessing the ambiguous signal and underreact to the risky investment (e.g., Hirshleifer et al., 2009). The results further show under a matching condition that investors perceived a company with the greatest risk when the company

Table 1

Descriptive statistics[a].

Panel A: Investment decision[c,d]		
	Low penalty	High penalty
	Mean	Mean
	(Std Error.)	(Std Error.)
	Cell size	Cell size
Low violation	-$4453.13	-$3044.22
	(736.63)	(825.53)
	N = 38	N = 30
High violation	-$3541.47	-$5325.01
	(739.38)	(744.14)
	N = 38	N = 37

Panel B: Company risk assessment[b,c]		
	Low penalty	High penalty
	Mean	Mean
	(Std Dev.)	(Std Dev.)
	Cell size	Cell size
Low violation	5.09	4.78
	1.06	1.07
	N = 38	N = 30
High violation	5.28	5.56
	1.16	0.99
	N = 38	N = 37

[a] Descriptive statistics for participants' *investment* is measured as the original $10,000 investment minus the ending investment balance after participants determine to purchase, sell, or maintain their current $10,000 investment (i.e., change in investment). Participants can determine whether to maintain their $10,000 investment, sell part of their investment, or purchase up to an additional $10,000 investment.

[b] *Company risk assessment* is an average of participants' responses to four items.

[c] *Violation severity* is manipulated as low or high. *Penalty* is manipulated as low or high.

[d] The means presented in Panel A represent the marginal estimated means.
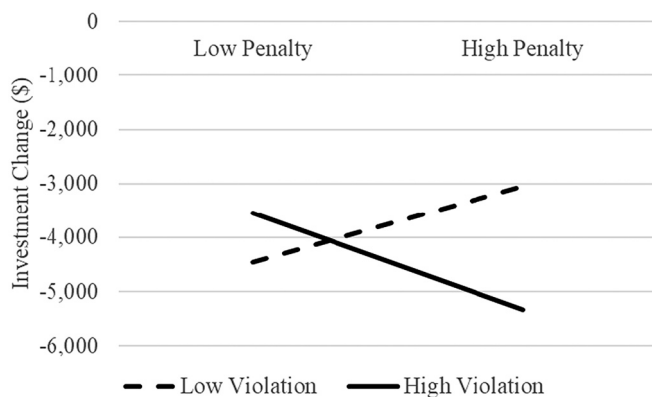

Fig. 2. Adjusted mean *investment* change.

Graphical representation of interaction between the severity of an FCPA violation and penalty.

Variable definitions:

Investment is measured as the original $10,000 investment minus the ending investment balance after either selling, purchasing, or maintaining their investment in the company, indicating the amount of change in their investment; participants began with a $10,000 investment and could purchase up to an additional $10,000, sell some or all of their current $10,000 investment, or maintain the current $10,000 investment.

Violation severity is manipulated as either low or high.

Penalty is manipulated as either low or high.

[a] Means are adjusted for the bribery perceptions covariate.

has a high FCPA violation and high penalty (mean = 5.56, standard deviation = 0.99) relative to a low violation/low penalty, low violation/high penalty, and high violation/low penalty ($t = 2.474$, one-tailed, $p = 0.01$, untabulated).

H1 predicts that investors' divestment will be lower (greater) when the FCPA violation and penalty size mismatch (match). Table 2, Panel A presents the results from ANCOVA testing. While the results indicate that the main effects are not significant, the interaction between the severity of the violation and the penalty assessed is statistically significant ($F = 4.329$, one-tailed, $p = 0.02$). These results support the interaction predicted in H1 and Fig. 2 indicates that the interaction is disordinal.

To ensure the robustness of the results, additional tests of planned contrasts were performed. The planned contrasts in Table 2, Panel B provide further support for H1 ($t = 1.947$, one-tailed, $p = 0.027$), indicating that investors are more likely to sell when the severity of the FCPA violation is high and penalty is high compared to when the FCPA violation is low but the penalty is high. Investors also sell more when the severity of an FCPA violation is high and penalty is high than when the violation is low and penalty is high or when the violation is high and the

Table 2

Experimental results.

Panel A: Results of an ANCOVA of violation severity and penalty on investment[a]				
Source	df	Mean square	F-statistic	p
Severity of violation	1	16,497,915	0.807	0.371
Penalty	1	1,240,861	0.061	0.806
Severity of violation * Penalty	1	88,486,164	4.329	**0.020***
Covariate: bribery perceptions	1	78,348,657	3.833	0.052
Residual	138	20,440,133		

Panel B: Planned contrasts[b]		
Source of variation	t-stat	p-value
HVHP>LVHP, HVLP, LVLP	1.775	**0.039***
HVHP>LVHP, HVLP	1.986	**0.025***
HVLP<LVLP	0.567	0.572
LVHP<HVHP	1.947	**0.027***
HVHP, LVLP > HVLP, LVHP	1.810	**0.036***

Panel C: Simple effects[c]		
	Investment	
Violation (Low)	HP < LP	p = 0.265
Violation (High)	HP > LP	**p = 0.075***
Penalty (Low)	HV < LV	p = 0.572
Penalty (High)	HV > LV	**p = 0.027***

[a] Severity of violation is manipulated as low or high. Penalty is manipulated as low or high. Panel A illustrates the interaction of the severity of violation and penalty on investors' investment. Investor investment is measured as the original $10,000 investment minus the ending investment balance after participants determine to purchase, sell, or maintain their current $10,000 investment (i.e., change in investment). Participants can purchase up to an additional $10,000. Bribery perceptions represents participants' level of agreement with bribery statements on a scale of Strongly Disagree to Strongly Agree.

[b] Planned contrasts were conducted to assess the statistical differences in the interaction. * indicates one-tailed *p*-values. HVHP = High violation and high penalty; LVHP = Low violation and high penalty; HVLP = High violation and low penalty; LVLP = Low violation and low penalty.

[c] Simple effects represent a two-tailed distribution.

penalty is low ($t = 1.986$, one-tailed, $p = 0.025$). These results suggest that investors are more likely to find the company riskier ($t = 1.626$, one-tailed, $p = 0.053$, untabulated) and thus divest more ($t = 1.810$, one-tailed, $p = 0.036$) when the severity of the FCPA violation and penalty

amount match relative to when these two factors mismatch.[22] Essentially, investors are most likely to sell their investment when there is a joint effect of a high violation and high penalty amount ($t = 1.775$, one-tailed, $p = 0.039$). The planned contrasts indicate investors do not invest differently when the severity of the FCPA violation and penalty are low compared to when the violation is low, but the penalty is high ($t = 0.567$, two-tailed, $p = 0.572$).

Table 2 Panel C presents the simple effects. This shows that when the penalty is high, a high violation leads participants to sell more of their investment than does a low violation (one-tailed, $p = 0.027$), but when the penalty is low, the difference is not significant (two-tailed, p = 0.572). Similarly, when the FCPA violation is high, participants sell more of their investment when there is a high penalty than a low penalty (one-tailed, $p = 0.075$), but this difference is not significant when the violation is low (two-tailed, $p = 0.265$). These results provide additional support for the disordinal interaction and indicate that investors are more likely to sell their investment when there is an additive effect of violation severity and penalty amount.

To further test for robustness of the results, investment change was coded as (-1) for those who sold any or all their initial $10,000 investment, (0) if they maintained their $10,000 investment, and ($+1$) if they purchased more stock. I also coded participants in the mismatching conditions (i.e., low violation severity/high penalty amount and high violation severity/low penalty amount) as 1 and matching conditions (i.e., low violation severity/low penalty amount and high violation severity/high penalty amount) as 0. This analysis examines whether the distribution of participants' decision to sell, maintain, or buy is statistically different between matching and mismatching FCPA violation and penalty severity conditions. Table 3 Panel A shows that when the FCPA violation is high and the penalty is low, 60.5% of participants sold their investment, 31.6% maintained, and 7.9% bought more shares. In the other mismatching condition where the FCPA violation is low and the penalty is high, 63.3% of participants divested, 20% maintained, and 16.7% invested more in the company. Comparatively, in the low FCPA violation and low penalty, 76.3% of participants divested, 18.4% maintained, and 5.3% invested. In the high FCPA violation and high penalty, 81.1% of participants divested, 13.5% maintained, and 5.4% invested more.

The study further analyzes participants' investment decisions when confronted with matching or mismatching conditions. Approximately 41% of participants sold some or all their investment in the matching condition relative to only 29.4% in the mismatching condition.[23] Table 3 Panel B shows that participants were more willing to divest than maintain or invest when the violation and penalty matched than mismatched ($\chi_{(1)}^2 = 5.06$, one-tailed, $p = 0.04$). Participants were also more likely to divest relative to maintaining their position ($\chi_{(1)}^2 = 3.16$, one-tailed, $p = 0.038$) or investing $\chi_{(1)}^2 = 2.74$, one-tailed, $p = 0.049$) in the matching relative to mismatching conditions. However, there are no differences in participant's decision to maintain or invest under matching relative to mismatching conditions ($\chi_{(1)}^2 = 0.16$, two-tailed, $p = 0.688$). These results provide additional support that participants were more willing to divest if the violation and penalty were matching relative to mismatching.

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[22] An independent *t*-test was further analyzed and confirms that investors find companies whose FCPA severity and penalty size match riskier (means = 5.323; $t = 1.425$, one-tailed, $p = 0.078$, untabulated) and thus divest more (means = $4780, $t = 1.764$, one-tailed, $p = 0.04$, untabulated) relative to when the two factors mismatch (means = 5.06 and means = $3435.75, respectively).

[23] The matching condition had a total of 59 participants (29 participants in the *Low Violation/Low Penalty* condition plus 30 participants in the *High Violation/High Penalty* condition), while the mismatching condition had a total of 42 participants (19 participants in the *Low Violation/High Penalty* condition plus 23 participants in the *High Violation/Low Penalty* condition) who sold out of a total of 143 participants.

Table 3
Experimental results - divest, maintain, or invest.

Panel A: Descriptive statistics[a]		
	Penalty	
	Low	High
Low violation		
Proportion:		
Divesting	29/38	19/30
Maintaining	7/38	6/30
Investing	2/38	5/30
Percent:		
Divesting	76.3%	63.3%
Maintaining	18.4%	20%
Investing	5.3%	16.7%
High violation		
Proportion:		
Divesting	23/38	30/37
Maintaining	12/38	5/37
Investing	3/38	2/37
Percent:		
Divesting	60.5%	81.1%
Maintaining	31.6%	13.5%
Investing	7.9%	5.4%

Panel B: Planned contrasts for investment decision (matching violation-penalty vs. mismatching violation-penalty)[b]		
	Chi-square	p-value
Divest, maintain, invest	$\chi_{(1)}^2 = 5.06$	0.040*
Divest or maintain	$\chi_{(1)}^2 = 3.16$	0.038*
Divest or invest	$\chi_{(1)}^2 = 2.74$	0.049*
Maintain or invest	$\chi_{(1)}^2 = 0.16$	0.688

[a] Violation severity is manipulated as low or high. Penalty is manipulated as low or high. Panel A illustrates participants' decision to sell, maintain, or buy more stock. Investment change was coded as (-1) for those who sold any or all of their initial $10,000 investment, (0) if they maintained their $10,000 investment, and ($+1$) if they purchased more stock. Low violation/high penalty and high violation/low penalty conditions were coded as 1 (mismatching) and low violation/low penalty and high violation/high penalty as 0.

[b] Panel B conducts planned contrasts to assess differences in investors' decision to sell, maintain, or buy between mismatching and matching conditions.

* Symbolize one-tailed *p*-values.

Table 4
Company risk assessment.

Factor analysis[a]	
	Components
Question	1
The risks to the company from the FCPA violation cause me to worry.	0.622
The risks to the company from the FCPA violation are catastrophic.	0.764
I would voluntarily invest in a company that has a FCPA violation (reverse-coded).	0.672
Overall, the FCPA violation is risky to the company	0.817

Rotation Method: Promax.
[a] Extraction Method: Maximum Likelihood.

H2 predicts the effect of FCPA violation and penalty size on investors' investment decision is explained by investors' company risk assessment. Table 4 shows the factor analysis for company risk assessment and indicates that all four items loaded on one factor with loadings greater than the absolute value of 0.60.[24] Utilizing an average of all four items of company risk assessment, I used a mediation model to determine the effect of violation and penalty on investment through risk. The mediation model was tested using PROCESS (Hayes, 2013; Preacher & Hayes,

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[24] The four items for risk had a high level of internal consistency, as determined by a Cronbach's alpha of 0.802.

2004). Variables in the analysis include *Violation × Penalty* as the independent variable, *Risk* as the mediator, and *Investment* as the dependent variable.

Table 5 Panels A and B show the results of the mediation analysis. Table 5 Panel A includes the direct effect of the interaction term, *Violation × Penalty,* on the mediator, *Risk*. The analysis indicates that *Violation × Penalty* has a positive direct effect on the mediator, *Risk* (b = 0.49, $p = 0.02$). Table 5 Panel B includes the direct effect of the *Violation × Penalty* and *Risk* on *Investment.* Results indicate that *Violation × Penalty* does not have a significant direct effect on Investment (b = −430.94, $p = 0.57$). *Risk*, however, has a negative direct effect on *Investment* (b = −2196.56, $p < 0.001$), shown in Table 5 Panel B. With respect to H2, Table 5 Panel C shows that there is a negative indirect effect of the *Violation × Penalty* on *Investment* through *Risk* (CI [−2045.93, −222.00]) based on a 95% bootstrapped confidence interval using 5000 iterations. The mediation effect is strong as results indicate full mediation occurs where *Violation × Penalty* on *Investment* can only occur through *Risk* and thus supports H2. Fig. 3 graphically displays the mediation test results.

The mediation model suggests that investors' willingness to hold stock in a company that violated the FCPA and incurred a financial penalty is fully explained by their company risk assessment. Investors consider a company's risk higher when the company's FCPA violation severity and corresponding penalty amount are matched (i.e. low violation/low penalty and high violation/high penalty), presumably because they are less likely to experience ambiguity in interpreting the signals disclosed about the company's behavior. When investors have a clear understanding of the signals about the company, investors are more likely to assess a higher company risk. However, when a company's FCPA violation and penalty amount are not matched (i.e. low violation/ high penalty or high violation/low penalty), investors are more likely to experience ambiguity in interpreting the signals disclosed in the SEC news release about the company. When this occurs, investors are more likely to give the company the benefit of the doubt, and, in effect, assess lower company risk. These results positively correlate with investors'

higher company risk, they are more likely to sell some or all of their current investment in the sanctioned company.

These results suggest that companies should review their internal controls carefully and improve their corporate governance relating to the FCPA, as FCPA violations can influence investors to sell stock, particularly when companies have a high FCPA violation and high financial penalty. Investors might sell their stock in a company if they consider the company a risky investment. Furthermore, it is also possible that investors will sell their stock because they find the company's unethical business decisions inconsistent with their personal moral standards. However, this is a subject for future research.

5. Discussion and conclusion

In this study I examine whether a company's FCPA violation and the corresponding penalty affect investors' decision-making. Based on signaling theory, I argue investors are more likely to experience ambiguity in interpreting signals disclosed in an SEC news release when a company's FCPA violation severity does not match the amount of the corresponding penalty, and accordingly, investors might be more likely to give companies the benefit of the doubt. Thus, in these circumstances, I expect investors to maintain their investment or divest less. However, when a company's FCPA violation severity and penalty amount are matched (i.e., low violation/low penalty or high violation/high penalty), investors are less likely to experience ambiguity in interpreting the signals in the disclosure. As a result, I expect them to assess a higher company risk and sell more of their investment. This study predicts that penalty amount will moderate the impact of the severity of the FCPA violation on investors' decisions. Utilizing 143 nonprofessional investors from Amazon Mechanical Turk, I test my hypotheses using a 2 × 2 between-subjects experimental design. Results support my expectations and show that investors are likely to divest more when the company's FCPA violation severity and penalty amount match than when these two factors mismatch.

Table 5
Mediation analysis of interaction on investment.

Panel A: Direct effect of Violation × Penalty on risk[a]						
	Coefficient	SE	t	Sig.	LLCI	ULCI
Constant	5.07	0.11	48.37	**<0.001**	4.87	5.28
Predictor:						
Interaction	0.49	0.21	2.37	**0.02**	0.08	0.89

Panel B: Direct effect of risk and Violation × Penalty on investment						
	Coefficient	SE	t	Sig.	LLCI	ULCI
Constant	17,391.20	1589.75	10.94	**<0.001**	14,248.16	20,534.23
Predictor:						
Interaction	−430.94	759.78	−0.57	0.57	−1933.07	−1071.19
Mediator:						
Risk	−2196.56	304.33	−7.22	**<0.001**	−2798.24	−1594.88

Panel C: The indirect effect of risk on investment			
Mediator	Effect	Boot SE	Bootstrapped LLCI	Bootstrapped ULCI
Risk	−1071.26	473.35	−2045.93	−222.00

Risk is measured as the mean of four adapted company risk questions that loaded on one factor.
Investment is measured as the original $10,000 investment minus the ending investment amount after participants purchased an additional $10,000, sold some or all of their $10,000 current investment, or maintained their current $10,000 investment.
[a] Interaction represents the interactive effects of the *violation severity* and *penalty*.

investment decisions where lower (higher) assessed company risk is associated with lower (higher) investment divestiture. Specifically, when investors assess a lower company risk, they are more likely to maintain or buy more stock or divest less. However, if investors assess a
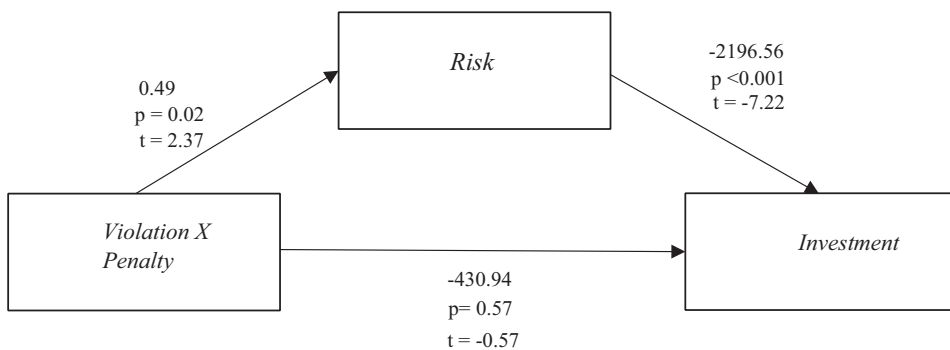
Fig. 3. Mediation analyses for the interactive effect of violation × penalty.

Violation × Penalty is the independent variable, *Risk* is the mediator, and *Investment* is the dependent variable. Mediation analysis follows Preacher and Hayes (2004) and Hayes (2013) using a 95% confidence interval with 5000 iterations. This figure illustrates the full mediation analysis of *Risk* on investors' willingness to hold common stock in a company with an FCPA *violation* and *penalty*. Participants were asked to evaluate the *company's risk* on four adopted 7-point Likert scale questions. *Risk* is the mean of four adopted company risk questions from Koonce et al., 2005 and Arnold et al., 2011.

Prior literature argues that the SEC and DOJ's enforcement has not significantly affected companies' corporate governance or ethical behavior. The literature further claims this failure is due to the use of other tactics to penalize companies, increasing the perception that FCPA violations are just a cost of doing business (Weismann et al., 2014). The results of my experimental analysis suggest that another potential reason for the lack of a more pronounced effect from regulatory enforcement is the mismatch that sometimes occurs between the FCPA violation severity and penalty size. It appears that regulatory bodies should be cautious in matching the assessment of companies' violations and penalties because a mismatch between the severity of the FCPA violation and the penalty size creates market uncertainty and potentially minimizes the SEC and DOJ's credibility to the public (e.g. Beneish et al., 2008; Bens et al., 2016; Darrough, 2010). Regulators should be especially cautious in assessing low penalties because the low penalty amount might undermine investors' perception of the FCPA violation and cause confusion when there is information asymmetry. These findings extend beyond the FCPA policy and can be generalized to other controversial regulations or ethical issues, such as environmental stewardship and human rights (e.g., Cleveland et al., 2009).

This study makes several contributions to practice and research. The SEC and DOJ have speculated whether FCPA violations can impact investors' decision-making and have taken the initiative in increasing its enforcement with the assumption that the amount of fines owed will potentially influence shareholders' investment decisions. This study is the first to test this assumption by examining investors' decisions when a company's FCPA violation severity (mis)matches the amount of penalty incurred. The results first show that when a company's FCPA violation severity and penalty amount mismatch, investors are likely to struggle evaluating the signals disclosed and give the company the benefit of the doubt. This perception among investors can lead to a decreased company risk assessment and a greater likelihood of investing or maintaining their current investment. However, when a company's FCPA violation severity and penalty amount match (either high/high or low/low), investors do not experience ambiguity interpreting the signals disclosed in the news release, leading to a higher risk assessment and lower investment.

The present study has several limitations that could be addressed in future research. This study does not distinguish between individual shares of stock and mutual funds or indices. It was implied that the case referred to individual shares of stock based on the information provided to participants. Also, when companies violate the FCPA, the process to discover, negotiate, and remediate any damages can last several years. The current study only examines current investors' decisions in a short window. Future research could explore the effect of investment decisions over a long window and whether the results hold when examining institutional investors. The current study also only examines investment decisions by current investors. Future research could examine the effect of an FCPA violation and penalty on prospective investors and whether prospective investors respond differently. Future research could also examine whether management knowledge (e.g.,

Koonce et al., 2005), self-reporting, cooperation, and acceptance of responsibility impact investors' investment decisions. A final avenue for research could examine whether the location of the FCPA violation impacts market reaction. Investors might react differently if the FCPA violation occurs in countries where bribery is commonly accepted as a part of conducting business.

Appendix A. Variable

Measure of bribery perceptions

I create and validate a measure of participant's bribery perceptions with the following four questions. Participants rated each on a scale of 1 (Strongly disagree) to 7 (Strongly agree).

1. Bribery is a part of the culture in some countries.
2. Paying bribes to foreign officials is a part of the cost of doing business for some U.S. based companies when operating in other countries.
3. Foreign officials often expect U.S. companies to pay bribes to facilitate international business expansion and growth.
4. Laws that prevent companies from offering monetary payments to foreign officials impair the ability of U.S. companies to do business in foreign countries.

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