(How) Do Firms Respond to Rivals' Corruption? Evidence from Financial Misstatements

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ABSTRACT

This study examines whether the actions of corrupt firms affect peer firms' financial misstatements. Using data on violations of the U.S. Foreign Corrupt Practices Act (FCPA), I find that peer firms misstate their financial statements and increase their earnings during the years in which corrupt rivals bribe foreign officials to gain unfair performance advantages. The likelihood of such income-increasing misstatements is higher when non-bribing peers experience loss of income due to bribing rivals' unfair gains, and when financial analysts compare bribing firms and non-bribing peers' performance. These findings suggest that competitive disadvantage and relative performance evaluation pressure result in spillovers of one type of corporate misconduct (bribery) into another (financial misstatement). By documenting the spillover effects from corporate misconduct, I contribute to the limited evidence on externalities from corporate behavior, and provide new insights into how firms' misconduct spreads.

JEL classification: D73, H23, M41, M48.

Keywords: corruption, financial misstatement, spillover effects.

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(How) Do Firms Respond to Rivals' Corruption?
Evidence from Financial Misstatements

Introduction

The past two decades have marked a sharp increase in news about corporate misconduct, which entails a variety of unethical professional actions, including fraudulent financial reporting, money laundering, and corruption (Soltes, 2016). When subject to criminal prosecution, corporate misconduct is known as corporate crime or white-collar crime (Friedrichs, 2010). As corporate misconduct causes severe economic losses and produces long-lasting side effects that reverberate throughout the economy, understanding how it spreads is essential for economic and socio-political stability (Zuber, 2015).

Corporate misconduct spreads when more than one subject becomes involved in the same improper activity (contagion effect) or when one type of improper activity leads to other forms of misbehavior (spillover effect).

While the literature in accounting, economics, and finance both predicts and finds that corporate misconduct is contagious (Kedia, Koh, and Rajgopal, 2015; Parsons, Sulaeman, and Titman, 2018), evidence on its spillover effects is lacking. Furthermore, unlike the sociology and psychology literature, which provides some theory and evidence on spillovers from common offenses (Corman and Mocan, 2005), the specificity of the corporate environment prevents researchers from applying the common crime theoretical framework to the corporate setting (Benson and Moore, 1992).[1] Thus whether spillovers from corporate misconduct occur remains unclear. In this paper, to investigate whether and, if so, how the spillover effects influence the spread of corporate misconduct I focus on corruption and financial misstatement.[2]

First, I examine whether firms' bribery of foreign officials to gain unfair business advantages influences non-bribing peers' propensity to misstate their financial statements. Second, I investigate whether non-bribing peers' financial misstatements depend on the likelihood of experiencing loss of income due to bribing rivals' unfair gains. Third, I examine whether peer performance pressure

[1] Common crime refers to common offenses, either violent or non-violent, that arise in public places, such as crimes against persons and property (Benson and Moore, 1992).

[2] Most of the literature uses the terms "corruption" and "bribery" interchangeably (e.g., Shleifer and Vishny, 1993; Ades and Di Tella, 1999), and I adopt a similar approach.

is a possible mechanism for the spillover effects of firms' bribery on non-bribing peers' financial misstatements.

Despite the first-order importance of corruption and financial misstatements, research evidence on their emergence and evolution is not conclusive. Corruption is ranked among the main factors hampering economic growth and impairing the legitimacy of the market economy (Healy and Serafeim, 2016). Nevertheless, no consensus exists on the scale of this phenomenon (Jain, 2001). Similarly, despite a broad consensus on the negative consequences of financial misstatement, evidence on its causes is mixed (Amiram, Cox, Dupont, Karpoff, and Sloan, 2018). Moreover, corruption and financial misstatements are likely related, because when some firms create wealth unethically, their peers feel pressured to obtain similar results, even though achieving those results might entail engaging in other forms of misconduct (Den Nieuwenboer and Kaptein, 2008).

Corruption is widespread and persistent, the considerable efforts of legislators to eradicate it notwithstanding, possibly because corruption yields significant benefits for corrupt agents (Sahakyan and Stiegert, 2012; Giannetti, Liao, You, and Yu, 2017). Corrupt firms are often big market players that establish favorable connections with government officials and extract high rents from them (Birhanu, Gambardella, and Valentini, 2016). Through bribery, corrupt firms become more profitable than their fair-trading peers (Vial and Hanoteau, 2010; Williams, Williams, and Kedir, 2016).

Moreover, corruption adversely affects the business activities of non-corrupt firms operating in corrupt industries (Giannetti et al., 2017). Corruption undermines non-bribing firms' efficiency, distorts price formation, and leads to suboptimal resource allocation (Compte, Lambert-Mogiliansky, and Verdier, 2005; Cingano and Pinotti, 2013).

When corrupt firms gain unfair business advantages and improve their performance through illicit payments, their peers have strong incentives to report similar results. Furthermore, the exposure to bribing firms' unethical behaviors through business interactions can alter the understanding of norms related to misbehavior, making engaging in corporate misconduct more acceptable for non-bribing peers (Cialdini and Trost, 1998). Therefore, I predict that non-bribing peers (i.e., non-bribing firms exposed to bribing rivals) resort to financial misstatements more than firms not exposed to rivals' bribery. To test this prediction, I identify non-bribing peers by constructing a proxy for non-bribing firms' exposure to rivals' bribery based on the enforcement actions of the U.S. Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) against

firms that violate the Foreign Corrupt Practices Act (FCPA). Consistent with my prediction, the evidence suggests that non-bribing peers misstate their financial statements more than firms not exposed to bribing rivals.

Furthermore, I examine whether non-bribing peers' propensity to misstate their financial statements depends on their likelihood of experiencing loss of income due to rivals' bribery. In this paper, I define "loss of income" as the loss of possible additional income that non-bribing peers would report if competition and trades were fair and not distorted by rivals' bribery.

First, I predict that non-bribing peers' financial misstatements increase with the magnitude of such loss of income, which in turn depends on the magnitude of bribing rivals' unfair gains. The more that corrupt firms win by bribing, the more their peers are expected to lose out (Giannetti et al., 2017). Using illicit bribery payments to construct a proxy for bribing firms' benefits, I find that non-bribing peers' performance-enhancing financial misstatements increase with the magnitude of the loss of income.

Second, I predict that non-bribing peers are more likely to be negatively affected by rivals' bribery, in turn having stronger incentives to manipulate their performance, when they lose profits and market share because their bribing rivals beat them out of profitable deals (Kaikati, Sullivan, Virgo, Carr, and Virgo, 2000). To test this prediction, I exploit Hoberg and Phillips (2016)' product market similarity scores to identify non-bribing peers likely to compete directly against their bribing rivals for the same contracts and deals. The results are consistent with my prediction: The greater the product market similarity between non-bribing peers and their bribing rivals, the higher the likelihood that non-bribing peers will misstate their financial statements.

Third, I explore a possible mechanism through which the performance of bribing firms affects non-bribing peers' financial misstatements. When bribing firms obtain unfair business advantages from bribing, the firms directly benchmarked against them are likely to underperform and face peer performance pressures. Relative underperformance is costly for the firms, because executives may be fired, markets may react negatively to declines in performance, lenders may be less willing to provide access to credit, and analysts may formulate unfavorable recommendations (e.g., De Franco, Hope, and Larucque, 2015; Jenter and Kanaan, 2015). Therefore, I predict that non-bribing peers benchmarked against bribing rivals have the greatest incentives to manipulate their results and alter the stakeholders' perception of relative underperformance. Consistent with my prediction, I find

that when peer performance pressures are high because non-bribing peers have the same analysts as their bribing rivals, non-bribing peers misstate their financial statements more often than other firms without (or with fewer) common analysts.

The results are robust to possible alternative explanations. First, if firms engaging in bribery are also more likely to misstate their financial statements, results may reflect contagion in financial misstatements rather than spillover effects (Kedia et al., 2015). To rule out this possibility, I control for bribing firms' financial manipulation rates in each year and industry. Second, if firms both bribe and misstate their financial statements, and if their bribery remains undetected, my results may reflect contagion in bribery rather than the spillovers of corruption on peers' financial misstatements. To deal with this concern, I test my predictions in a setting where firms are unlikely to bribe, making contagion in bribery an unlikely explanation of the results. Specifically, I restrict the sample to non-bribing firms without significant business in highly corrupt countries. Third, if non-bribing firms exposed to rivals' bribery operate in geographical environments with a high propensity toward misconduct, results may reflect the effect of location-specific norms rather than the spillovers from corporate misconduct (Parsons et al., 2018). To rule out the possibility that social and cultural factors drive the evidence, I control for state fixed effects. All robustness tests confirm the main results.

Overall, the findings suggest that corruption generates spillover effects on non-bribing peers' propensity to artificially increase their performance. The frequency of such income-increasing financial misstatements is related to the loss of income that non-bribing peers are likely to experience following bribing rivals' unfair gains. Moreover, among non-bribing peers, those benchmarked against high-performing bribing rivals by financial analysts respond to peer performance pressures by artificially boosting their performance even more.

This paper makes three contributions to the literature on corporate misconduct. First, I provide empirical evidence on the spillover effects of corporate misconduct and offer an economic-based explanation—rooted in relative performance evaluation pressures—for such spillovers. By doing so, I complement the socio-psychological theories explaining the spillover effects from common offenses and show that corporate behavior produces externalities (Leuz and Wysocki, 2016; Lanfear, Matsueda, and Beach, 2020). Second, as my findings suggest that firms' corruption influences non-corrupt peer firms' accounting decisions, I add to the literature on the macro-economic effects of corruption

and the strategic responses of non-corrupt firms operating in corrupt environments (e.g., Mauro, 1995; Galang, 2012). Third, opposed to studies that rely primarily on country-specific corruption perception indexes, I employ firm-level proxies for corruption to overcome some generalizability issues associated with corruption heterogeneity across countries (De Maria, 2008; Alexeev and Song, 2013).

1 Related Literature and Hypotheses

This section first reviews the studies on the detrimental role of corruption on economic growth, market competition, and business activities. Second, it summarizes the studies on the spillover effects from common offenses and on the spread of corporate misconduct. Third, it presents the hypothesis development.

1.1 Bribery

Bribery is the offering, receiving or soliciting of something valuable with the intention to influence the actions of an official in the discharge of her or his public or legal duties (James Jr., 2002). Despite being a worldwide phenomenon, regulators are primarily concerned about corruption in developing countries (Weber and Getz, 2004), thus explaining why the FCPA sanctions U.S. corporations for foreign bribery. As the FCPA wrote in 1977, "foreign corporate bribery affects the very stability of overseas business. Foreign corporate bribes also affect our domestic competitive climate when domestic firms engage in such practices as a substitute for healthy competition for foreign business".[3]

In addition to undermining the effectiveness of the business transactions in corrupt environments, corruption impairs domestic operations and weakens peer firms that do not bribe.[4] By increasing the costs of doing business, corruption leads to price distortion and allocation inefficiencies (e.g., Compte et al., 2005; Cingano and Pinotti, 2013).[5] Moreover, bribery undermines the effectiveness of most bid-for-contract mechanisms, so that efficient businesses cannot be certain of selection because "the decisions of the corrupt public agent reflect concealed transactions in the bribery market"

[3] See: https://www.justice.gov/sites/default/files/criminal-fraud/legacy/2010/04/11/senaterpt-95-114.pdf (United States Senate, 1977).

[4] See: https://www.sec.gov/spotlight/fcpa/fcpa-resource-guide.pdf

[5] A joint publication by the International Chamber of Commerce, Transparency International, the United Nations Global Compact and the World Economic Forum Partnering Against Corruption Initiative (PACI) reports that corruption adds up to 10 percent to the total cost of doing business globally. See: https://www.unglobalcompact.org/docs/issues_doc/Anti-Corruption/clean_business_is_good_business.pdf

(Della Porta and Vannucci, 1997, 522).

A possible explanation for the persistence of widespread corruption is the benefits it yields for unethical agents in general and for large firms in particular (Sahakyan and Stiegert, 2012). Through bribery, firms obtain permits, licenses, contracts, and the assurance that the markets in which they operate are protected from competitors (Shleifer and Vishny, 1993). Even with all direct and indirect costs of corruption, the net present value of bribery remains positive (Karpoff, Lee, and Martin, 2017b). Moreover, although corruption is overall welfare-reducing, firms generally bribe to obtain unfair performance-enhancing advantages that would not be accessible under fair competition (Dieleman and Sachs, 2008).[6] The benefits of corruption are especially large for big firms, which have few resource constraints and are better able to establish connections with public officials and obtain favorable treatments from them (Fieldhouse, 1986).[7]

1.2 Spread and Spillover Effects from Misconduct

The spread of common offenses and corporate misconduct can be studied by either investigating whether one type of improper behavior is contagious, or whether it leads to other forms of improper behavior through the spillover effects. Scholars have examined contagion in common offenses and corporate misconduct, whereas only the common crime literature provides both theory and evidence on spillover effects (e.g., Brendgen, Girard, Vitaro, Dionne, and Boivin, 2013; Carson, 2013; Kedia et al., 2015; Parsons et al., 2018).

The evidence on contagion and spillovers from common offenses mostly relies on sociological and psychological theories, with learning processes and social factors playing the major role in shaping individuals' propensity to misbehave (Gino, 2015). Common offenses spread when individuals learn from other group members that crossing ethical boundaries produces benefits (e.g., Shaw and McKay, 1942). Moreover, Wilson and Kelling (1982) argue that certain crimes deteriorate the local environment (what they call "broken windows") and lead to further major offenses. The empirical findings support researchers' socio-psychological arguments for contagion and spillovers from common offenses (e.g., Jessor and Jessor, 1977; Skogan, 1990; Bingenheimer, Brennan, and

[6] Firms choose to bribe to maximize their after-bribe profits (Kaufmann and Wei, 1999).

[7] Whether small firms benefit from paying bribes, because resource constraints and the lack of economies of scale prevent them from extracting sufficient rents from public officials (Zhou and Peng, 2012; O'Toole and Tarp, 2014) or whether corrupt firms overvalue present profits and discount future ones, thus making corruption value-destroying in the long-term are debatable (e.g., De Rosa, Gooroochurn, and Gorg, 2010; Seker and Yang, 2012; Birhanu et al., 2016).

Earls, 2005; Ludwig and Kling, 2007; Boman IV, Ward, Gibson, and Leite, 2012).

The arguments for describing contagion in corporate misconduct derive primarily from rational-economic and sociological explanations, consistent with Granovetter (1985)'s "embeddedness" theory, which states that an economic behavior combines economic and sociological features. Kedia et al. (2015) provide two explanations for interpreting their evidence on contagion in earnings management. First, the authors rely on the rational crime-based explanation that potential criminals misbehave if they perceive that the benefits of doing so exceed the costs (Becker, 1986). Second, they introduce the social norms-based explanation that observing others cheat may modify an individual's understanding of the social norms associated with misbehavior (Cialdini and Trost, 1998). Moreover, Parsons et al. (2018) attribute contagion in corporate misconduct to social forces, but argue that rational peer pressures also affect contagion.

1.3 Hypothesis Development

Corruption is performance-enhancing for corrupt firms, in particular in the short-term and when firms are big and major market players (Birhanu et al., 2016). The benefits of corruption exceed the costs, and the penalties are insufficient for deterrence (Lambsdorff and Nell, 2007). Moreover, the increase in market capitalization at the announcement of bribe-related projects is higher than the decrease in market capitalization following corruption disclosure and enforcement (Karpoff et al., 2017b).

Corruption adversely affects the business activities of non-corrupt peers operating in corrupt industries, as both the costs of doing business and the competitive disadvantages increase with corruption (e.g., Giannetti et al., 2017). Corruption undermines non-bribing peers' efficiency, distorts price formation, and leads to suboptimal resource allocation (Compte et al., 2005). Furthermore, bribing outcomes (e.g., licenses, tenders) are generally assigned to small groups of large corrupt firms rather than being allocated to multiple firms (Fieldhouse, 1986).

When firms produce wealth dishonestly and distort the market competition, their peers feel pressured to obtain similar results, even though achieving those results entails engaging in other forms of misconduct. In addition, the exposure to some firms' misconduct through common competitive environments and business interactions can produce a chain of misbehaviors, in which one type of corporate misconduct leads to another (Christensen and Gordon, 1999; Murphy, 2019). For example,

the World Bank is concerned that firms have incentives to engage in unethical behaviors when they believe that their competitors are receiving unfair advantages.[8]

A channel that non-bribing peers can exploit to artificially boost their performance and report results consistent with the unfair gains of bribing rivals is financial misstatement. Firms manipulate their financial statement numbers to make their performance look comparable to that of their competitors (DeFond and Park, 1999; Park and Ro, 2004). Because non-bribing peers are subject to bribing rivals' unfair advantages (Giannetti et al., 2017; Brown, Smith, White, and Zutter, 2019), I expect them to misstate their financial statements more often than firms not exposed to corruption. In particular, I expect financial misstatements to enhance non-bribing peers' performance. Using data on foreign bribery to identify non-bribing peers (i.e., non-bribing firms exposed to bribing rivals), I formulate my first hypothesis as follows,

H1: Some firms' bribery has spillover effects on non-bribing peers' performance-enhancing financial misstatements.

Non-bribing peers could improve their efficiency and enhance their competitive strategies in response to the unfair gains of bribing rivals (Galang, 2012). However, this response is unlikely because the costs of changing corporate strategy and becoming more efficient are considerable, and the implementation time long (Wan and Yiu, 2009; Stuebs and Sun, 2010).[9] Despite destroying economic value in the long-term, financial misstatements provide instead benefits in the short-term (e.g., Bhojraj, Hribar, Marc, and McInnis, 2009). Moreover, consistent with non-bribing peers having fewer incentives to artificially boost their performance when bribing rivals are caught and can no longer obtain unfair gains, recent evidence shows that non-bribing peers reduce abnormal accruals after their bribing rivals receive FCPA enforcement actions (Bunkanwanicha and Greusard, 2019).

Arguably, not all firms exposed to corruption are affected by rivals' bribery in the same way. With the second hypothesis, I investigate whether some conditions exacerbate the competitive disadvantages of non-bribing peers, and in turn their incentives to misstate the financial statements. Non-bribing peers exposed to rivals' bribery are likely to report lower earnings relative to what

[8] See: https://www.worldbank.org/en/topic/financialsector/brief/illicit-financial-flows-iffs

[9] If non-bribing peers change their strategy in response to rivals' corruption, this would work against me finding evidence in support of H1.

they would report if competition and trades were fair and not distorted by corruption (Giannetti et al., 2017). The loss of income of non-bribing peers possibly derives from how much corrupt firms unfairly win, and whether bribing firms beat non-bribing peers out of profitable deals because of bribery.

First, I expect non-bribing peers' engagement in income-increasing financial misstatements to depend on the magnitude of their loss of income. Using the amounts of bribes paid to proxy for both corrupt firms' illicit gains and the extent of non-bribing peers' loss of income, I formulate the first specification of my second hypothesis as follows,

H2a: Non-bribing peers' performance-enhancing financial misstatements increase with the bribes paid by corrupt rivals.

Second, I expect non-bribing peers to be penalized more when they compete with bribers for the same deals. Through bribe payments, firms beat their competitors out of profitable deals, erode their market shares, and can even force them to exit the market (e.g., Bai, Jayachandran, Malesky, and Olken, 2017). I therefore predict that non-bribing peers have more incentives to manipulate their performance when they lose profitable deals and market share because of their rivals' bribery. Using the Hoberg and Phillips (2016)' product market similarity scores to determine bribers' closest competitors, I formulate the second specification of my second hypothesis as follows,

H2b: Non-bribing peers' performance-enhancing financial misstatements increase with the product market similarity to corrupt rivals.

Lastly, I examine a possible mechanism for the spillover effects of corporate corruption on peer firms' financial misstatements. Non-bribing peers are likely to underperform relative to their bribing rivals that obtain unfair performance-enhancing favors. Relative underperformance is costly for the firms because executives may need to resign, markets may react negatively to performance declines, lenders may refuse to provide credit, and analysts may formulate unfavorable recommendations (e.g., Bagnoli and Watts, 2000; Park and Ro, 2004; Jenter and Kanaan, 2015; Young and Zeng, 2015).

As analysts largely rely on relative performance evaluation to make decisions, non-bribing peers are likely to care about bribers' performance when they are directly benchmarked against them. Specifically, analysts use relative peer performance as the benchmark to support valuation

multiples, earnings forecasts, and stock recommendations (e.g., Bradshaw, Miller, and Serafeim, 2009; De Franco et al., 2015). Moreover, during the Q&A session of firm conference calls, analysts often ask questions about firm results relative to their peers, exacerbating the pressures on relative performance (Brochet, Kolev, and Lerman, 2018). Finally, peer pressure is a likely reason why managers tend to reply to analysts' questions with "non-answers" when the competition is intense (Gow, Larcker, and Zakolyukina, 2019).

I therefore expect non-bribing peers to have more incentives to misstate their financial statements upward when they are benchmarked against high-performing corrupt rivals by financial analysts. Using common analysts between bribing firms and non-bribing peers to proxy for the intensity of peer performance pressures, I formulate my third hypothesis as follows,

H3: Among non-bribing peers, those experiencing the strongest peer performance pressures misstate their financial statements upward more often.

Consistent with the evidence on contagion in corporate misconduct (e.g., Kedia et al., 2015), I suggest that the spillover effects of corruption on peers' financial misstatements rely on an economic-based explanation, that is peer performance pressure. However, my tests do not rule out the possibly contributing role of sociological and psychological arguments in explaining the spread of corporate misconduct (e.g., Den Nieuwenboer and Kaptein, 2008; Parsons et al., 2018).

2 Data and Empirical Methodology

2.1 Data and Sample

To test the hypotheses, I examine the enforcement actions for FCPA violations issued by the U.S. DOJ and the SEC between April 1978 and December 2019.[10] Violations of the FCPA imply that U.S. firms have bribed foreign officials, via foreign operations and/or foreign subsidiaries, to obtain or retain government contracts and other business in those foreign countries. The FCPA prosecutes firms for foreign bribery only, although corporations can bribe both domestically and internationally. However, because regulators are primarily concerned about corruption in developing

[10]The enforcement actions are accessible through the U.S. DOJ and the SEC websites. The U.S. DOJ site is available at http://www.justice.gov/criminal/fraud/fcpa/cases/a.html, whereas the SEC "Spotlight on Foreign Corrupt Practices Act" is available at http://www.sec.gov/spotlight/fcpa/fcpa-cases.shtml.

countries (Weber and Getz, 2004; Olken and Pande, 2012), I consider this sample meaningful to answer my research question.[11]

I first provide a descriptive overview about corrupt firms and enforcement actions. Between 1978 and 2019, regulators have released 451 enforcement actions for FCPA violations against 203 unique firms in Compustat. Each firm has therefore received, on average, 2.2 enforcement actions, suggesting that bribing firms are repeat offenders and bribery is profitable for bribing firms (e.g., Sahakyan and Stiegert, 2012; Birhanu et al., 2016). Table 1 shows that until early 2000s, regulators' enforcement was relatively moderate, whereas from 2005 the trend has increased, reaching up to 51 annual enforcement actions in 2010, and 47 in 2016.[12] This increasing trend reflects regulators' industry-wide investigations and international anti-corruption cooperation and enforcement (Koehler, 2013).

[Table 1]

Table 2 shows where bribes are paid and reveals that China is the country with the highest frequency of illicit payments (12.16 percent), followed by Brazil, Iraq, and Nigeria, whose bribery frequency ranges between 4.12 percent and 4.71 percent.[13]

[Table 2]

Table 3 reports some descriptive statistics of enforcement actions and corrupt firms. On average, bribes paid are $66.64 million, whereas the sanctions for violating firms amount to $75.56 million. The standard deviation of both variables highlights the presence of some observations whose illicit payments and penalties are significantly higher than the sample means. The evidence also shows that firms bribe, on average, for about 5.7 years, whereas 6.5 years is the time between the average year in which bribes are paid and the year of the enforcement action. Moreover, almost 28 percent

[11]The Corruption Perceptions Index (CPI) 2019 ranks the United States of America among the least corrupt countries in the world, providing some assurance that corruption within the U.S. is not a first-order issue. See: https://www.transparency.org/cpi2019.

[12]These small figures could raise concerns about selectivity issues. The number of enforcement actions for FCPA violations is lower than that of enforcement actions for other accounting and auditing violations. For example, in 2016 the SEC issued 58 enforcement actions for FCPA violations (original figure before data cleaning), whereas 113 accounting and auditing enforcement actions. However, the observations in my final sample are in line with those used in other studies on the accounting consequences of SEC enforcement (e.g., Tran and O'Sullivan, 2011; Beatty, Liao, and Yu, 2013; Mehta and Zhao, 2020).

[13]In Table 2, the total number of observations (510) is higher than that reported in Table 1 (451) because each enforcement action can refer to bribes paid in more than one foreign country.

of the enforcement actions are against firms' executives, around 21 percent involve M&A deals, more than 63 percent impose compliance obligations as part of case resolutions, and almost half of the actions involve both the DOJ and the SEC. Finally, statistics show that bribing firms' performance, measured as sales growth and profitability, improves during bribing years relative to before the beginning of the bribery projects, suggesting that corruption leads to unfair benefits for corrupt firms.

[Table 3]

After screening the enforcement actions and examining their characteristics, as described in Tables 1—3, I identify the years in which firms have bribed and earned business and financial unfair benefits. I focus on bribe payments between 2002 and 2016 for two reasons. First, the database I use to construct the proxies for financial misstatement (i.e., Audit Analytics) covers restatements from early 2000s, and is likely incomplete before that date (Gonzales, Schmid, and Yermack, 2013; Karpoff, Koester, Lee, and Martin, 2017a). Second, the observations involving bribe payments both before early 2000s and in recent years are limited, and therefore not representative of the population of corrupt firms. The lack of data for recent years likely depends on the time that regulators need to identify a bribery project, conduct the investigations, and release the enforcement actions.

The final sample of corrupt firm-years is limited to firms with securities listed in the U.S., belonging to non-financial industries, and with sufficient available data to construct the test variables. As Panel A of Table 4 reports, between 2002 and 2016, 684 bribing firm-year observations (i.e., 134 unique firms) meet these requirements.[14]

[Table 4]

Once I have identified bribing firms and years, I construct the sample of non-bribing firms that I use to test my hypotheses. The sample includes all remaining firms publicly listed in the U.S., with the same two-digit SIC code as bribers, and with data available in Compustat, CRSP, and Thomson Reuters for variable construction. Limiting the sample to firms with the same two-digit SIC code as corrupt firms allows to mitigate the heterogeneity in industry characteristics and is consistent with the literature (e.g., Garvey and Milbourn, 2006; Kedia et al., 2015). Furthermore,

[14] As opposed to the sample in Table 3, which focuses on enforcement actions release, this sample of bribing firms identifies, for each enforcement action, the years of the illicit payments.

this sample selection allows to exploit the time-series variation of my data and control for fixed firm characteristics while subsequently performing an event study analysis.

I partition the sample of non-bribing firms into non-bribing peers and other non-bribing firms based on the value assumed by the variable *Bribe Exposure*, which is an indicator equal 1 if firm i is exposed to at least one j bribing industry competitor in fiscal year t, and 0 otherwise. Non-bribing firms exposed to bribing rivals (i.e., non-bribing peers) have the same year and three-digit SIC code as bribing firms. Non-exposed firm-year observations include firm-years with the same two-digit SIC as bribing firms, but a different three-digit SIC code, and firms with the same three-digit SIC code as bribing firms in non-bribing years.[15]

As Panel B of Table 4 shows, the initial sample of U.S. publicly listed non-bribing firm-years between 2002 and 2016 consists of 166,452 observations. I subsequently exclude 47,521 observations that do not have any bribing rival in the same two-digit SIC group. I further remove 65,784 observations because of missing data for variable construction. Finally, I exclude 8,433 financial firm-years because the financial industry is highly regulated and substantially different from the rest of the sample. Over the period 2002-2016, the final sample consists of 44,714 non-bribing firm-year observations, of which 23,760 exposed to rivals' bribery, whereas 20,954 not exposed to rivals' bribery.[16,17]

[15]This partition differs from that required by a common difference-in-differences research design because having multiple bribery cases in the same year and three-digit SIC group prevents from identifying time indicators. Suppose that two firms with three-digit SIC equal to 100 bribe, but the first does so in 2005 and 2006, whereas the second in 2008 and 2009. Assuming that treated (peer) firms are non-bribing firms with the same three-digit SIC as bribers (i.e., three-digit SIC equal to 100), whereas control firms are non-bribing firms with the same two-digit SIC as bribers (i.e., two-digit SIC equal to 10), but a different three-digit SIC, I would have the same control firm for multiple treated firms, and I would not be able to identify a unique time indicator for the control group. However, according to my specification, *Bribe Exposure* equals 1 in 2005, 2006, 2008, and 2009 (that is, all bribing years, regardless of the bribing firm), and 0 in all other years when firms' three-digit SIC is 100. *Bribe Exposure* also equals 0 for all remaining firms with two-digit SIC equal to 10 in any sample year.

[16]On average, there are 35 peers for 1 bribing firm. However, I do not expect all peers to be equally and directly affected by rivals' bribery, as only few have highly overlapping product lines or common analysts. The tests of H2 and H3 aim at exploiting these differences.

[17]The unreported sample split by year reveals that the number of bribing firm-year observations increases between 2002 and 2006, and decreases afterwards, similarly to the sample of non-bribing peers, whereas firm-year observations not exposed to rivals' corruption increase over the most recent years (2007-2016). The decrease in bribing firm-years over recent years is likely attributable to the enforcement actions being released, on average, 6.5 years after firms bribe. Moreover, the unreported sample split by industry reveals that bribery mainly occurs in agricultural, mining, manufacturing, and wholesale trade of nondurable goods industries.

2.2 Empirical Methodology

The first hypothesis (H1) investigates whether firms' involvement in bribing activities affects the frequency of their non-bribing peers' income-increasing financial misstatements. To test this hypothesis, I perform the following multivariate regression analysis,

$$Misstatement(Up)(Down)_{i,t} = \alpha + \beta Bribe\ Exposure_{j,t} + \delta \boldsymbol{Z}_{i,t} + a_j + b_t + \epsilon_{i,t} \quad (1)$$

The dependent variable measures firm financial misstatements with different proxies. The first specification does not capture the direction of the manipulation and identifies all non-bribing firms (both exposed and non-exposed to bribing rivals in a given fiscal year) required to restate their financial statements because of previous financial misstatements. I compute this variable from the Non-reliance Restatement Database of Audit Analytics, which allows to detect the fiscal year(s) in which firms have misstated their accounting numbers.[18] Specifically, *Misstatement* is an indicator equal 1 if firm i engages in financial misstatement activities in fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise.

Although the majority of financial misstatements are performance-enhancing (Kothari, Mizik, and Roychowdhury, 2016), to test more directly whether firms misstate their financial numbers upward, the second specification captures income-increasing financial misstatements. In particular, *Misstatement Up* is an indicator equal 1 if firm i engages in income-increasing misstatement activities in fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. The third specification captures income-decreasing manipulations and is *Misstatement Down*, an indicator equal 1 if firm i engages in income-decreasing misstatement activities in fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise.[19]

The independent test variable for H1 is *Bribe Exposure*, an indicator equal 1 if firm i is exposed

[18] The proxies for financial misstatement rely on the assumption that restatements represent corrections to financial statement misstatements that negligent and/or opportunistic managers previously made (Baber, Kang, Liang, and Zhu, 2015.

[19] In alternative (unreported) specifications, I adjust the proxies for income-increasing and income-decreasing financial misstatements as follows. First, when I focus on income-increasing misstatements, I exclude income-decreasing misstatements from the sample. Second, when I focus on income-decreasing misstatements, I exclude income-increasing misstatements from the sample. Results of the tests using these specifications support the main evidence.

to at least one j bribing industry competitor in fiscal year t, and 0 otherwise.[20] Non-bribing firms exposed to bribing rivals (i.e., non-bribing peers) have the same year and industry as bribing firms, with industry determined at the three-digit SIC level. Non-exposed firm-years include firm-years with the same two-digit SIC as bribing firms, but a different three-digit SIC code, and firms with the same three-digit SIC code as bribing firms in non-bribing years.

If non-bribing peers misstate their financial statements to report results consistent with the unfair gains of their corrupt rivals, I expect β to be positive when the dependent variable captures performance-enhancing misstatements (i.e., *Misstatement Up*). If non-bribing peers misstate their financial statements because rivals' corporate misconduct permeates the business environment (e.g., Den Nieuwenboer and Kaptein, 2008), any financial misstatement could occur, and β would be positive with any dependent variable. If non-bribing peers respond to rivals' bribery becoming more efficient and competitive through strategic decisions (Galang, 2012), or do not react to rivals' bribery, I would not observe any spillover effects from corruption, and β would be statistically insignificant.

Not all non-bribing peers are expected to be equally affected by rivals' bribery. The second hypothesis investigates which conditions exacerbate non-bribing peers' competitive disadvantage and loss of income. First, I test whether the spillover effects are more severe when bribing firms earn high unfair gains, consistent with the assumption that non-bribing peers' loss of income is proportionate to bribing firms' unfair gains (H2a). To test this hypothesis, I perform the following multivariate regression analysis,

$$Misstatement\ Up_{i,t} = \alpha + \beta Rival\ Bribes_{j,t} + \delta \boldsymbol{Z}_{i,t} + a_j + b_t + \epsilon_{i,t} \tag{2}$$

The dependent variable is *Misstatement Up*, an indicator equal 1 if firm i engages in income-increasing financial misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. The independent test variable is *Rival Bribes*, which proxies for the extent of loss of income that non-bribing peer firms are likely to experience because of their rivals' unfair gains. I obtain this variable as follows. First, I compute the natural logarithm of

[20] Although the enforcement actions disclose when firms start the illicit payments, the benefits of bribery may fully materialize in the subsequent period(s), thus shifting the effective exposure to rivals' bribery later in time. In unreported tests, I confirm my results by excluding the first year in which corrupt firms bribe.

the bribes paid by bribing firms in each bribing year and industry (three-digit SIC). Second, I assign this variable to non-bribing peers exposed to bribing rivals based on their year and industry group (three-digit SIC). Bribes paid are a good proxy for corrupt firms' unfair gains because illicit payments are generally proportionate to the benefits earned, and potential gains are an important determinant of unethical actions (Cheung, Rau, and Stouraitis, 2012; Draca, Koutmeridis, and Machin, 2019). Because I examine the consequences of bribing firms' gains relative to non-bribing peers, H2a focuses on income-increasing financial manipulations only.

Through illicit payments, bribing firms are likely to beat out of profitable deals their peers, who will experience a reduction in their market shares, and will face, in turn, a loss of income. As a consequence, non-bribing peers have more incentives to artificially increase their performance. I thus examine whether bribing firms' closest competitors misstate their financial statements more often than other non-bribing peers exposed to bribing rivals but less competitively close. To test H2b, I perform the following multivariate regression analysis,

$$Misstatement\ Up_{i,t} = \alpha + \beta Rival\ Product\ Similarity_{j,t} + \delta \boldsymbol{Z}_{i,t} + a_j + b_t + \epsilon_{i,t} \tag{3}$$

Consistent with H2a, in H2b I focus on income-increasing financial misstatements, and use *Misstatement Up* as the dependent variable. The independent test variable is obtained exploiting the firm pairwise similarity scores that Hoberg and Phillips (2016) compute from text analysis of firms' 10-K product descriptions. Specifically, I construct *Rival Product Similarity* as an indicator equal 1 if firm i in fiscal year t has at least one bribing competitor j with pairwise similarity score above the median, and 0 otherwise. In line with H2b, I predict that the firms with the strongest incentives to misstate their financial statements upward are bribers' closest competitors (Kaikati et al., 2000).[21]

The third hypothesis investigates whether a possible mechanism for the spillover effects of corruption on non-bribing peers' financial misstatement is relative performance pressure. To test

[21] Previous literature argues that U.S. non-bribing firms under FCPA regulation face competitive disadvantages especially when they do business abroad, because their European and Asian competitors are better able to beat them out of profitable deals due to their bribes (e.g., Kurer, 1993; Brown et al., 2019). In unreported tests, I focus on firms that are more likely to be affected by rivals' foreign bribery by applying my empirical methodology to the sample of non-bribing firms that do business abroad (i.e., firms with non-zero income taxes from foreign operations reported in Compustat). The analyses performed using this sample confirm all the main findings.

H3, I perform the following multivariate regression analysis,

$$\begin{aligned} \textit{Misstatement Up}_{i,t} = \alpha + \beta \textit{Common Analyst (Percentage Common Analyst)}_{j,t} + \\ + \delta \boldsymbol{Z}_{i,t} + a_j + b_t + \epsilon_{i,t} \end{aligned} \tag{4}$$

The dependent variable, *Misstatement Up*, is as per equations 2 and 3. The first independent test variable is *Common Analyst*, an indicator equal 1 if firm i has at least one financial analyst in common with bribing firms in fiscal year t, and 0 otherwise. In the second specification of H3, the independent test variable is *Percentage Common Analyst*, which measures the percentage of common analysts between bribing firms and their non-bribing peers in a given fiscal year. In both specifications of equation 4, I predict that having the same financial analyst(s) as bribing firms puts non-bribing peers under high peer performance pressures and motivates them to misstate their financial performance more often compared to other firms exposed to corruption but without (or with fewer) common analysts.

The models in equations 1—4 include additional control variables ($\boldsymbol{Z}$) that previous literature associates with corporate misconduct, in particular financial manipulation incentives and ability, industry structure, firm characteristics, and firm performance (e.g., Beatty et al., 2013; Kedia et al., 2015; Liu, 2016). To proxy for manipulation incentives, I use leverage, reported losses, and market-to-book ratio. Firms with high leverage have more incentives to manipulate their financial statements to avoid debt covenant violations (Richardson, Tuna, and Wu, 2003). Moreover, firms misstate their financial statements to window-dress losses (Healy and Wahlen, 1999), or to signal high future growth opportunities (Povel, Singh, and Winton, 2007). I measure leverage (*Leverage*) as the ratio of short- and long-term debt to lagged total assets, loss (*Loss*) as an indicator equal 1 if firms report losses in the current fiscal year, and 0 otherwise, and market-to-book ratio (*Market-to-Book*) as the market value of assets scaled by the book value of assets.

To proxy for manipulation ability, I use Big4 auditor data, because Big4 auditors exercise substantial scrutiny over financial statements to prevent misstatements (DeFond and Zhang, 2014). Specifically, *Big4* is an indicator equal 1 if firms are audited by Big4 audit firms, and 0 otherwise. In addition, I use the normalized value of the Herfindahl-Hirschman Index (*Normalized HHI*) to proxy for industry concentration (e.g., Datta, Iskandar-Datta, and Singh, 2013; Balakrishnan and

Cohen, 2014).

I further include the following firm characteristics and performance measures. *Age* proxies for firms' life cycle and is calculated as the natural logarithm of one plus firm age, which is the number of years since the inclusion of firms in Compustat. *Buy-and-Hold Return* measures firms' stock performance and is computed as the contemporaneous 12-month buy-and-hold return. *Capex* measures the funds that firms use to purchase, maintain, and upgrade their assets, and proxies for the barriers to entry into the market (Porter, 1979). It is calculated as the ratio of capital expenditure to lagged property, plant and equipment. *CFO* measures cash flows from operations scaled by lagged total assets. *Earnings Volatility* proxies for earnings volatility and is computed as the standard deviation of earnings per share for the 12 quarters ending with the year of observation. *Growth* accounts for firms' growth and is the annual percentage change in sales. *Institutional Investor* measures institutional ownership—an important corporate governance mechanism that can reduce agency conflicts and limit managers' accounting discretion (Jiambalvo, Rajgopal, and Venkatachalam, 2010). I proxy for the role of institutional investors using the percentage of common shares that such investors own in the firms. *ROA* measures firms' profitability and is the ratio of operating income before depreciation to lagged total assets. Finally, *Size* proxies for firms' size and is the natural logarithm of lagged total assets. The empirical models presented in equations 1—4 include industry (three-digit SIC) and year fixed effects. Moreover, I estimate the coefficients using logistic regressions and cluster the standard errors at firm level.

2.3 Descriptive Statistics

Table 5 provides the descriptive statistics of the main variables distinguishing between bribing firm-year observations, non-bribing peers (i.e., non-bribing firms exposed to bribing rivals), and non-exposed firm-years.

[Table 5]

Bribing firms in bribing years are, on average, bigger and more profitable compared to non-bribing ones, consistent with the literature suggesting that corruption is performance-enhancing, in particular when firms are major market players (D'Souza and Kaufmann, 2013; Birhanu et al., 2016; Giannetti et al., 2017).

Focusing on non-bribing firms in sections (2) and (3) of Table 5, it is noticeable that the average frequency of misstatements detected by ex-post restatements (*Misstatement*) is 13.2 percent for firm-year observations exposed to bribing rivals, and 12.7 percent for non-exposed firm-years.[22] Moreover, income-increasing financial misstatements frequency is 11.3 percent for firm-years exposed to corruption and 10.5 percent for firm-years not exposed to corruption, whereas income-decreasing financial misstatement frequency is less than 3 percent in both subsamples. This descriptive evidence confirms that income-increasing financial misstatements are more common than income-decreasing misstatements (e.g., Cao, Myers, and Omer, 2012; Kothari et al., 2016).

Regarding the independent variables, the natural logarithm of the bribes paid by corrupt firms and aggregated by year and industry (three-digit SIC) is, on average, 2.88,[23] whereas around 21 percent of the sample of firms exposed to corruption have at least one bribing rival with product market proximity score above the median. In addition, 31.2 percent of firms exposed to bribing rivals share with them, on average, at least one financial analyst, while the percentage of common analysts is around 10 percent. The remaining descriptive statistics are overall consistent with previous studies on the determinants of financial misconduct (e.g., Beatty et al., 2013; Kedia et al., 2015; Liu, 2016; Du and Shen, 2018).

3 Results

This section describes the main empirical findings and presents the results of additional analyses performed to rule out some alternative explanations.

3.1 Main Results—Exposure to Bribery and Financial Misstatement

Table 6, Panel A presents the results of testing H1 using equation 1. Column (1) employs *Misstatement* as the dependent variable, and shows a higher financial misstatement rate for firms exposed to bribing rivals compared to firms not exposed to rivals' corruption. The coefficient of

[22] Bribing firm-years have higher misstatement rates, on average, compared to the rest of the sample. A likely reason is that, during bribing years, corrupt firms hide the illicit payments through accounting manipulations. However, according to my argument, these misreporting practices do not relate to peers' propensity to misbehave (which is instead mainly driven by relative performance pressures).

[23] Note that the dollar value of the natural logarithm of bribes paid differs from the amount reported in Table 3 for the following reasons. First, the sample in Table 3 is different from that in Table 5. Second, the natural logarithm presented in Table 5 aggregates bribe payments by year and industry. Third, the logarithmic function is nonlinear, hence the mean of the logarithm of bribery payments does not equal the logarithm of the mean of bribery payments.

Bribe Exposure is positive (0.141) and statistically significant at the 5 percent level.

[Table 6]

Column (2) reports the results when the dependent variable captures income-increasing financial misstatements (*Misstatement Up*). Consistent with my hypothesis, the evidence suggests that corruption positively affects non-bribing peers' attitude toward upward financial misstatements. Specifically, the coefficient of *Bribe Exposure* is positive and statistically significant (coef. 0.196, z-stat 2.65). Economically, non-bribing peers (i.e., non-bribing firms exposed to bribing rivals) have a predicted probability of misstating upward their financial statements 1.9 percentage points higher than that of non-exposed firms. Considering an average income-increasing misstatement rate of 11 percent, this result suggests that financial misstatement rate increases up to around 13 percent during bribing years. Moreover, the exposure to rivals' corruption does not affect income-decreasing financial misstatements (the coefficient of *Bribe Exposure* is statistically insignificant in column (3) of Table 6).

With reference to control variables, the results show that firms with higher leverage (*Leverage*) misstate their financial statements more often, possibly to avoid debt covenants violations (Richardson et al., 2003). Furthermore, consistent with previous literature, the evidence indicates that firms with higher earnings volatility (*Earnings Volatility*) and current growth rates (*Growth*) engage more in financial misstatement activities (e.g., Povel et al., 2007; Johnson, Ryan, and Tian, 2009).

Although non-bribing peers could manipulate any accounting number to report a higher performance, I expect them to engage primarily in revenue misstatements, because bribery allows corrupt firms to obtain new contracts and businesses that generate additional revenues (Ryan, 2000).[24] I therefore examine whether non-bribing firms exposed to bribing rivals engage in revenue manipulations more often than non-exposed firms. Specifically, I re-test H1 by replacing the dependent variables with proxies for upward and downward revenue misstatements.

Panel B of Table 6 reports the results of this analysis. Column (4) dependent variable is *Misstatement Revenue Up*, an indicator equal 1 if firms misstate their revenues upward in a given fiscal year and are sanctioned by subsequent restatements, and 0 otherwise, whereas column (5)

[24]The guide to the FCPA issued by the U.S. DOJ and the SEC in 2012 reiterates that bribery allows firms to increase their revenues. See: https://www.sec.gov/spotlight/fcpa/fcpa-resource-guide.pdf

dependent variable is *Misstatement Revenue Down*, an indicator equal 1 if firms misstate their revenues downward in a given fiscal year and are sanctioned by subsequent restatements, and 0 otherwise. Consistent with my prediction, results suggest that non-bribing peers misstate their revenues upward more often than firms not exposed to competitors' corruption (coef. 0.263, z-stat. 1.92).

Overall, the empirical findings for H1 indicate that the corrupt actions of some industry members affect non-bribing peers' upward financial misstatements, and that non-bribing peers misstate their financial statements to align their performance to the unfair gains of corrupt rivals. Moreover, such misstatements affect primarily revenues.

The research design employed so far assumes that there are no unobservable differences in the propensity toward financial misstatement between firms exposed and non-exposed to rivals' bribery. In the following analysis, I control for unobservable fixed firm characteristics by exploiting the time-series variation of my data. I perform an event study analysis and compare financial misstatement frequencies of non-bribing firms before bribing years vis-à-vis during bribing years. Every anti-bribery enforcement action represents an event, with bribing years representing the duration of the event. I assign each bribery event to non-bribing firms by classifying these firms as exposed (treated) and non-exposed (control) to bribery following Beatty et al. (2013).[25] For each bribery case at the three-digit SIC level, exposed (treated) firms are non-bribing firms with the same three-digit SIC code as bribers, whereas non-exposed (control) firms are non-bribing firms with the same two-digit SIC code as bribers, but a different three-digit SIC code. Moreover, for each event, I identify the pre-bribery period (the five years before bribery occurs), and the during-bribery period (the first five years in which bribery occurs).

To compare financial misstatement frequencies of treated and control firms before bribing years vis-à-vis during bribing years, control firms cannot be associated with multiple treatments. To have a unique time indicator for each control group, I select only the first bribery event in each two-digit SIC group, and align the time variables accordingly. Because the results of H1 suggest that non-bribing peers engage in income-increasing financial misstatements when their rivals bribe, the following analyses focus on upward financial misstatements. I present the results of this event study analysis in Panel A of Table 7. For parsimony, I only display the coefficient estimates of the test

[25] Consistent with the main tests, I consider firms exposed to rivals' bribery as non-bribing peers (treated firms).

variables, but regressions include control variables as per equation 1, and firm and year fixed effects.

[Table 7]

The test variable is *Treat Bribing Years*, and represents the interaction between the treatment indicator and the time indicator.[26] The dependent variable is *Misstatement Up*, an indicator equal 1 if firms misstate their financial statements upward in a given fiscal year and are sanctioned by subsequent restatements, and 0 otherwise. Column (1) reports the results of the regression without control variables, whereas the results in column (2) refer to the regression with controls. Consistent with my hypothesis that the frequency of income-increasing financial misstatements is higher for firms exposed to corruption in bribing years, the coefficient of the variable *Treat Bribing Years* is positive and significant, ranging from 0.031 in column (1) to 0.036 in column (2).[27]

To provide further assurance that treated and control firms are not inherently different in a persistent way, I perform a placebo test over pre-bribery years only. This test predicts no differences in misstatement frequency between treated and control firms during pre-bribery years. I present the results in Panel B of Table 7. Treatment and control groups are defined as per Panel A, whereas the time indicator equals 1 in the two years right before bribing firms start the illicit payments (*t-1* and *t-2*), and 0 in the years *t-3* and *t-4* from bribery initiation in each industry. The coefficient of the test variable is *Treat Pre-Bribing Years*, which captures the change in financial misstatement rates between treated and control groups comparing the two pre-bribery periods. As predicted, the interaction term is no longer positive and significant.

Overall, the evidence in Table 7 provides some confidence that unobservable firm fixed characteristics are not driving the results of my main analysis. Moreover, the fact that treated firms (same three-digit SIC code as bribers) show evidence on spillover effects, whereas control firms do not, speaks in favor of maintaining this industry classification for my subsequent tests on non-bribing peers (i.e., non-bribing firms exposed to bribing rivals).

[26] The treatment indicator equals 1 if non-bribing firms have the same three-digit SIC code as bribers, and 0 if they have the same two-digit SIC code, but a different three-digit SIC code as bribers. The time indicator equals 1 in the first five bribing years in a given two-digit SIC group, and 0 in the five years immediately before.

[27] The multivariate regression analysis with controls in column (2) is performed excluding the variable *Buy-and-Hold Return* from the set of controls to preserve the sample size. When I include this variable, the coefficient estimate of *Treat Bribing Years* becomes slightly insignificant, although it is statistically indistinguishable from the one estimated without *Buy-and-Hold Return* (the Chi^2 test for the difference in coefficients is equal to 0.37).

3.2 Main Results—Bribing Firms' Unfair Gains and Peers' Financial Misstatement

Panel A of Table 8 reports the results of testing H2a and H2b as per equations 2 and 3 using the sample of non-bribing peers (i.e., when *Bribe Exposure* equals 1). The results of H2a in column (1) suggest that non-bribing peers misstate their financial statements more often when they are likely to experience high loss of income because of bribing rivals' unfair gains. The coefficient of *Rival Bribes* (0.495) is positive and statistically significant at the 5 percent level.

[Table 8]

Moreover, the evidence on H2b in column (2) indicates that when bribing firms and their non-bribing peers have high product market similarity (i.e., when *Rival Product Similarity* equals 1), non-bribing peers are more affected by rivals' corruption, and engage in financial misstatements more often. Economically, non-bribing peers with high product market similarity to their bribing rivals have a predicted probability of misstating upward their financial statements 2 percentage points higher than that of less competitively closed peers. Consistent with an average income-increasing misstatement rate of 11 percent for non-bribing peers, this result suggests an increase in such rate up to 13 percent.

Panel B of Table 8 reports the results of testing the same hypotheses focusing on revenue misstatements as a response to corruption. The evidence in columns (3) and (4) suggests that the peers of bribing firms manipulate their revenues upward more often when the bribes paid (H2a) and the competitive similarity to corrupt rivals (H2b) are high. Overall, the findings in Table 8 indicate that the spillovers of corruption on financial misstatements are stronger, the higher non-bribing peers' likelihood of facing loss of income because of bribing rivals' unfair benefits.

3.3 Main Results—Peer Performance Pressure and Non-bribing Firms' Financial Misstatement

The third hypothesis investigates whether a possible mechanism for the spillover effects from corruption is peer performance pressure. Table 9 reports the results of this test performed on the sample of non-bribing peers (i.e., when *Bribe Exposure* equals 1). Panel A focuses on all income-increasing financial misstatements. The coefficient of *Common Analyst* is positive and statistically significant in column (1), suggesting that the predicted probability of income-increasing

manipulations is 1.6 percentage points higher for non-bribing peers with at least one financial analyst in common with bribing firms relative to other non-bribing peers.

The evidence is consistent with that in column (2): The higher the percentage of common analysts between bribing firms and their non-bribing peers, (i.e., *Percentage Common Analyst*), the higher the likelihood of non-bribing peers' performance-enhancing financial misstatements. In terms of economic impact, the marginal effect of moving from the 25th percentile to the 75th percentile of *Percentage Common Analyst* is associated with a change of around 2.95 percent in non-bribing peers' likelihood of misstating upward the financial statements.[28]

[Table 9]

Firms are often benchmarked against their peers based on revenue growth (e.g., Turner, Dietrich, Anderson, and Bailey, 2001), thus motivating non-bribing peers to manipulate their revenues to cope with the relative underperformance due to bribing rivals' unfair revenues. Consistent with the summary statistics in Table 5, this prediction is plausible because non-bribing peers have growth rates comparable, on average, to those of bribing rivals (11.8 percent vis-à-vis 12.2 percent, respectively).[29] In Panel B of Table 9, I test the same hypothesis focusing on upward revenue manipulations only. The evidence is overall consistent with that in Panel A. The higher the overlap in analyst coverage between bribing firms and their non-bribing peers, the higher the frequency of non-bribing peers' upward revenue manipulations.

3.4 Additional Analysis to Rule Out Alternative Explanations

This section reports the results of additional analyses performed to rule out some alternative explanations. First, if firms engaging in bribery are also more likely to misstate their accounting numbers, my results may reflect contagion in financial misstatement (as in Kedia et al., 2015) rather than spillovers of corruption on peers' financial misstatements. To rule out this alternative contagion mechanism, I re-test the hypotheses controlling for bribers' financial misstatement (*Misstatement*

[28] To illustrate the calculation, note that the marginal effect of 0.030 reported in column (2) of Table 9, Panel A for *Percentage Common Analyst* is multiplied by the inter-quartile range for *Percentage Common Analyst* of 0.111. This yields 0.0033, which when divided by the mean value of *Misstatement Up* of 0.113 yields 2.95 percent.

[29] The t-test of the difference in *Growth* means between firms exposed to corruption and their bribing rivals equals -0.327 and is not statistically significant. Please note that sales growth rate of bribing firms in bribing years in Table 5 is lower than that reported in Table 3 because the final sample excludes firms in the financial industry and firms without available data for variable construction. Compared to the comprehensive sample in Table 3, the evidence in Table 5 underestimates the sales increase that corrupt firms obtain in bribing years.

Bribers). I construct *Misstatement Bribers* averaging the financial misstatement rates (based on subsequent restatements) of bribing firms by year and three-digit SIC group. Subsequently, I assign this variable to non-bribing peers by year and three-digit SIC code, whereas I set it equal to 0 for all non-exposed firm-years.[30] I report the results of this test in Table 10. For parsimony, I only display the coefficient estimates of the test variables, but logistic regressions include control variables and fixed effects, as reported in equations 1—4. The findings do not provide evidence on contagion in financial misstatements.

[Table 10]

Second, as I classify only firms caught bribing as corrupt firms, my research design is subject to a possible misclassification error arising from undetected bribery projects. If uncaught bribing firms misstate their financial statements along with bribing, disentangling the spillover effects of corruption on peers' financial misstatements from contagion in bribery is challenging. To deal with this issue, I identify a setting where firms labeled as non-bribing firms are unlikely to bribe, making bribery contagion less likely to explain the results. Specifically, I classify non-bribing firms that do not have significant business in corrupt countries as unlikely to bribe. A reason why firms might not have business in highly corrupt countries is that their bribing rivals have beaten them out of the deals and gained a monopoly position (e.g., Zhu and Deng, 2018). I define corrupt countries as those ranked below the bottom quartile of the Corruption Perceptions Index (CPI) distribution in a given year.[31] To identify the countries where firms do business and classify them according to their corrupt status, I exploit the information about corporate geographical business segments reported in Compustat Geographical Segments. I test all the hypotheses restricting the sample to firm-years that do not have business in highly corrupt countries, and display the results in Table 11. The evidence suggests that the bribery-to-bribery contagion hypothesis is unlikely to explain the results.

[Table 11]

[30] Consistent with the dependent variables, I construct three proxies for bribers' financial misstatement, i.e., all financial misstatements, income-increasing financial misstatements, and income-decreasing financial misstatements. For simplicity, I label all of them as *Misstatement Bribers*.

[31] The CPI ranks countries on a scale 0-100 from highly corrupt (low index) to very clean (high index). As an example, in 2013 the U.S. have CPI equal to 73 (comparable to U.K. and Canada, which have CPIs equal to 76 and 81, respectively). Among the most corrupt countries, there are instead Afghanistan, North Korea, and Somalia (CPI equal to 8).

Third, Parsons et al. (2018) show that social and cultural forces—proxied by the geographical location of corporations—are a first-order determinant of firms' financial misconduct. To ensure that results do not indirectly reflect the effect of city-level culture on financial misstatement, I test my hypotheses controlling for state fixed effects. I report the results of this test in Table 12, and confirm previous evidence. The magnitude of the coefficients of the test variables in all hypotheses is similar to that of the main tests, and the statistical significance is largely unaffected. Only the coefficients of *Common Analyst* and *Percentage Common Analyst* employed to test H3 are slightly insignificant. Altogether, the evidence suggests that, after accounting for social factors, the exposure to rivals' corruption, the materiality of the unfair benefits that bribers earn through their illicit payments, and the side effects induced by competitive proximity to bribers, are relevant determinants of non-bribing peers' income-increasing financial misstatements.

[Table 12]

4 Conclusion

In this study, I provide evidence on the existence of spillover effects from corporate misconduct. When some firms bribe to gain unfair business advantages, their non-bribing peers respond by misstating their financial statements upward. Furthermore, the likelihood of reporting losses when rivals bribe affects non-bribing peers' propensity to misstate the financial statements. These losses depend on how much bribing rivals unfairly win, and whether non-bribing peers are likely to lose profitable deals because of rivals' bribery. Finally, the evidence suggests that peer performance pressure is a possible mechanism for such spillover effects.

This study helps understand the implications of bribery for corrupt firms' competitors, and answers a recent call for research on network effects and externalities from corporate behavior (Leuz and Wysocki, 2016; Zeume, 2017). While corruption is detrimental for economic growth and development (Healy and Serafeim, 2016), my results suggest that it can also produce indirect side effects by influencing other industry members' engagement in alternative forms of misconduct, like financial misstatement. Overall, I provide new insights into how corruption affects the financial reporting environment, and more generally, how corporate misconduct spreads.

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A Variable list and descriptions

Variable Label	Description
Panel A: Dependent variables	
Misstatement	Indicator equal 1 if firm i misstates its financial statements during fiscal year t, and 0 otherwise. Misstating firms are identified via subsequent restatements using the Non-reliance Restatement Database provided by Audit Analytics.
Misstatement Up	Indicator equal 1 if firm i misstates its financial statements upward during fiscal year t, and 0 otherwise. Misstating firms are identified via subsequent restatements using the Non-reliance Restatement Database provided by Audit Analytics.
Misstatement Down	Indicator equal 1 if firm i misstates its financial statements downward during fiscal year t, and 0 otherwise. Misstating firms are identified via subsequent restatements using the Non-reliance Restatement Database provided by Audit Analytics.
Misstatement Revenue Up	Indicator equal 1 if firm i engages in income-increasing revenue misstatement activities during fiscal year t, and 0 otherwise. Misstating firms are identified via subsequent restatements using the Non-reliance Restatement Database provided by Audit Analytics.
Misstatement Revenue Down	Indicator equal 1 if firm i engages in income-decreasing revenue misstatement activities during fiscal year t, and 0 otherwise. Misstating firms are identified via subsequent restatements using the Non-reliance Restatement Database provided by Audit Analytics.
Panel B: Independent test variables	
Bribe Exposure	Indicator equal 1 if firm i is exposed to at least one j bribing industry competitor in fiscal year t, and 0 otherwise. Non-bribing firms exposed to bribing rivals (i.e., non-bribing peers) are those that have the same year-industry group as bribing firms, with industry determined at the three-digit SIC level. Non-exposed firm-year observations include firm-years with the same two-digit SIC as bribing firms, but a different three-digit SIC code, and firms with the same three-digit SIC code as bribing firms in non-bribing years.

(Continued)

Variable Label	Description
Rival Bribes	Proxy for the magnitude of loss of income that non-bribing peer firms are likely to experience due to their rivals' bribery, obtained in two steps. First, I compute the natural logarithm of the bribes paid by bribing firms in each bribing year and industry (three-digit SIC). Second, I assign this variable to non-bribing firms exposed to bribing rivals based on their year and industry group (three-digit SIC).
Rival Product Similarity	Proxy for the product market similarity between bribing firms and non-bribing peers obtained from Hoberg and Phillips (2016), who construct industry classifications based on firm pairwise similarity scores from text analysis of firms' 10-K product descriptions. Based on Hoberg and Phillips (2016), I construct an indicator equal 1 if firm i has at least one bribing competitor j in fiscal year t with pairwise similarity score above the median, and 0 otherwise.
Common Analyst	Indicator equal 1 if firm i has at least one analyst in common with its bribing industry competitors (same three-digit SIC) in fiscal year t, and 0 otherwise.
Percentage Common Analyst	Percentage of common analysts between firm i and its bribing industry competitors (same three-digit SIC) in fiscal year t.
Panel C: Other independent variables	
Age	Natural logarithm of one plus the age of firm i in fiscal year t, measured as the number of years since the firm is included in Compustat.
Buy-and-Hold-Return	Contemporaneous 12-month buy-and-hold return of firm i in fiscal year t.
Big4	Indicator equal 1 if firm i is audited by a Big4 audit firm in fiscal year t, and 0 otherwise.
Capex	Ratio of capital expenditure to lagged property, plant and equipment of firm i in fiscal year t.
CFO	Ratio of cash flow from operations to lagged total assets of firm i in fiscal year t.
Earnings Volatility	Earnings volatility of firm i in fiscal year t, measured as the standard deviation of earnings per share for the 12 quarters ending with the year of observation.
Growth	Annual percentage change in sales for firm i in fiscal year t.
Institutional Investor	Percentage of common shares owned by institutional investors in firm i in fiscal year t.

(Continued)

Variable Label	Description
Leverage	Ratio of short-term and long-term debt to lagged total assets of firm i in fiscal year t.
Loss	Indicator equal 1 if firm i reports a loss in fiscal year t, and 0 otherwise.
Market-to-Book	Ratio of market value of assets to book value of assets of firm i in fiscal year t.
Normalized HHI	Normalized Herfindahl-Hirschman Index, defined as, $$\textit{Normalized HHI} = (n \cdot H - 1)/(n - 1) \quad (5)$$ where H is the sum of the squared market shares (based on sales) of all firms available in Compustat in each year and industry, and n is the total number of firms in each year and industry (at the three-digit SIC level). This variable is a proxy for industry concentration, hence competition.
ROA	Ratio of operating income before depreciation to lagged total assets of firm i in fiscal year t.
Size	Natural logarithm of lagged total assets of firm i in fiscal year t.

B Tables

Table 1. FCPA enforcement actions over time

The table reports the distribution of enforcement actions over time. The sample includes all enforcement actions released by the U.S. DOJ and the SEC from April 1978 to December 2019 and referred to firms with identifier (*gvkey*) available in Compustat. The 451 enforcement actions refer to 203 unique firms, leading to an average of 2.2 enforcement actions per firm.

Year of enforcement	Observations	Frequency
1978	2	0.44%
1986	1	0.22%
1988	1	0.22%
1989	4	0.89%
1990	3	0.67%
1991	1	0.22%
1992	1	0.22%
1993	1	0.22%
1994	2	0.44%
1996	1	0.22%
1997	2	0.44%
1999	2	0.44%
2000	2	0.44%
2001	7	1.55%
2002	7	1.55%
2003	2	0.44%
2004	9	2.00%
2005	12	2.66%
2006	14	3.10%
2007	37	8.20%
2008	31	6.87%
2009	22	4.88%
2010	51	11.31%
2011	30	6.65%
2012	28	6.21%
2013	18	3.99%
2014	20	4.43%
2015	12	2.66%
2016	47	10.42%
2017	24	5.32%
2018	25	5.54%
2019	32	7.10%
Total	*451*	*100.00%*

Table 2. Countries where bribes are paid

The Table reports the countries where bribes are paid, in alphabetical order. Because each enforcement action generally refers to more than one country where the illicit payments have taken place, the total number of observations is higher than that reported in Table 1.

Country of bribery	Observations	Frequency	Country of bribery	Observations	Frequency
Albania	1	0.20%	Laos	1	0.20%
Algeria	1	0.20%	Latvia	1	0.20%
Angola	12	2.35%	Lebanon	1	0.20%
Argentina	13	2.55%	Liberia	1	0.20%
Azerbaijan	4	0.78%	Libya	6	1.18%
Bahamas	1	0.20%	Lithuania	1	0.20%
Bahrain	2	0.39%	Luxembourg	1	0.20%
Bangladesh	6	1.18%	Macedonia	1	0.20%
Belgium	1	0.20%	Madagascar	1	0.20%
Benin	2	0.39%	Malawi	1	0.20%
Bolivia	1	0.20%	Malaysia	3	0.59%
Bosnia-Herzegovina	1	0.20%	Mali	2	0.39%
Brazil	21	4.12%	Mauritania	3	0.59%
Bulgaria	2	0.39%	Mexico	17	3.33%
Burkina Faso	2	0.39%	Mongolia	1	0.20%
Burundi	1	0.20%	Morocco	2	0.39%
Cameroon	1	0.20%	Mozambique	3	0.59%
Canada	1	0.20%	Myanmar	1	0.20%
Chad	1	0.20%	Nepal	1	0.20%
Chile	1	0.20%	Netherlands	1	0.20%
China	62	12.16%	Nicaragua	2	0.39%
Colombia	5	0.98%	Niger	4	0.78%
Costa Rica	3	0.59%	Nigeria	24	4.71%
Croatia	3	0.59%	North Korea	2	0.39%
Cuba	1	0.20%	Oman	2	0.39%
Czech Republic	2	0.39%	Pakistan	4	0.78%
Democratic Republic of the Congo	6	1.18%	Palestinian Territory	1	0.20%
Djibouti	1	0.20%	Panama	3	0.59%
Dominican Republic	2	0.39%	Peru	3	0.59%
Ecuador	4	0.78%	Philippines	4	0.78%
Egypt	8	1.57%	Poland	6	1.18%
Equatorial Guinea	2	0.39%	Qatar	2	0.39%
France	2	0.39%	Romania	4	0.78%
Gabon	5	0.98%	Russia	16	3.14%
Georgia	1	0.20%	Rwanda	1	0.20%
Germany	1	0.20%	Saudi Arabia	15	2.94%
Ghana	4	0.78%	Senegal	3	0.59%
Greece	8	1.57%	Serbia and Montenegro	1	0.20%
Guatemala	1	0.20%	Slovakia	1	0.20%
Guinea	4	0.78%	South Africa	2	0.39%
Haiti	1	0.20%	South Korea	6	1.18%
Honduras	1	0.20%	Spain	2	0.39%
Hungary	3	0.59%	Syria	2	0.39%
India	18	3.53%	Taiwan	4	0.78%
Indonesia	19	3.73%	Tanzania	1	0.20%
Iran	3	0.59%	Thailand	11	2.16%
Iraq	23	4.51%	Turkey	5	0.98%
Israel	3	0.59%	Turkmenistan	2	0.39%
Italy	3	0.59%	Ukraine	3	0.59%
Ivory Coast	2	0.39%	Uganda	1	0.20%
Jamaica	1	0.20%	United Arab Emirates	6	1.18%
Jordan	1	0.20%	Uzbekistan	6	1.18%
Kazakhstan	10	1.96%	Venezuela	8	1.57%
Kenya	2	0.39%	Vietnam	7	1.37%
Kuwait	4	0.78%	Yemen	1	0.20%
Kyrgyzstan	1	0.20%	Zimbabwe	1	0.20%
Total	*295*		*Total*	*215*	

Table 3. Bribing firms and enforcement actions—An overview

The table reports the descriptive statistics of some key variables associated with bribery cases and related enforcement actions. *Bribes Paid* measures the amount of bribes paid by bribing firms to obtain or retain business, in millions USD. *Sanctions* is the amount of penalties charged against bribing firms by the U.S. DOJ and the SEC as part of the case resolution, in millions USD. *Bribing Years* is the average number of bribing years, by enforcement action. *Period Bribery-Enforcement* measures the number of years between the average bribing year and the year of the enforcement action. *Executives Involved* is an indicator equal 1 if the enforcement actions are addressed to executives, and 0 otherwise. *M&A Involved* is an indicator equal 1 if an M&A operation took place during the bribing period, and 0 otherwise. *Compliance Obligation* is an indicator equal 1 if the resolution of the bribery case requires compliance obligations for indicted firms, and 0 otherwise. *DOJ & SEC Involved* is an indicator equal 1 if case resolutions involve both the U.S. Department of Justice and the Securities and Exchange Commission. *Growth Before Bribery* is the annual percentage change in sales in the years before each bribery case. *Growth During Bribery* is the annual percentage change in sales during bribing years. *ROA Before Bribery* is the return on assets in the years before each bribery case. *ROA During Bribery* is the return on assets during bribing years.

	25th	Median	Mean	75th	S.D.
Bribes Paid ($ mln)	0.086	1.440	66.644	13.440	270.339
Sanctions ($ mln)	1.878	13.024	75.558	44.092	176.703
Bribing Years	3.000	5.000	5.688	8.000	4.142
Period Bribery-Enforcement	4.500	6.500	6.533	8.500	2.917
Executives Involved	0.000	0.000	0.276	1.000	0.448
M&A Involved	0.000	0.000	0.207	0.000	0.406
Compliance Obligation	0.000	1.000	0.631	1.000	0.484
DOJ & SEC Involved	0.000	0.000	0.488	1.000	0.501
Growth Before Bribery	-0.046	0.045	0.090	0.153	0.503
Growth During Bribery	-0.012	0.089	0.133	0.196	0.430
ROA Before Bribery	0.073	0.119	0.118	0.180	0.217
ROA During Bribery	0.079	0.124	0.139	0.190	0.117

Table 4. Sample selection

Panel A - Bribing firms	
Public firm-year observations in Compustat with anti-FCPA enforcement actions between 1978 and 2019	1,336
- Firm-year observations with bribe payments outside the time span 2002-2016	(379)
- Firm-year observations with missing data for variable construction	(204)
- Firm-year observations within financial industry	(69)
= *Final sample of bribing firm-year observations (2002-2016)*	*684*
Panel B - Non-bribing firms	
(i.e., remaining listed firms in the U.S. without any enforcement action for FCPA violations over the sample period)	
Public firm-year observations between 2002 and 2016	166,452
- Firm-year observations with two-digit SIC codes other than those of bribing firms	(47,521)
- Firm-year observations with missing data for variable construction	(65,784)
- Firm-year observations within financial industry	(8,433)
= *Final sample of non-bribing firm-year observations (2002-2016)*	*44,714*
Of which	
Firm-year observations with bribe exposure (*Bribe Exposure* = 1)	23,760
Firm-year observations without bribe exposure (*Bribe Exposure* = 0)	20,954

Table 5. Summary statistics

The table reports the descriptive statistics of the variables used to perform the main analyses, by type of firm. The bribing firm-years sample includes firm-year observations associated with bribe payments. The exposed firm-years sample includes non-bribing firm-year observations belonging to industries where at least one competitor has received an enforcement action for bribe payments in violation of the FCPA (*Bribe Exposure* = 1). The non-exposed firm-years sample includes non-bribing firm-year observations belonging to industries where no competitor has received any enforcement action for bribe payments in violation of the FCPA (*Bribe Exposure* = 0). The detailed variable description is provided in Appendix A.

	(1) Bribing firm-years *Obs. 684*			(2) Exposed firm-years *Obs. 23,760*			(3) Non-exposed firm-years *Obs. 20,954*		
	Mean	Median	S.D.	Mean	Median	S.D.	Mean	Median	S.D.
Panel A - Dependent variables									
Misstatement	0.151	0.000	0.358	0.132	0.000	0.339	0.127	0.000	0.333
Misstatement Up	0.127	0.000	0.333	0.113	0.000	0.316	0.105	0.000	0.307
Misstatement Down	0.035	0.000	0.184	0.027	0.000	0.162	0.028	0.000	0.164
Misstatement Revenue Up	0.066	0.000	0.248	0.031	0.000	0.172	0.023	0.000	0.151
Misstatement Revenue Down	0.003	0.000	0.054	0.005	0.000	0.068	0.004	0.000	0.061
Panel B - Independent test variables									
Bribe Exposure	N/A	N/A	N/A	1.000	1.000	0.000	0.000	0.000	0.000
Rival Bribes	N/A	N/A	N/A	2.880	2.231	1.868	N/A	N/A	N/A
Rival Product Similarity	N/A	N/A	N/A	0.207	0.000	0.405	N/A	N/A	N/A
Common Analyst	N/A	N/A	N/A	0.312	0.000	0.463	N/A	N/A	N/A
Percentage Common Analyst	N/A	N/A	N/A	0.099	0.000	0.199	N/A	N/A	N/A
Panel C - Other independent variables									
Manipulation incentives									
Leverage	0.189	0.173	0.140	0.141	0.043	0.203	0.218	0.184	0.217
Loss	0.045	0.000	0.208	0.309	0.000	0.462	0.142	0.000	0.349
Market-to-Book	1.621	1.295	1.177	2.092	1.413	2.871	1.458	1.091	1.419
Manipulation ability									
Big4	0.940	1.000	0.238	0.745	1.000	0.436	0.753	1.000	0.431
Industry structure									
Normalized HHI	0.050	0.038	0.034	0.039	0.032	0.026	0.052	0.041	0.041
Firm characteristics and performance									
Age	3.124	3.091	0.704	2.660	2.639	0.660	2.899	2.890	0.741
Buy-and-Hold Return	0.146	0.106	0.473	0.123	0.012	0.675	0.142	0.071	0.593
Capex	0.244	0.217	0.132	0.301	0.245	0.219	0.219	0.172	0.173
CFO	0.097	0.093	0.085	-0.017	0.068	0.345	0.054	0.077	0.190
Earnings Volatility	0.435	0.318	0.348	0.315	0.190	0.323	0.409	0.266	0.380
Growth	0.122	0.099	0.211	0.118	0.084	0.352	0.083	0.058	0.297
Institutional Investor	0.395	0.345	0.370	0.383	0.310	0.360	0.437	0.440	0.360
ROA	0.133	0.125	0.106	-0.021	0.081	0.424	0.070	0.105	0.246
Size	8.873	8.886	2.022	5.724	5.524	2.175	6.539	6.575	2.092

Table 6. Hypothesis 1—Financial misstatement and bribe exposure

The table reports the results of the logistic regressions investigating the association between financial misstatement and bribery exposure (i.e., the existence of at least one bribing industry rival). The dependent variables are as follows. Column (1) employs *Misstatement*, an indicator equal 1 if firm i engages in financial misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. Column (2) employs *Misstatement Up*, an indicator equal 1 if firm i engages in income-increasing financial misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. Column (3) employs *Misstatement Down*, an indicator equal 1 if firm i engages in income-decreasing financial misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. Column (4) employs *Misstatement Revenue Up*, an indicator equal 1 if firm i engages in income-increasing revenue misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. Column (5) employs *Misstatement Revenue Down*, an indicator equal 1 if firm i engages in income-decreasing revenue misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. The independent test variable is *Bribe Exposure*, an indicator equal 1 if firm i is exposed to at least one j bribing industry competitor in fiscal year t, and 0 otherwise. Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. Z-statistics, in parentheses below coefficients, are based on robust standard errors clustered at firm level. Marginal effects, where reported, are in square brackets below coefficients. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: All manipulations			**Panel B: Revenue manipulations**	
	(1) Misstatement	(2) Misstatement Up	(3) Misstatement Down	(4) Misstatement Revenue Up	(5) Misstatement Revenue Down
Test variable					
Bribe Exposure	**0.141****	**0.196*****	**-0.065**	**0.263***	**-0.007**
	(2.05)	**(2.65)**	**(-0.49)**	**(1.92)**	**(-0.02)**
	[0.015]	**[0.019]**	**[-0.002]**	**[0.007]**	**[-0.000]**
Manipulation incentives					
Leverage	0.681***	0.726***	0.437**	0.369	0.039
	(6.34)	(6.24)	(2.05)	(1.55)	(0.07)
Loss	-0.075	-0.119*	0.125	-0.081	-0.306
	(-1.22)	(-1.81)	(1.06)	(-0.65)	(-0.97)
Market-to-Book	-0.034**	-0.046**	-0.021	-0.119**	-0.039
	(-2.11)	(-2.45)	(-1.13)	(-2.58)	(-0.53)
Manipulation ability					
Big4	-0.135**	-0.123*	-0.151	0.022	-0.349
	(-2.05)	(-1.74)	(-1.15)	(0.17)	(-1.01)
Industry structure					
Normalized HHI	1.867	2.259	1.511	-1.309	-0.114
	(1.32)	(1.32)	(0.47)	(-0.32)	(-0.01)
Firm characteristics and performance					
Age	0.008	0.005	0.085	-0.052	-0.176
	(0.19)	(0.11)	(1.01)	(-0.61)	(-0.85)
Buy-and-Hold Return	-0.059**	-0.068**	-0.049	-0.089	0.153
	(-2.20)	(-2.30)	(-0.99)	(-1.46)	(1.43)
Capex	0.096	0.162	-0.133	0.608***	0.923*
	(0.89)	(1.41)	(-0.59)	(3.09)	(1.78)
CFO	0.351***	0.238*	0.315*	0.038	0.936
	(2.76)	(1.67)	(1.75)	(0.12)	(1.60)
Earnings Volatility	0.370***	0.383***	0.341***	0.415***	-0.122
	(5.58)	(5.36)	(2.66)	(3.17)	(-0.39)
Growth	0.138***	0.165***	0.077	0.245**	0.387*
	(2.66)	(2.87)	(0.76)	(2.34)	(1.69)
Institutional Investor	0.265***	0.329***	-0.017	0.247	0.323
	(3.18)	(3.68)	(-0.10)	(1.38)	(0.83)
ROA	-0.370***	-0.191*	-0.489***	0.077	-0.679***
	(-3.63)	(-1.70)	(-3.88)	(0.27)	(-2.92)
Size	-0.014	-0.017	0.006	0.029	-0.005
	(-0.80)	(-0.90)	(0.19)	(0.80)	(-0.07)
Intercept	-2.080***	-2.566***	-3.764**	-3.429***	-3.564
	(-3.17)	(-3.55)	(-2.28)	(-3.51)	(-1.32)
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Pseudo R2	0.0395	0.0452	0.0443	0.0590	0.0729
Obs.	44,714	44,714	44,714	44,714	44,714

Table 7. Identification strategy—Controlling for firm fixed characteristics

Panel A of Table 7 reports the results of the event study analysis comparing treated and control firms' financial misstatement rates in the five-years prior to the beginning of a bribery case in each industry (two-digit SIC code) vis-à-vis during the first five years in which a bribery project is in place. Treated firms are those with the same three-digit SIC code as bribing firms, whereas control firms share with bribers the same two-digit SIC, but a different three-digit SIC code (as in Beatty et al., 2013). The time variable, specific for each two-digit SIC code, distinguishes between the first five years in which bribing firms make the illicit payments and the five years prior to the bribing period. *Treat Bribing Years* is the interaction term capturing treated firms in bribing years. Multivariate linear regressions include control variables, and firm and year fixed effects. Panel B of Table 7 reports the results of a placebo event study analysis performed over pre-bribing years only. Treated firms are those with the same three-digit SIC code as bribing firms, whereas control firms share with bribers the same two-digit SIC, but a different three-digit SIC code. The time variable, specific for each two-digit SIC code, distinguishes between the two years (*t–2* and *t–1*) right before bribing firms start the illicit payments, and years *t–4* and *t–3* from the first year of bribery (in each two-digit SIC code). *Treat Pre-Bribing Years* is an indicator capturing treated firms in pre-bribing years (*t–2* and *t–1* vis-à-vis *t–4* and *t–3*). Multivariate linear regressions include control variables, and firm and year fixed effects. The dependent variable in both panels is *Misstatement Up*, an indicator equal 1 if firm *i* engages in income-increasing financial misstatement activities during fiscal year *t* and is sanctioned by an ex-post restatement, and 0 otherwise. Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. T-statistics, reported in parentheses below coefficients, are based on robust standard errors clustered at industry (two-digit SIC) level. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: Event study		**Panel B: Placebo event study**	
	(1)	(2)	(3)	(4)
	Misstatement Up	Misstatement Up	Misstatement Up	Misstatement Up
Treat Bribing Years	**0.031****	**0.036****		
	(2.69)	**(2.21)**		
Treat Pre-Bribing Years			**-0.005**	**-0.015**
			(-0.42)	**(-0.48)**
Intercept	0.067***	-0.305**	0.074***	-0.015
	(26.05)	(-3.48)	(18.94)	(-0.48)
Other Controls	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R2	0.3215	0.3305	0.4397	0.4542
Obs.	5,696	3,341	3,735	1,988

Table 8. Hypothesis 2—Financial misstatement and competitive disadvantage

The table reports the results of the logistic regressions investigating the association between non-bribing peers' financial misstatement and the likelihood of them being affected by rivals' corruption. The analysis is performed on exposed firms only and the dependent variables are as follows. Columns (1) and (2) employ *Misstatement Up*, an indicator equal 1 if firm i engages in income-increasing financial misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. Columns (3) and (4) employ *Misstatement Revenue Up*, an indicator equal 1 if firm i engages in income-increasing revenue misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. The independent test variables are as follows. Columns (1) and (3) employ *Rival Bribes*, which is obtained in two steps. First, I compute the natural logarithm of the bribes paid by bribing firms in each bribing year and industry (three-digit SIC). Second, I assign this variable to non-bribing firms exposed to bribing rivals based on their year and industry group (three-digit SIC). Columns (2) and (4) employ *Rival Product Similarity*, which is an indicator equal 1 if firm i in fiscal year t has at least one bribing competitor j with pairwise similarity score above the median, and 0 otherwise. Similarity scores are obtained from Hoberg and Phillips (2016). Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. Z-statistics, in parentheses below coefficients, are based on robust standard errors clustered at firm level. Marginal effects, where reported, are in square brackets below coefficients. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: All manipulations		**Panel B: Revenue manipulations**	
	(1) Misstatement Up	(2) Misstatement Up	(3) Misstatement Revenue Up	(4) Misstatement Revenue Up
Test variable				
Rival Bribes	**0.495****		**0.781****	
	(2.27)		**(2.09)**	
	[0.048]		**[0.025]**	
Rival Product Similarity		**0.210*****		**0.218**
		(2.70)		**(1.62)**
		[0.020]		**[0.007]**
Manipulation incentives				
Leverage	0.761***	0.663***	0.558*	0.502*
	(4.49)	(4.12)	(1.75)	(1.65)
Loss	-0.149*	-0.123	-0.107	-0.088
	(-1.71)	(-1.53)	(-0.69)	(-0.59)
Market-to-Book	-0.041*	-0.032	-0.081	-0.076
	(-1.71)	(-1.57)	(-1.57)	(-1.56)
Manipulation ability				
Big4	-0.153	-0.185**	0.055	0.049
	(-1.60)	(-2.10)	(0.33)	(0.30)
Industry structure				
Normalized HHI	9.062	9.430*	11.758	13.880
	(1.61)	(1.77)	(0.97)	(1.18)
Firm characteristics and performance				
Age	-0.011	0.023	0.021	0.068
	(-0.17)	(0.38)	(0.18)	(0.61)
Buy-and-Hold Return	-0.036	-0.044	-0.033	-0.035
	(-0.91)	(-1.21)	(-0.44)	(-0.49)
Capex	0.159	0.154	0.630**	0.612**
	(1.05)	(1.09)	(2.57)	(2.57)
CFO	0.618**	0.533***	0.604	0.535
	(2.54)	(2.63)	(1.34)	(1.26)
Earnings Volatility	0.375***	0.390***	0.386**	0.417**
	(3.48)	(3.92)	(2.05)	(2.38)
Growth	0.142*	0.157**	0.232*	0.192
	(1.82)	(2.18)	(1.81)	(1.54)
Institutional Investor	0.174	0.207*	0.176	0.170
	(1.37)	(1.74)	(0.73)	(0.73)
ROA	-0.327	-0.314**	-0.247	-0.156
	(-1.59)	(-2.01)	(-0.68)	(-0.44)
Size	0.005	0.004	0.044	0.029
	(0.19)	(0.14)	(0.94)	(0.66)
Intercept	-4.145***	-3.996***	-5.036**	-6.381***
	(-2.94)	(-2.89)	(-1.98)	(-2.65)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Pseudo R2	0.0430	0.0436	0.0490	0.0504
Obs.	23,760	23,760	23,760	23,760

Table 9. Hypothesis 3—Financial misstatement and peer performance pressure

The table reports the results of the logistic regressions investigating a possible mechanism through which spillover effects of corruption on peers' financial misstatement occur. The analysis is performed on exposed firms only and the dependent variables are as follows. Columns (1) and (2) employ *Misstatement Up*, an indicator equal 1 if firm i engages in income-increasing financial misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. Columns (3) and (4) employ *Misstatement Revenue Up*, an indicator equal 1 if firm i engages in income-increasing revenue misstatement activities during fiscal year t and is sanctioned by an ex-post restatement, and 0 otherwise. The independent test variables are as follows. Columns (1) and (3) employ *Common Analyst*, an indicator equal 1 if firm i has at least one financial analyst in common with its bribing industry competitors (same three-digit SIC) in fiscal year t, and 0 otherwise. Columns (2) and (4) employ *Percentage Common Analyst*, which measures the percentage of common analysts between firm i and its bribing industry competitors (same three-digit SIC) in fiscal year t. Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. Z-statistics, in parentheses below coefficients, are based on robust standard errors clustered at firm level. Marginal effects, where reported, are in square brackets below coefficients. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: All manipulations		**Panel B: Revenue manipulations**	
	(1) Misstatement Up	(2) Misstatement Up	(3) Misstatement Revenue Up	(4) Misstatement Revenue Up
Test variable				
Common Analyst	**0.166****		**0.183**	
	(2.06)		**(1.38)**	
	[0.016]		**[0.006]**	
Percentage Common Analyst		**0.307***		**0.946*****
		(1.72)		**(3.53)**
		[0.030]		**[0.029]**
Manipulation incentives				
Leverage	0.673***	0.672***	0.519*	0.529*
	(4.16)	(4.16)	(1.70)	(1.74)
Loss	-0.105	-0.104	-0.069	-0.068
	(-1.31)	(-1.30)	(-0.47)	(-0.47)
Market-to-Book	-0.035*	-0.033	-0.080	-0.080
	(-1.68)	(-1.61)	(-1.64)	(-1.63)
Manipulation ability				
Big4	-0.181**	-0.178**	0.053	0.055
	(-2.06)	(-2.02)	(0.33)	(0.34)
Industry structure				
Normalized HHI	9.084*	8.894*	13.459	13.273
	(1.71)	(1.66)	(1.15)	(1.08)
Firm characteristics and performance				
Age	0.024	0.021	0.069	0.073
	(0.39)	(0.34)	(0.62)	(0.66)
Buy-and-Hold Return	-0.041	-0.044	-0.030	-0.033
	(-1.10)	(-1.18)	(-0.43)	(-0.47)
Capex	0.160	0.169	0.618***	0.631***
	(1.13)	(1.20)	(2.58)	(2.62)
CFO	0.529***	0.538***	0.531	0.558
	(2.60)	(2.66)	(1.26)	(1.32)
Earnings Volatility	0.397***	0.392***	0.426**	0.431**
	(3.99)	(3.93)	(2.42)	(2.46)
Growth	0.159**	0.159**	0.195	0.203
	(2.21)	(2.21)	(1.56)	(1.62)
Institutional Investor	0.201*	0.221*	0.160	0.161
	(1.68)	(1.86)	(0.70)	(0.70)
ROA	-0.315**	-0.324**	-0.161	-0.194
	(-1.99)	(-2.07)	(-0.46)	(-0.56)
Size	-0.007	0.000	0.017	0.006
	(-0.27)	(0.00)	(0.36)	(0.13)
Intercept	-3.910***	-3.900***	-6.208***	-6.136**
	(-2.82)	(-2.81)	(-2.59)	(-2.45)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Pseudo R2	0.0433	0.0431	0.0502	0.0532
Obs.	23,760	23,760	23,760	23,760

Table 10. Alternative explanation—Mimicking bribing firms' financial misstatement

The table reports the results of the tests of H1, H2, and H3 controlling for bribers' financial misstatement (*Misstatement Bribers*). *Misstatement Bribers* is the average (by three-digit SIC) financial misstatement rate of bribing firms in bribing years. This variable is assigned to exposed firm-years based on year and industry, whereas it is set equal to 0 for all non-exposed firm-years. The dependent variables are as follows. *Misstatement* (*Up* or *Down*) is an indicator equal 1 if firm i engages in financial (upward or downward) misstatements during fiscal year t and is sanctioned by ex-post restatements, and 0 otherwise. The independent test variable for H1 in Panel A is *Bribe Exposure*, an indicator equal 1 if firm i is exposed to at least one j bribing industry competitor in fiscal year t, and 0 otherwise. The independent test variables for H2 in Panel B are as follows. Column (1) employs *Rival Bribes*, which is obtained in two steps. First, I compute the natural logarithm of the bribes paid by bribing firms in each bribing year and industry. Second, I assign this variable to non-bribing firms exposed to bribing rivals based on their year and industry group. Column (2) employs *Rival Product Similarity*, which is an indicator equal 1 if firm i in fiscal year t has at least one bribing competitor j with pairwise similarity score above the median, and 0 otherwise. Similarity scores are obtained from Hoberg and Phillips (2016). The independent test variables for H3 in Panel C are as follows. Column (1) employs *Common Analyst*, an indicator equal 1 if firm i has at least one financial analyst in common with its bribing industry competitors in fiscal year t, and 0 otherwise. Column (2) employs *Percentage Common Analyst*, which measures the percentage of common analysts between firm i and its bribing industry competitors in fiscal year t. Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. Z-statistics, in parentheses below coefficients, are based on robust standard errors clustered at firm level. Marginal effects, where reported, are in square brackets below coefficients. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: H1—Bribe exposure		
	(1)	(2)	(3)
	Misstatement	Misstatement Up	Misstatement Down
Bribe Exposure	**0.141****	**0.198*****	**-0.056**
	(2.05)	**(2.67)**	**(-0.43)**
	[0.015]	**[0.019]**	**[0.002]**
Misstatement Bribers	0.002	0.099	-0.250
	(0.02)	(1.01)	(-0.73)
Other controls and intercept	Yes	Yes	Yes
Industry & Year FE	Yes	Yes	Yes
Pseudo R2	0.0395	0.0452	0.0444
Obs.	44,714	44,714	44,714

	Panel B: H2—Competitive disadvantage	
	(1)	(2)
	Misstatement Up	Misstatement Up
Rival Bribes	**0.497****	
	(2.28)	
	[0.048]	
Rival Product Similarity		**0.211*****
		(2.71)
		[0.021]
Misstatement Bribers	0.172	0.177
	(1.31)	(1.34)
Other controls and intercept	Yes	Yes
Industry & Year FE	Yes	Yes
Pseudo R2	0.0431	0.0438
Obs.	23,760	23,760

	Panel C: H3—Peer performance pressure	
	(1)	(2)
	Misstatement Up	Misstatement Up
Common Analyst	**0.167****	
	(2.07)	
	[0.016]	
Percentage Common Analyst		**0.306***
		(1.72)
		[0.030]
Misstatement Bribers	0.176	0.172
	(1.33)	(1.30)
Other controls and intercept	Yes	Yes
Industry & Year FE	Yes	Yes
Pseudo R2	0.0435	0.0433
Obs.	23,760	23,760

Table 11. Alternative explanation—Contagion in bribing behavior

The table reports the results of the tests of H1, H2, and H3 restricting the sample to firms doing business in non-corrupt countries. Corrupt countries are those ranked below the bottom quartile of the Corruption Perceptions Index (CPI) distribution in each year. This restriction aims to mitigate the confounding effects of potential contagion in bribery. The dependent variables are as follows. *Misstatement* (*Up* or *Down*) is an indicator equal 1 if firm i engages in financial (upward or downward) misstatements during fiscal year t and is sanctioned by ex-post restatements, and 0 otherwise. The independent test variable for H1 in Panel A is *Bribe Exposure*, an indicator equal 1 if firm i is exposed to at least one j bribing industry competitor in fiscal year t, and 0 otherwise. The independent test variables for H2 in Panel B are as follows. Column (1) employs *Rival Bribes*, which is obtained in two steps. First, I compute the natural logarithm of the bribes paid by bribing firms in each bribing year and industry. Second, I assign this variable to non-bribing firms exposed to bribing rivals based on their year and industry group. Column (2) employs *Rival Product Similarity*, which is an indicator equal 1 if firm i in fiscal year t has at least one bribing competitor j with pairwise similarity score above the median, and 0 otherwise. Similarity scores are obtained from Hoberg and Phillips (2016). The independent test variables for H3 in Panel C are as follows. Column (1) employs *Common Analyst*, an indicator equal 1 if firm i has at least one financial analyst in common with its bribing industry competitors in fiscal year t, and 0 otherwise. Column (2) employs *Percentage Common Analyst*, which measures the percentage of common analysts between firm i and its bribing industry competitors in fiscal year t. Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. Z-statistics, in parentheses below coefficients, are based on robust standard errors clustered at firm level. Marginal effects, where reported, are in square brackets below coefficients. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: H1—Bribe exposure		
	(1) Misstatement	(2) Misstatement Up	(3) Misstatement Down
Bribe Exposure	**0.180** **(2.35)** **[0.020]**	**0.225***** **(2.72)** **[0.022]**	**-0.012** **(-0.08)** **[-0.000]**
Other controls and intercept	Yes	Yes	Yes
Industry & Year FE	Yes	Yes	Yes
Pseudo R2	0.0420	0.0480	0.0489
Obs.	36,062	36,062	36,062

	Panel B: H2—Competitive disadvantage	
	(1) Misstatement Up	(2) Misstatement Up
Rival Bribes	**0.542** **(2.28)** **[0.055]**	
Rival Product Similarity		**0.220***** **(2.59)** **[0.022]**
Other controls and intercept	Yes	Yes
Industry & Year FE	Yes	Yes
Pseudo R2	0.0433	0.0432
Obs.	19,115	19,115

	Panel C: H3—Peer performance pressure	
	(1) Misstatement Up	(2) Misstatement Up
Common Analyst	**0.179** **(2.00)** **[0.018]**	
Percentage Common Analyst		**0.285** **(1.47)** **[0.029]**
Other controls and intercept	Yes	Yes
Industry & Year FE	Yes	Yes
Pseudo R2	0.0429	0.0426
Obs.	19,115	19,115

Table 12. Alternative explanation—Social factors affecting financial misstatement

The table reports the results of the tests of H1, H2 and H3 controlling for social and cultural factors affecting firms' attitude toward financial misconduct (Parsons et al., 2018). Specifically, all regressions include state fixed effects. The dependent variables are as follows. *Misstatement* (*Up* or *Down*) is an indicator equal 1 if firm i engages in financial (upward or downward) misstatements during fiscal year t and is sanctioned by ex-post restatements, and 0 otherwise. The independent test variable for H1 in Panel A is *Bribe Exposure*, an indicator equal 1 if firm i is exposed to at least one j bribing industry competitor in fiscal year t, and 0 otherwise. The independent test variables for H2 in Panel B are as follows. Column (1) employs *Rival Bribes*, which is obtained in two steps. First, I compute the natural logarithm of the bribes paid by bribing firms in each bribing year and industry. Second, I assign this variable to non-bribing firms exposed to bribing rivals based on their year and industry group. Column (2) employs *Rival Product Similarity*, which is an indicator equal 1 if firm i in fiscal year t has at least one bribing competitor j with pairwise similarity score above the median, and 0 otherwise. Similarity scores are obtained from Hoberg and Phillips (2016). The independent test variables for H3 in Panel C are as follows. Column (1) employs *Common Analyst*, an indicator equal 1 if firm i has at least one financial analyst in common with its bribing industry competitors in fiscal year t, and 0 otherwise. Column (2) employs *Percentage Common Analyst*, which measures the percentage of common analysts between firm i and its bribing industry competitors in fiscal year t. Control variables are defined in Appendix A. Continuous variables are winsorized at the 1% level. Z-statistics, in parentheses below coefficients, are based on robust standard errors clustered at firm level. Marginal effects, where reported, are in square brackets below coefficients. *, **, *** indicate significance level at 10%, 5%, and 1%, respectively.

	Panel A: H1—Bribe exposure		
	(1) Misstatement	(2) Misstatement Up	(3) Misstatement Down
Bribe Exposure	**0.137***	**0.196****	**-0.065**
	(1.90)	**(2.54)**	**(-0.46)**
	[0.016]	**[0.019]**	**[-0.002]**
Other controls and intercept	Yes	Yes	Yes
Industry, State & Year FE	Yes	Yes	Yes
Pseudo R2	0.0494	0.0564	0.0608
Obs.	44,714	44,714	44,714

	Panel B: H2—Competitive disadvantage	
	(1) Misstatement Up	(2) Misstatement Up
Rival Bribes	**0.498****	
	(2.17)	
	[0.050]	
Rival Product Similarity		**0.086**
		(1.08)
		[0.009]
Other controls and intercept	Yes	Yes
Industry, State & Year FE	Yes	Yes
Pseudo R2	0.0602	0.0589
Obs.	23,760	23,760

	Panel C: H3—Peer performance pressure	
	(1) Misstatement Up	(2) Misstatement Up
Common Analyst	**0.077**	
	(0.89)	
	[0.008]	
Percentage Common Analyst		**0.151**
		(0.75)
		[0.015]
Other controls and intercept	Yes	Yes
Industry, State & Year FE	Yes	Yes
Pseudo R2	0.0589	0.0589
Obs.	23,760	23,760