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In the Aftermath of Foreign Bribery:

The Ripple Effects of Anti-Corruption Enforcement on U.S. Multinational Firms

By

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Doctor of Philosophy

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Abstract

In the Aftermath of Foreign Bribery:

The Ripple Effects of Anti-Corruption Enforcement on U.S. Multinational Firms

By Weishi Jia

Corporate corruption has long been recognized as a global issue that victimizes honest businesses and impedes long-term social and economic development. The U.S. Foreign Corrupt Practices Act (FCPA) prohibits firms from offering bribes to foreign officials to obtain or retain business. Recent years have witnessed a significant increase in the intensity of FCPA enforcement, which raises concerns that FCPA scrutiny is imposing large costs on U.S. firms that operate globally. This paper studies the ripple effects of FCPA enforcement and provides empirical evidence on how it affects U.S. multinational firms. In particular, the paper focuses on (1) the effects on FCPA-targeted firms that go beyond settlement amounts, and (2) the effects on U.S. multinational firms in general that go beyond FCPA-targeted firms. For FCPA-targeted firms, I find that both the stock market and financial analysts react negatively to FCPA enforcement announcements, consistent with an anticipated increase in compliance costs and potential loss of foreign sales. Targeted firms also pay higher audit and non-audit fees after being involved in FCPA cases, reflecting increased audit risks and audit effort and a greater need for advisory services provided by accounting firms. For U.S. multinational firms in general, I find that FCPA enforcement has a strong deterrent effect on their investment in foreign markets, consistent with these firms taking FCPA risk into account when making foreign investment decisions. Overall, these findings suggest that FCPA enforcement creates a ripple effect that extends to various aspects of targeted firms and non-targeted firms. This ripple effect of anti-corruption enforcement on multinational firms warrants attention from policymakers, law enforcement agencies, and corporate executives.

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In the Aftermath of Foreign Bribery:

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I. INTRODUCTION

Corporate bribery is bad business. In our free market system it is basic that the sale of products should take place on the basis of price, quality, and service. Corporate bribery is fundamentally destructive of this basic tenet. Corporate bribery of foreign officials takes place primarily to assist corporations in gaining business. Thus 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.

—United States Senate, 1977

Both academics and policymakers have long recognized the importance of tackling corporate corruption. Enacted in 1977, the U.S. Foreign Corrupt Practices Act (FCPA) prohibits firms from offering bribes to foreign officials to obtain or retain business. Although the FCPA is aimed at curbing corruption and improving social efficiency, critics argue that broad interpretation and vigorous enforcement of the act in recent years are imposing large costs on firms with international operations and creating disincentives for foreign investment. Current discussions on the costs of FCPA enforcement lack empirical evidence and focus narrowly on settlement amounts for targeted firms in actual FCPA cases. In this study, I examine multiple dimensions on which FCPA scrutiny may affect U.S. multinational firms. Specifically, I study two sets of ripple effects of FCPA enforcement: (1) the effects on targeted firms that go beyond

settlement amounts, and (2) the effects on U.S. multinational firms in general that go beyond FCPA-targeted firms (see Figure 1).[1]

The FCPA includes two sets of provisions and covers three types of entities. The anti-bribery provisions prohibit bribery payments made to foreign officials to gain unfair business advantages, and the internal control provisions require companies to maintain effective internal control systems and accurate records of transactions. Domestic U.S. firms (both privately owned and publicly traded), foreign firms that are listed on the U.S. capital market, and firms that engage in bribery within U.S. territories are all subject to the FCPA.

The intensity of FCPA enforcement has increased rapidly in recent years. More than 80% of all FCPA cases from 1977 to 2014 occur after 2005, and later cases incurred larger settlement amounts. Headline FCPA enforcement actions include cases against Walmart, the U.S. retail company; Siemens, the German industrial group; Avon Products Inc., the U.S. cosmetics company; and Total S.A, the French oil company. Vigorous enforcement of the FCPA has triggered complaints from U.S. multinational firms that are primarily concerned about the potential costs associated with FCPA scrutiny. Specifically, firms targeted in FCPA enforcement actions face financial exposure on multiple fronts. The most direct costs are settlement amounts, which usually include fines and disgorgements imposed by the enforcement authorities. However, "settlement amounts are often only a minor component of the overall financial consequences that can result from FCPA scrutiny or enforcement in this new era" (Koehler 2014, 291). FCPA enforcement can create a ripple effect that extends to a firm's business operations and capital market reputation. In this paper, I first examine several important effects of FCPA enforcement

[1] A "ripple effect" is defined in the Merriam-Webster Dictionary as "a spreading, pervasive, and usually unintentional effect or influence" (Merriam-Webster 2012). Similarly, in the Cambridge Dictionary, it is defined as "a situation in which one event produces effects which spread and produce further effects" (the Cambridge Dictionary 2013). In the context of this paper, I use ripple effects to describe the far-reaching impacts of FCPA enforcement that extend beyond direct settlement amounts for targeted firms. Another potential way to describe the situation is the iceberg metaphor where the apparent effect is visible on the surface (tip of the iceberg) and the more substantial effects are hidden beneath the surface.

on targeted firms by studying how the stock market, financial analysts, and public accounting firms react to firms' FCPA violations.

I hypothesize that due to anticipation of increased FCPA compliance costs and potential loss of foreign sales, investors and financial analysts should react negatively to firms' FCPA violations. Empirically, I find significantly negative stock market reaction to announcements of FCPA enforcement for targeted firms. Financial analysts also reduce their one-year-ahead earnings per share (EPS) estimates for targeted firms after FCPA announcements. Together, these results support my hypotheses and suggest that investors and analysts generally perceive targeted firms' involvement in an FCPA enforcement action as negative news.

I then investigate how FCPA enforcement affects the fees (audit fees and non-audit fees) that targeted firms pay to public accounting firms. Accounting firms may charge higher audit fees to FCPA-targeted firms because of increased audit risks and audit effort. The internal control provisions of the FCPA explicitly require that public companies maintain effective internal control systems to reduce foreign corruption risk. Therefore, violations of the FCPA signify internal control weaknesses within targeted firms, suggesting higher control risks and audit risks. Moreover, auditors may need to exert greater effort when auditing FCPA-targeted firms because they can obtain information about targeted firms' risk factors from FCPA enforcement and need to perform procedures to address these risks. Consistent with these arguments, I find that FCPA-targeted firms pay higher audit fees in post-FCPA years than in pre-FCPA years (a 13.6% increase) relative to propensity score-matched control firms. Targeted firms may also incur higher non-audit fees after being involved in FCPA cases because of a greater need for services such as FCPA internal investigations and FCPA compliance program design and implementation. Major accounting firms have specialized FCPA teams in their forensics department to assist clients in performing these FCPA-related tasks. Consistent with this observation, I find a significant increase (47.6%) in non-audit fees paid by targeted firms after FCPA enforcement actions relative

to propensity score-matched control firms. Together, these results identify increased audit and non-audit fees paid to accounting firms as nontrivial costs for FCPA-targeted firms.

While FCPA enforcement affects various aspects of targeted firms, its influence may extend beyond these firms. Specifically, FCPA enforcement may deter U.S. multinational firms from investing abroad irrespective of their current involvement in FCPA cases, creating another ripple effect. This deterrent effect may occur because FCPA enforcement shifts the expected costs and benefits associated with foreign investment. FCPA enforcement increases the expected costs of operating in foreign markets because getting caught in an FCPA enforcement action is costly. FCPA-targeted firms not only face fines and disgorgements, but also encounter negative reactions from the stock market, financial analysts, and public accounting firms. Meanwhile, FCPA enforcement may reduce the expected benefits of investing in foreign economies because it limits firms' ability to gain business through bribery. Overall, increased costs and reduced benefits associated with FCPA enforcement should deter U.S. firms from making foreign investment. Alternatively, the FCPA may not discourage foreign investment if it provides firms with a credible excuse to refuse bribery demands from foreign officials. If U.S. firms can reduce bribery expenses and manage to obtain foreign business through comparative advantages such as technological innovations, then FCPA enforcement may not deter foreign investment (Wei 2000; Kaufmann and Wei 1999).

I find strong empirical support for the deterrent effect. At the industry level, industries with FCPA enforcement experience a significant reduction in the growth of U.S. foreign direct investment in the following years. The deterrent effect also occurs at the host country level. I find a significant reduction in the growth of U.S. foreign direct investment in host countries where FCPA violations are targeted. Together, these results suggest that U.S. multinational firms take FCPA risk into account when making foreign investment decisions.

This study contributes to the literature in several ways. First, using the FCPA setting, I document the effects of anti-corruption enforcement on firms with global operations. While the

increasing intensity of FCPA enforcement in recent years has attracted substantial attention from multinational firms and the financial media, academic research into the pattern and consequences of FCPA enforcement remains limited. This paper identifies the FCPA as an important regulation with an ever-increasing impact on multinational firms.

Second, this study documents the ripple effects of FCPA enforcement by identifying several ways in which FCPA enforcement affects targeted firms. Business leaders in the U.S. complain about the FCPA, and their primary concern seems to be the large settlement amounts and high compliance costs. My results show that, besides these direct monetary expenses, targeted firms also face substantial pressure from the stock market, financial analysts, and accounting firms after being involved in FCPA cases. These costs are nontrivial because these institutions foster the growth of public firms. Therefore, my findings highlight the importance of broadening current FCPA conversations and encourage managers of multinational firms to have a more holistic view of the FCPA.

Third, this study shows how FCPA enforcement against targeted firms can spill over to affect other multinational firms that operate in the same industry or host country. While prior legal and economic literature has examined similar issues, the sample periods in these studies generally end before 2000, when enforcement of the FCPA was still quite limited. Existing studies also tend to use 1977, the inception year of the FCPA, as the cutoff point for a before-and-after design and rarely examine actual enforcement data in their analyses (probably because of the low enforcement frequency), making identification of the effects difficult. Using detailed enforcement data from FCPA's initial passage to the current time, my analyses cover the period of heightened enforcement and provide more robust empirical results. In addition, the findings on the deterrent effect of FCPA enforcement on U.S. foreign investment inform policymakers and enforcement agencies that tackling corruption from the supply side can place U.S. firms at a disadvantage when no significant changes on the demand side of the problem are made. This situation suggests that international cooperation in anti-bribery efforts is needed because firms

from countries that lack anti-bribery legislations are more than willing to meet the bribery demands of foreign officials that U.S. firms have to refuse in compliance with the FCPA.[2]

Last, this study broadly relates to the vast literature on globalization. We are living in the new era of globalization that is characterized by increasingly intense social, political, and economic interactions across geographic borders. An important manifestation of globalization is the large flow of capital investment from source countries to foreign markets. However, opportunities and challenges coexist with investing in foreign markets. This paper studies the tradeoff that U.S. multinational firms face when investing abroad, and shows that FCPA enforcement significantly affects this tradeoff. Moreover, reduced U.S. investment in foreign countries as a result of FCPA enforcement may have a negative impact on the economic development and the quality of life in foreign countries where U.S. investment is needed the most.

The rest of the paper is organized as follows. In Section II, I provide background on the FCPA. In Section III, I review prior literature and develop my hypotheses. Section IV describes the data and the sample selection procedure, Section V details the empirical design and results, and Section VI concludes.

II. BACKGROUND ON THE FCPA

FCPA Fundamentals

The U.S. Congress introduced the FCPA in 1977 after massive worldwide corporate corruption by U.S. companies was discovered in the aftermath of the Watergate scandal. The hundreds of companies involved and the millions of bribery payments made to foreign officials shocked the Securities and Exchange Commission (SEC) and the U.S. Department of Justice

[2] The international community is making a joint effort to tackle corruption among foreign government officials. The Organization for Economic Co-operation and Development's (OECD) Anti-Bribery Convention was adopted in 1997, and it requires its 41 signatory countries to commit to anti-bribery legislation and enforcement. However, according to a report by Transparency International, by 2015, only four countries are actively enforcing anti-bribery laws (U.S., U.K., Germany, and Switzerland). Six countries are moderate enforcers (Austria, Australia, Canada, Finland, Italy, and Norway). The remaining countries in the OECD Convention have limited or no enforcement, such as China, Russia, and France.

(DOJ), which eventually prompted Congress to enact formal legislation to halt these practices (SEC and DOJ 2012). Interestingly, Congress's initial decision to move forward with the FCPA was primarily motivated by the political concern that corporate corruption might interfere with U.S. foreign policy and hamper the diplomatic relationships between the U.S. and foreign countries. Restoring "public confidence in the integrity of the marketplace" post-Watergate was another motivation for establishing the FCPA. The potential economic consequences of the FCPA for U.S. businesses, however, were not policymakers' top concern at the inception of the act (Koehler 2014).[3]

The FCPA contains two sets of provisions: (1) the anti-bribery provisions, and (2) the recordkeeping and internal control provisions (also known as the accounting provisions). The anti-bribery provisions prohibit the willful use of payments to foreign government officials for the purpose of obtaining or retaining business (SEC and DOJ 2012). The accounting provisions require public companies "to make and keep books and records that accurately and fairly reflect the transactions of the corporation, and devise and maintain an adequate system of internal accounting controls" (DOJ 2015).[4] The two provisions work in tandem and constitute the major part of the FCPA.[5] The SEC and DOJ are the dual enforcers of the FCPA. Although the SEC targets mostly civil liabilities while the DOJ prosecutes criminal violations, the two enforcement agencies collaborate closely on the investigations and resolutions of many cases.

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[3] The following statement made during a House hearing by Representative Solarz, who took an active role in combating the foreign bribery problem, expressed this exact view: "What is at stake is much more than the individual interests of corporations which are competing for a share of foreign markets. What is in fact at stake is the foreign policy and national interest of the United States. It is clearly in our interest to put a stop to these pernicious practices. […] We simply cannot permit activity which so damages U.S. foreign policy" (Koehler 2014, 7).

[4] Although the accounting provisions were initially written as part of the FCPA, they are not restricted to bribery-related violations. Instead, all public companies are required to conform to the accounting provisions. Targeting similar issues in financial reporting, the 2002 Sarbanes-Oxley (SOX) Act mandated enhancement to corporate compliance and internal controls. Several requirements under the SOX, such as SOX Section 302 "certification rule" and SOX Section 404 "internal control reporting rule" also have FCPA implications (SEC and DOJ 2012).

[5] In most FCPA cases, violations of the anti-bribery provisions and accounting provisions both occur. Therefore, FCPA cases in this paper refer to violations of both provisions by targeted firms and related parties.

Following enactments of amendments in 1998, the anti-bribery provisions of the FCPA broadly cover three types of entities: (1) U.S. businesses and their officers, directors, employees, agents, and shareholders (domestic concerns); (2) U.S. and foreign public companies that are listed on a national securities exchange in the U.S. or that are quoted in the over-the-counter market in the U.S. and required to file periodic reports with the SEC, and their officers, directors, employees, agents, and shareholders (issuers); and (3) certain foreign persons and businesses acting while in the territory of the U.S. (territorial jurisdiction).[6] Unlike the anti-bribery provisions that apply to a wide range of entities, the accounting provisions of the FCPA are only directed at "issuers", which are defined similarly as in the anti-bribery provisions. An issuer is responsible for the financial reporting of its consolidated subsidiaries and affiliates, such as foreign subsidiaries and joint venture partners, because their books and records are a part of their issuer's books (SEC and DOJ 2012). Overall, the FCPA applies to a large number of firms and individuals that are connected to the U.S. capital market.

FCPA Enforcement

Although the FCPA is an important piece of legislation for corporations on paper, actual enforcement of the act during its first quarter century was limited. Intense FCPA enforcement only started around 2005 when more cases were pursued, with greater penalties imposed (*The Economist* 2015; Koehler 2014; McLean 2012). In fact, between 1977 and 2004, fewer than 50 corporate FCPA cases, or equivalently fewer than two cases per year, were pursued. This number is trivial when compared with the eight to ten FCPA enforcement actions per year in the recent ten years.

Several factors have been suggested to explain the upward trend in FCPA enforcement. First, international business prospered in the past decade, leading to more interaction between the U.S. and global markets, which in turn creates opportunities for FCPA violations (Koehler 2014).

[6] Specifically, the anti-bribery provisions of the FCPA have applied to domestic concerns and issuers since 1977. The 1998 amendments expanded the scope of the FCPA to include territorial jurisdiction.

Second, the 1998 amendments expanded the scope of the FCPA in terms of both conduct and jurisdiction; therefore, a larger number of firms and individuals are now subject to the FCPA (New York City Bar Association 2011; SEC and DOJ 2012). Third, enhanced cross-border information-sharing between the U.S. and other nations facilitates FCPA investigations. As a response to the terrorist attack on September 11, 2001, the U.S. instituted the Patriot Act of 2001, which included various provisions and regulatory tools aimed at improving cross-border information sharing and enforcement. Financial regulators around the world also developed stronger cooperation in international fraud investigations (Silvers 2016). Fourth, a potentially more provocative reason for heightened FCPA enforcement is that FCPA cases are lucrative for the U.S. government. In 2010, FCPA enforcement contributed 50% of all fines and penalties obtained by the criminal division of the DOJ, which is charged with enforcing roughly 900 laws. Therefore, U.S. enforcement agencies may be financially motivated to pursue more FCPA cases (Koehler 2014). Other factors, such as the passage of the 2002 Sarbanes-Oxley Act, the invention of new FCPA resolution vehicles, and the increase in the SEC budget may also have contributed to more intense FCPA enforcement. Overall, as Assistant Attorney General Lanny A. Breuer proclaimed in 2010, "We are in a new era of FCPA enforcement; and we are here to stay" (DOJ Justice News 2010).

III. PRIOR LITERATURE AND HYPOTHESES DEVELOPMENT

The Effect of FCPA Enforcement on Targeted Firms

Recent enforcement of the FCPA has attracted substantial attention from business leaders and the media. For example, *The Economist* published two articles discussing firms' experiences in FCPA enforcement actions. In these articles, the FCPA is portrayed as a U.S. law that is "written confusingly, and applied vigorously", and FCPA cases are described as "expensive and time-consuming" (*The Economist* 2011, 2015). Several influential FCPA cases, such as cases against Walmart, Siemens, Avon, and Total, also made headlines of major financial newspapers. To date, most complaints about the FCPA revolve around the large settlement amounts in

enforcement actions. Systematic analyses of FCPA enforcement and how it affects various other aspects of a firm (i.e., the ripple effects) remain limited.

Several prior studies have examined issues related to the FCPA. Smith, Stettler, and Beedles (1984) use a sample of firms voluntarily disclosing foreign bribery payments in the pre-FCPA regime and document a negative stock market reaction to disclosure of foreign sensitive payments. Lyon and Maher (2005) examine a similar sample and find that firms that voluntarily disclose bribery payments pay higher audit fees compared to firms that do not. Serafeim (2013) uses proprietary survey data and shows that detection of bribery hurts employee morale and firm competitiveness. Karpoff, Lee, and Martin (2015) use actual FCPA enforcement data and find that firms engage in foreign bribery to secure projects with positive ex ante net present values (NPVs). The ex post NPVs of these projects after accounting for penalties remain positive for firms without commingled financial fraud charges. In this paper, I collect detailed FCPA enforcement data and identify three important effects of FCPA enforcement for targeted firms: stock market reaction, analyst forecast revision, and changes in professional fees paid to public accounting firms. I choose these three channels because of their importance to firms' future growth. The stock market provides a measure of aggregate investor attitude towards firms' future prospects. Financial analysts are preeminent information intermediaries that collect, synthesize, and distribute information to investors. Public accounting firms provide assurance for the credibility of firms' financial statements and assist firms with advisory services. Therefore, analyses of how FCPA enforcement affects the relationships between targeted firms and these three parties provide a comprehensive evaluation of the costs of foreign bribery for targeted firms.

Firms targeted in FCPA enforcement actions may experience adverse stock market reaction and analyst forecast revisions because investors and analysts anticipate increased FCPA-related costs and potential loss of business in foreign markets in the future (Smith et al. 1984). FCPA-related costs include fines and disgorgements imposed by enforcement agencies and the

professional fees paid for legal services, internal investigations, and design and implementation of FCPA compliance programs. For example, Siemens spent more than $3 billion on FCPA compliance and $800 million on court-mandated penalties for its FCPA violations in 2008. Avon incurred $350 million in legal and compliance fees, which more than doubles the imposed penalties ($135 million), and is "not far short of its 2014 operating profit" (*The Economist* 2015). Therefore, expected costs related to the investigations and resolutions of FCPA cases should induce negative stock market and analyst reactions. Additionally, FCPA investigation and compliance may divert management's time from normal business operations, which can impair operating performance. Investors and analysts may also be concerned about the loss of future business that depends on the firm's ability to make bribes. Overall, I expect negative stock market reactions and downward analyst forecast revisions around dates when FCPA investigations are initially revealed and when FCPA cases are eventually resolved.[7]

H1: Stock market reaction to announcements of FCPA investigations and resolutions for FCPA-targeted firms is negative.

H2: Analysts revise their forecasts downward in response to announcements of FCPA investigations and resolutions for FCPA-targeted firms.

Next, I examine how FCPA enforcement affects fees paid by targeted firms to accounting firms. Specifically, I investigate two types of fees: audit fees and non-audit fees. Audit fees are jointly determined by audit risk, audit effort, and audit efficiency (DeFond and Zhang 2014). Firms may present higher audit risks after being involved in FCPA cases because FCPA violations reveal deficiencies in targeted firms' internal control systems, suggesting increased control risks, which compose a key element of audit risks. Moreover, audits of FCPA-targeted firms may require greater effort because auditors can obtain information about firms' risk factors

[7] An FCPA enforcement action involves a series of events, which usually starts with a trigger event that is followed by informal inquiry, formal investigation, and final resolution (Karpoff et al. 2015). I investigate formal investigation and final resolution in this paper for two reasons. First, they are more likely to contain relevant information regarding the scope and severity of FCPA cases. Second, the dates for these two events are less ambiguous to identify from public sources.

from FCPA investigations and have to perform specific procedures to address these risks. Overall, FCPA cases can increase targeted firms' audit fees by increasing the risk and effort associated with the audits. On the other hand, FCPA cases may decrease targeted firm's audit fees because FCPA resolutions typically mandate procedures aimed at improving corporate FCPA compliance. For example, most FCPA resolutions require that targeted firms retain compliance monitors to oversee their compliance efforts (Warin, Diamant, and Root 2011). If auditors believe these procedures are effective at improving targeted firms' internal control environment, then they may perceive lower audit risks and reduce audit effort for their FCPA clients. In addition, FCPA cases may decrease audit fees of targeted firms because FCPA investigations and resolutions may improve the efficiency of the audits by identifying key risk factors within targeted firms and helping auditors avoid unnecessary procedures for insignificant issues. However, this outcome would happen only if auditors are willing to share the efficiency gains with their clients. Overall, these possibilities lead to the following hypothesis:

H3.1: Audit fees paid by FCPA-targeted firms increase after announcements of FCPA investigations and resolutions.

FCPA enforcement may also affect non-audit fees of targeted firms because FCPA internal investigation and compliance involve complicated procedures that require public accounting firms' expertise. Targeted firms often hire forensic accountants from public accounting firms to conduct third-party investigations to assist enforcement authorities in formal investigations. Accounting firms also help FCPA clients in designing and implementing effective FCPA compliance programs. Therefore, I expect an increase in non-audit fees paid by FCPA-targeted firms after being involved in FCPA cases.

H3.2: Non-audit fees paid by FCPA-targeted firms increase after announcements of FCPA investigations and resolutions.

The Effect of FCPA Enforcement on U.S. Foreign Investment

While FCPA enforcement may affect targeted firms on multiple dimensions, its impact can extend beyond targeted firms. Specifically, FCPA enforcement may spill over to non-targeted U.S. multinational firms by deterring them from making investment in foreign markets. In fact, the FCPA has been the subject of intense debate for inadvertently creating a disincentive for U.S. firms to invest globally (Krever 2007; Graham 1984; Hines 1995; New York City Bar Association 2011). This deterrent effect is perhaps the strongest criticism of the FCPA since its passage.

FCPA enforcement can deter U.S. firms' direct investment in foreign countries for several reasons.[8] First, U.S. firms may reduce foreign investment because of lower expected returns. If FCPA enforcement constrains the ability of U.S. firms to pay bribes and bribery leads to profitable projects, then the enforcement reduces the expected returns of foreign investment because securing projects through bribery becomes more difficult. This situation is especially the case in developing economies where informal relationships forged through bribery are essential for winning public contracts.

Second, U.S. firms may reduce foreign investment because of the potential costs of FCPA scrutiny. To illustrate this point, consider a situation in which a U.S. multinational firm is contemplating an acquisition of a Malaysian manufacturer. Intense FCPA scrutiny over U.S. firms' operations in Malaysia would increase the potential costs of the acquisition because more extensive pre-acquisition FCPA due diligence and post-acquisition FCPA compliance have to be performed (New York City Bar Association 2011). The benefits of the acquisition may decline at the same time because the potential to gain business through bribery is limited. After a cost and

[8] U.S. direct investment in foreign countries, or U.S. foreign direct investment, refers to a controlling ownership (usually greater than 10%) by a U.S. entity in a foreign business enterprise. It typically involves long-term investment in fixed assets, such as the purchase of production facilities, and active engagement in the day-to-day operation of the foreign enterprise. Most corporations make foreign direct investment with the intent of gaining substantial influence or control over the foreign enterprise. Foreign direct investment is often compared with foreign portfolio investment, which is investment through purchase of financial instruments of foreign assets, such as stocks and bonds, usually for short-term speculative profits.

benefit analysis, the U.S. firm in question may choose to forego the acquisition. Therefore, the costs of FCPA scrutiny can deter U.S. firms from making foreign investment.

The deterrent effect of the FCPA seems even more plausible if firms consider the many consequences of being targeted in an actual FCPA enforcement action. Besides monetary penalties imposed by the enforcement authorities, targeted firms may also suffer indirectly through negative stock market reactions, downward analyst forecast revisions, and increases in audit and non-audit fees paid to accounting firms. Overall, getting caught in an FCPA case is bad for business, and U.S. multinational firms may prefer to "stay home" when FCPA scrutiny heightens. This leads to my fourth hypothesis:

H4: FCPA enforcement decreases U.S. foreign direct investment.

Alternatively, the FCPA may encourage foreign investment by providing firms with a legitimate reason for refusing foreign bribery demands (Wei 2000). U.S. executives whose firms operate in high-corruption countries could resist bribery demands from foreign officials by quoting the FCPA. For instance, they could say, "No. I would like to do it, but I can't because it is illegal" (Koehler 2014, 33). Therefore, the FCPA can work as a credible commitment mechanism to reduce harassment from foreign officials (Kaufmann and Wei 1999). Moreover, the FCPA may encourage U.S. firms to gain business by improving their core competitiveness, for example, through better business models and technological innovations. If U.S. firms can reduce bribery expenses and win foreign business by providing higher quality products and services, then the FCPA may not lead to a decrease in foreign investment.

I investigate two levels at which the deterrent effect of FCPA enforcement may occur: industry and host country. Specifically, I expect industries and host countries in which FCPA violations have been discovered to experience significant reductions in U.S. direct investment as a result of heightened FCPA risk. I identify these two channels because FCPA enforcement actions often cluster at industry and host country levels.

In recent years, the SEC and the DOJ have adopted a proactive investigation strategy called "industry sweeps" to uncover potential FCPA violations. This strategy involves "wide-ranging FCPA investigations into multiple companies within a particular industry," and it is based on the belief that one firm's violation "may reflect an industry-wide pattern of wrongdoing" (Moyer 2012; Harmon and Medina 2013, 1). After revelation of one firm's FCPA misconduct, enforcement agencies send out letters of inquiry to companies within the same industry to solicit information and encourage voluntary disclosure. Targets of recent industry sweeps include financial, oil and gas, pharmaceutical, and movie industries. Host countries where FCPA violations occur are another important aspect of FCPA enforcement. Investigations into firms in a host country may extend to other firms operating in the same country. Overall, I summarize the two sub-hypotheses as follows:

H4.1: FCPA enforcement decreases U.S. foreign direct investment at the industry level.

H4.2: FCPA enforcement decreases U.S. foreign direct investment at the host country level.

Given the importance of the 1977 FCPA as the first legislation to tackle international bribery, it is not surprising that the legal and economics literature has examined its consequences for U.S. foreign investment. Peat, Marwick, Mitchell & Co. (1979) conducted a survey study of executives of American multinational firms and reported that 71% of the respondents thought the FCPA would result in significant loss of business by U.S. companies to foreign competitors. Pisano (2014) discusses how the ambiguous nature of the FCPA may discourage charity donations of U.S. companies to foreign countries, citing the U.S. relief effort in the 2010 Haiti earthquake as an example. On the empirical side, Hines (1995) shows that the growth of U.S. foreign direct investment is slower in countries that are more corrupt during 1977-1982, suggesting a deterrent effect. Similarly, Zeume (2014) studies the U.K. counterpart of the FCPA, the 2010 U.K. Bribery Act, and finds that U.K. firms reduce their investment in high-corruption regions after 2010, supporting Hines (1995). In contrast, Wei (2000) finds that although U.S. direct investment abroad is sensitive to host country corruption levels, it is not more sensitive

than investment from other countries that are not subject to the FCPA, which indicates that the effect of the FCPA is minimal. Graham (1984) also finds no evidence that the FCPA leads to reduced market shares for U.S. firms in the global market. Finally, Cuervo-Cazurra (2008) finds that the FCPA reduces U.S. investment in corrupt countries only after the establishment of the Anti-Bribery Convention by the Organization for Economic Cooperation and Development (OECD). Overall, existing literature provides mixed evidence on whether and how the enactment of the FCPA affects the direct investment decisions of U.S. multinational firms.

This paper revisits the deterrent effect of the FCPA with new perspectives. First, many prior studies adopt the research design that compares various measures of U.S. business activities before and after the FCPA using the inception year 1977 as the cutoff point (e.g., Hines 1995; Graham 1984; Wei 2000; Cuervo-Cazurra 2008). Very few papers examine actual FCPA enforcement actions taken by the DOJ and the SEC, which is problematic because the effectiveness of a regulation hinges on high-quality enforcement. “Formal institutions or rules of the game can have one meaning on paper and quite another in practice in the field of corporate governance” (Siegel 2005, 356). In this paper, I collect detailed FCPA enforcement data from official websites of the DOJ and the SEC to construct reliable measures of FCPA enforcement. Second, most prior FCPA studies are conducted within 20 years after the initial inception of the FCPA, when the act was virtually unenforced. The deterrent effect may be trivial in the sample period of these studies because of the low enforcement frequency. My sample covers ongoing FCPA investigations and resolved FCPA cases from 1977 to 2014, therefore, it should be comprehensive enough to detect the deterrent effect. Third, I provide insights into the mechanism of the deterrent effect by identifying two levels on which FCPA can deter U.S. foreign investment: industry and host country. While prior literature focuses primarily on host country-level deterrence, this paper shows that deterrence also occurs at the industry level, which corresponds with the enforcement strategy adopted by the SEC and the DOJ.

IV. DATA, SAMPLE, AND DESCRIPTIVE STATISTICS

Data and Sample

I collect FCPA enforcement data from multiple sources. I start from the official websites of the SEC and the DOJ, where legal documents of resolved cases are posted. There are 366 resolved FCPA enforcement actions, which are related to 150 unique bribery events from January 1978 to April 2015.[9] I then identify an additional 124 ongoing FCPA investigations[10] from the Corporate Investigations List provided by the FCPA Blog.[11] I verify this list with a similar list provided by Sherman & Sterling LLP (2015). I exclude 47 cases with missing identifiers in the COMPUSTAT database. A total of 227 bribery events with available identifiers remain in the sample.

Table 1 summarizes the data selection process and lists the final number of cases included in each test. Variable definitions and data sources are summarized in Appendix A.

Descriptive Statistics

Figure 2 plots the frequency of resolved FCPA cases measured at both the individual case and the bribery event levels by enforcement year. Visually, an upward trend in the number of resolved FCPA cases since the early 2000s is apparent, consistent with heighted FCPA enforcement in recent years. Table 2 describes the distribution of FCPA cases (measured at the bribery event level) on several dimensions. Panel A presents the industry distribution of FCPA cases.[12] Almost half of the cases occur in the manufacturing sector (55.1%), followed by the

[9] 366 is the number of total individual cases, which is not equal to the number of unique bribery events (155) because several individual cases can be related to one unique bribery event. For example, Siemens AG, Siemens Argentina, Siemens Venezuela, and Siemens Bangladesh are all charged by the DOJ with FCPA violations. The SEC also charged Siemens AG and seven of its executives for FCPA civil liabilities. However, these individual cases are all based on the same set of core actions of the Siemens Group.

[10] This number includes 20 investigations that were initiated but later dropped because of insufficient evidence.

[11] The FCPA Blog is an online website that tracks FCPA enforcement actions in real-time. The publisher and editor-in-chief, Richard L. Cassin, worked as a senior partner in a major international law firm. His articles and opinions about FCPA enforcement have been published and cited by major news sources, including the *Wall Street Journal*, the *Financial Times*, the *New York Times*, Fox News, CNN, and others. I retrieved the ongoing investigation list from http://www.fcpablog.com/blog/2015/4/6/the-corporate-investigations-list-april-2015.html in May 2015.

[12] I use the North American Industry Classification System (NAICS) to determine industry classification following the U.S. Bureau of Economic Analysis that produces FDI data.

mining sector (10.6%) and the information sector (8.4%). The number of cases in the manufacturing sector is consistent with the large size of the manufacturing industry and with manufacturing firms' tendency to set up foreign operations. Cases in the mining sector correspond to the intrinsic nature of mining, which entails a greater need for bribes to win government extraction permits. Table 2 Panel B presents the host country distribution of FCPA cases. In total, 85 host countries have been involved, with a higher concentration of FCPA cases in developing economies in Asia, South America, and Africa. Table 2 Panel C presents several key characteristics of resolved FCPA cases. Part A shows that FCPA defendants tend to be large firms, with mean total assets around $47 billon.[13] The mean duration of FCPA violations is approximately five years. An average bribery payment of $27 million is made in return for an average of $35 million in illicit profits. Total penalties are the sum of all monetary penalties including disgorgement, prejudgment interest, and criminal fines. The total penalties average around $53 million.[14] Part B and Part C show that 59% of the cases are prosecuted by both the DOJ and the SEC, and self-reporting and remedial efforts are reported in about 60% of the cases. Part D shows that both corporations and individuals are held accountable for FCPA violations. About three quarters of the cases only involve corporate defendants, and the rest involve both corporations and individuals. Part E shows that in 64% of the cases more than one party is charged.[15] These related parties usually include company executives and foreign subsidiaries. Part F reports that 72% of all cases are against domestic U.S. firms. Finally, Panel D lists the 15 resolved FCPA cases with the largest total penalties. These headline cases received substantial

[13] The mean total assets of FCPA defendants is between the 95th percentile ($12 billion) and 99th percentile ($81 billion) of total assets for all firms in the COMPUSTAT universe from 1980 to 2013.
[14] In untabulated analyses, I compare the average size of bribery payments and total penalties for cases resolved before and after 2005. Two-sample t-test results show that cases after 2005 involve significantly larger bribery payments and total penalties than cases before 2005. I also compute the ratio of total penalties to bribery payments and find that this ratio is significantly larger for cases after 2005 than cases before 2005. These findings suggest that the larger total penalties in more recent cases are due to both the increased size of bribery schemes and harsher punishment for bribery.
[15] If the same entity is charged by both the SEC and the DOJ, I count them as two parties in one bribery event.

attention from the media and investors. Some well-known FCPA-targeted firms are Siemens, Avon, Alstom, Total, and Hewlett-Packard.

V. EMPIRICAL DESIGN AND RESULTS

Results: The Effect of FCPA Enforcement on Targeted Firms

In this section, I report empirical evidence on the ripple effect of FCPA enforcement for targeted firms hypothesized in H1, H2, and H3. Table 3 Panel A presents abnormal stock returns of targeted firms around announcements of FCPA investigations and resolutions. For FCPA investigations, the abnormal returns for the [0, 3] and [0, 5] windows around announcement dates are significantly negative at −1.45% and −1.40%. For FCPA resolutions, although the event day abnormal returns are not significantly different from zero, the run-up period abnormal returns for the [−10, −1], [−8, −1], and [−5, −1] windows are −1.77%, −1.62%, and −1.39%, respectively (all significant at the 5% level).[16] These results suggest that news of the impending resolution of FCPA cases leaks and is viewed unfavorably by investors. Panel B reports the correlation between abnormal stock returns around FCPA resolutions and total penalties imposed on targeted firms.[17] The negative and significant correlation coefficients in Panel B indicate that stock market reacts more negatively to FCPA announcements with larger penalties.[18] Overall, results in Table 3 show that the stock market reacts negatively to announcements of FCPA investigations and resolutions, consistent with H1.

Table 4 presents analyst forecast revisions for targeted firms around announcements of FCPA investigations and resolutions. I construct three revision windows to account for potential

[16] The stock return results are qualitatively similar after excluding 13 resolved FCPA cases and 10 ongoing FCPA cases for which quarterly earnings announcements occur within five days of FCPA announcements.
[17] I scale total penalties by the market value of the firm at the end of the previous fiscal year when calculating correlations.
[18] In untabulated analysis, I compare the magnitude of abnormal stock returns to scaled total penalties. Mean abnormal stock returns for [-10, -1] is -1.77%, and mean total penalties scaled by market value is 0.72%. The difference between mean absolute value of abnormal stock returns (1.77%) and mean total penalties (0.72%) is marginally significant (p-value=0.08). This indicates that the stock market reaction reflects more than the simple effect of total penalties on targeted firms. It also incorporates anticipation of increased FCPA compliance costs and reduced foreign business in the future.

information leakage. Panel A.1 reports that analysts lower their one-year-ahead EPS estimates after news of FCPA investigations (window 2).[19] Similarly, Panel A.2 reports that analysts also decrease their EPS estimates for firms reaching resolutions for FCPA cases, and the revisions happen before the announcement dates. This is consistent with the stock return tests that indicate information leakage occurs regarding impending resolutions of FCPA cases and such news is generally perceived as unfavorable. Panel B shows that the magnitude of analyst forecast revisions is correlated with total penalties imposed on targeted firms.[20] Larger penalties are associated with larger downward analyst forecast revisions. Overall, Table 4 suggests that analysts react negatively to announcements of FCPA investigations and resolutions, consistent with H2.

Table 5 presents the relationship between FCPA enforcement and fees paid to accounting firms. I employ a difference-in-difference design and construct a control sample of non-FCPA firm-years by performing an exact match on year and industry, and a propensity score match on all control variables included in the second-stage models. Following DeFond and Zhang (2014) and DeFond, Raghunandan, and Subramanyam (2002), I estimate the following audit fee and non-audit fee models in Table 5:

$$LN(FEES) = \alpha + \beta_1 FCPA + \beta_2 POST + \beta_3 FCPA*POST + CONTROLS + YEAR\ FE + INDUSTRY\ FE + \varepsilon. \quad (1)$$

The primary variable of interest is the interaction between *FCPA* and *POST*, which estimates the percentage change in fees paid by targeted firms after FCPA investigations, compared to the control sample. I also include a comprehensive set of control variables used in prior audit fee studies, such as firm size (*LN(AT)*), profitability (*ROA*), leverage (*LEV*), and the use of Big 4 audit firms (*BIG4*). Table 5 Panel A presents the covariate balance after performing

[19] There is also a negative and significant analyst forecast revision prior to the announcements (window 1), which could be due to analysts' superior information compared to average investors since the stock market does not seem to react to FCPA investigations before announcement dates.

[20] I scale total penalties by the total number of shares used for EPS calculation when calculating correlations.

propensity score matching. All control variables except firm size and foreign sales are balanced across the treatment and the control sample. Table 5 Panel B presents results of estimating model (1). The interaction term *FCPA*POST_IN* is positive and significant in all three models, suggesting an increase in audit, non-audit, and total fees for targeted firms after FCPA investigations. On average, targeted firms pay 13.6% (47.6%) more audit (non-audit) fees after being investigated for FCPA violations, compared to matched control firms. Table 5 Panel C uses similar models as Panel B and replaces *POST_IN* with *POST_RE* to assess changes in fees after final resolutions of the cases. Results show that there is a significant increase in audit fees for targeted firms, which suggests that final resolutions of cases provide additional information on the scope and severity of the FCPA violations and lead to increases in perceived audit risks. The change in non-audit fees after FCPA resolution is insignificant, which suggests that most of the FCPA compliance design and implementation costs are incurred after the initiation of investigations, rather than after the final resolutions. Overall, results in Table 5 are consistent with H3 that FCPA enforcement leads to increases in audit and non-audit fees for targeted firms.

Results: The Effect of FCPA Enforcement on U.S. Foreign Investment

In this section, I report results on the effect of FCPA enforcement on U.S. foreign direct investment hypothesized in H4. Following Hines (1995), I use the growth of U.S. foreign direct investment positions (FDI hereafter) as my dependent variable. U.S. outward FDI represents "ownership or control, directly or indirectly, by one U.S. resident, the U.S. parent, of at least 10 percent of a foreign business enterprise, which is called a foreign affiliate" (U.S. Bureau of Economic Analysis 2014, G-12). Changes in FDI primarily reflect changes in equity investment (acquisition and establishment of new foreign affiliates), changes in reinvested earnings (reinvestment of earnings from foreign operations), and changes in intra-company loans (net lending from U.S. parents to foreign affiliates).

Industry Level Test

To test the effect of FCPA enforcement on U.S. FDI at the industry level, I estimate the following model:

$$\Delta LN(FDI_{i,t}) = \alpha + \beta_1 FCPA\_BINARY_{i,t} + INDUSTRY\_CONTROLS + YEAR\ FE + INDUSTRY\ FE + \varepsilon.$$

(Subscript i=industry, t=year) *(2)*

The dependent variable $\Delta LN(FDI_{i,t})$ is the change in the natural log of U.S. FDI positions in industry *i* from year *t-1* to *t*.[21] The test variable is $FCPA\_BINARY_{i,t}$, which equals one if firms in industry *i* were targeted in FCPA cases in year *t-1* or *t*, and zero otherwise. Negative and significant estimates for β_1 imply that FCPA enforcement in a given industry leads to reduced FDI outflow for that industry, supporting the deterrent effect. I also include a set of industry control variables following Yang, Jiang, Kang, and Ke (2007). $IND\_CORRUPTION_i$ is industry-specific Bribe Payers Index and controls for the perceived likelihood of bribery in each sector. $IND\_LN(ASSETS)_{i,t}$ and $IND\_\Delta LN(ASSETS)_{i,t}$ control for industry size and growth. Larger and faster-growing industries should have greater FDI outflows. $IND\_HERFINDAHL_{i,t}$ is the Herfindahl index of industry *i* at year *t* and controls for industry competition.

Table 6 Panel A (B) presents descriptive statistics (a correlation matrix) for the industry level test. Panel B shows a significant negative correlation between $FCPA\_BINARY_{i,t}$ and $\Delta LN(FDI_{i,t})$, providing indirect support for H4.1. Panel C presents results of estimating the industry model in equation (2). The first three models use one-year FDI growth rate as the dependent variable, and the fourth model uses two-year FDI growth rate. Industry and year fixed effects are included in models (3) and (4) to control for industry and time trends. In all four specifications, the FCPA measure is negative and statistically significant, supporting H4.1 that industries with FCPA enforcement significantly reduce FDI in the following one and two years. In terms of economic significance, on average, industries with FCPA cases reduce FDI growth in

[21] Mathematically, it is equal to $\log(FDI_{i,t})$-$\log(FDI_{i,t-1})$, which is equivalent to $\log(FDI_{i,t}/FDI_{i,t-1})$ and approximately equal to the annual growth rate of U.S. FDI in industry *i* from year *t-1* to year *t*.

the following year by about 8% (model 3), which is approximately equal to the average annual growth rate of FDI in all industries (Table 6 Panel A) and is economically significant.

Host Country Level Test

Next, I estimate host country regressions to investigate how host country variation in FCPA enforcement impact U.S. FDI (H4.2). Specifically, I estimate the following model:

$$\Delta LN(FDI_{h,t}) = \alpha + \beta_1 FCPA\_BINARY_{h,t} + HOST\_COUNTRY\_CONTROLS + US\_FDI + YEAR\ FE + HOST\ COUNTRY\ FE + \varepsilon. \quad (3)$$

(Subscript h=host country, t=year)

The dependent variable $\Delta LN(FDI_{h,t})$ is the change in the natural log of U.S. FDI positions in host country *h* from year *t-1* to *t*, which is approximately equal to the growth rate of U.S. FDI positions in host country *h* from year *t-1* to *t*. $FCPA\_BINARY_{h,t}$ is the primary variable of interest. If heightened FCPA enforcement in a host country raises the concern of U.S. multinational firms for their foreign investment, then β_1 should be negative and significant. I also include a set of control variables in the host country model. $HOST\_LN(GDP)_{h,t}$ is annual gross domestic product (GDP) of each host country, and $HOST\_\Delta LN(GDP)_{h,t}$ is the change in annual GDP for each host country. $HOST\_LN(GDP)_{h,t}$ and $HOST\_\Delta LN(GDP)_{h,t}$ control for the economic development of host countries. $HOST\_RULE_{h,t,}$ is the host country's Rule of Law (ROL) index from the Worldwide Governance Indicators (WGI) created by the World Bank (Kaufmann, Kraay, and Mastruzzi 2003). The ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013). Countries with weak institutions, as measured by $HOST\_RULE_{h,t}$, lack proper investor protection and present greater investment risk for U.S. companies. I also include other control variables, such as the official language of the host country ($HOST\_LANGUAGE_h$), the geographic distance between U.S. and each host country ($HOST\_DISTANCE_h$), and changes in annual U.S. GDP ($US\_\Delta LN(GDP)_t$) in equation (3).

Table 7 Panel A (B) presents summary statistics (a correlation matrix) for the host country level tests. The Pearson correlation between $FCPA\_BINARY_{h,t}$ and $\Delta LN(FDI_{h,t})$ is negative and significant, consistent with the deterrent effect. Panel C presents the results of estimating the host country model in equation (3) using one-year FDI growth rate as the dependent variable. Coefficient estimates for $FCPA\_BINARY_{h,t}$ in all four specifications are significantly negative, providing support for the deterrent effect. In terms of economic significance, on average, host countries where FCPA violations are uncovered and penalized experience a 5% decrease in U.S. FDI growth in the following year (model 4), which is economically significant given the average annual growth rate of U.S. FDI in all host countries is around 8%. $HOST\_LN(GDP)_{h,t}$, $HOST\_\Delta LN(GDP)_{h,t}$, and $US\_\Delta LN(GDP)_t$ are all positive and significant, suggesting that the economic situations in the U.S. and the host country affect U.S. FDI. Panel D uses two-year FDI growth rate as the dependent variable and reports qualitatively similar results as Panel C. Overall, Table 7 provides empirical support for H4.2 that FCPA enforcement deters U.S. FDI at the host country level.

My last set of tests is designed to examine the deterrent effect of FCPA enforcement separately for cases against domestic firms and foreign firms. As Table 2 Panel C shows, 28% of all FCPA cases are targeted at foreign issuers. Unlike FCPA enforcement against domestic U.S. firms, cases against foreign firms may not deter U.S. FDI because deterrence occurs if non-targeted firms infer an increase in their own FCPA risks from the enforcement against their peer firms, which shifts the expected costs and benefits of making foreign investment. Cases against foreign firms, however, may be perceived by U.S. firms as less relevant because U.S. firms and foreign firms have different institutional backgrounds and corporate characteristics. Therefore, U.S. firms may not consider foreign firms their close peers even if they operate in the same industry or host country. If so, then FCPA cases against foreign firms may not deter U.S. FDI. Alternatively, if U.S. firms do not consider home country when interpreting enforcement intensity, then FCPA enforcement against foreign firms may still serve as a deterrent. To test the

effect of enforcement against foreign firms on U.S. FDI, I split FCPA cases into two categories (cases against domestic vs. foreign firms) and create an indicator variable for each category. In Table 7 Panel E, $FCPA\_DOMESTIC_{h,t}$ is equal to one if in year *t-1* or *t* there are only FCPA cases against domestic firms in host country *h*, and zero otherwise. Similarly, $FCPA\_FOREIGN_{h,t}$ is equal to one if there are only FCPA cases against foreign firms in host country *h*, and zero otherwise. The coefficient estimates for $FCPA\_DOMESTIC_{h,t}$ are consistently negative and significant, while the coefficient estimates for $FCPA\_FOREIGN_{h,t}$ are not significantly different from zero. Therefore, the deterrent effect of FCPA enforcement on U.S. FDI is mainly driven by cases against domestic U.S. firms.

VI. CONCLUSION AND DISCUSSION

The FCPA is an important piece of legislation in the U.S. that targets corporate corruption involving foreign officials. Although it was enacted in 1977, the FCPA was largely ignored by prosecutors for the next 25 years. Starting in the early 2000s, enforcement of the FCPA increased drastically, with more cases pursued, a broader range of firms targeted, and larger penalties imposed. In this study, I investigate how heightened enforcement of the FCPA affects U.S. multinational firms. Specifically, I examine two sets of ripple effects of FCPA enforcement: (1) the effects on targeted firms that go beyond settlement amounts, and (2) the effects on U.S. multinational firms in general that go beyond FCPA-targeted firms

I document two sets of findings in this paper. First, the effects of FCPA enforcement ripple through various aspects of targeted firms. Specifically, targeted firms experience significantly negative stock market reaction, downward analyst forecast revision, and increases in audit and non-audit fees when they are involved in FCPA cases. Second, the effects of FCPA enforcement ripple across U.S. multinational firms. Specifically, FCPA enforcement deters U.S. multinational firms from making foreign investment. Industries and host countries with more FCPA cases experience significant reductions in the growth of U.S FDI. Together, these findings provide empirical support for the current debate on the costs and benefits of FCPA enforcement,

and they show that FCPA enforcement has repercussions that substantially affect multinational firms.

This study contributes to the literature by documenting the ripple effects of FCPA enforcement on targeted firms. I find that besides settlement amounts imposed by the enforcement authorities, targeted firms also face substantial pressure from the stock market, financial analysts, and accounting firms after being involved in FCPA cases. In other words, FCPA enforcement creates a ripple effect that extend to various aspects of targeted firms. These findings should help "shift the FCPA conversation away from a purely legal issue to its more proper designation as a general business issue" (Koehler 2014, 292).

Another contribution of this study is that it shows how FCPA enforcement against targeted firms can affect non-targeted multinational firms that operate in the same industry or host country. Using FCPA enforcement data that reliably capture the time, industry, and host country variation in FCPA enforcement intensity, this paper addresses the research design and data issues in prior studies and provides more robust results.

The findings in this paper also tangentially relate to criticisms over current FCPA enforcement and highlight a need for more judicial oversight over the enforcement process. In the law literature, the DOJ and the SEC's current approach to FCPA scrutiny is often criticized for its expansive interpretation of the act's scope in terms of conduct and jurisdiction, and for the limited checks on enforcement (New York City Bar Association 2011; Koehler 2014). For example, the FCPA prohibits the willful use of anything of value to "foreign government officials" for the purpose of obtaining or retaining business. Pisano (2014) argues that the enforcement authorities have taken a rather broad view of who is considered a foreign official. Moreover, current FCPA enforcement covers a wide range of bribery events, including situations in which the bribery payers have very limited connections to the U.S. Furthermore, almost all FCPA cases in the past 20 years have been resolved without trials. Non Prosecution Agreements (NPAs) and Deferred Prosecution Agreements (DPAs) are popular resolution vehicles for FCPA cases, and they are

subject to limited judicial oversight. Overall, given the issues with current FCPA enforcement and the significant ripple effects of such enforcement on U.S. multinational firms documented in this paper, clearer definitions, more reasonable interpretations, and greater judicial oversight over FCPA enforcement is called for.

Next, I discuss several caveats for the current version of my paper and plans for future research. First, my analyses on the costs of FCPA enforcement to targeted firms are not intended to be exhaustive. Targeted firms may also be affected in aspects that are not examined in this paper. For example, I do not include legal expenses in my analyses, but they are an important part of the total FCPA compliance costs. I choose stock returns, analyst forecast revisions, and fees paid to public accounting firms because of their significance to targeted firms' capital market reputation and future growth.

Second, since FDI data aggregate the investment positions of all U.S. firms, there is a chance that the observed reduction in U.S. FDI is caused by FCPA-targeted firms only, and non-targeted U.S. firms operating in the same industry or host country may not reduce their FDI. I will collect cross-border merger and acquisition data from SDC Platinum to overcome this challenge. Mergers and acquisitions are an important form of foreign direct investment; therefore, FCPA enforcement should also deter U.S. firms from acquiring foreign firms. Moreover, with merger and acquisition data, I can clearly identify acquiring firms and distinguish between FCPA-targeted firms and non-targeted firms.

Third, while I examine stock market reaction, analyst forecast revisions, and changes in professional fees paid to accounting firms for FCPA-targeted firms only, an industry and/or host country contagion effect for these outcomes may also exist. For example, when one oil and gas firm is undergoing an FCPA investigation, other oil and gas firms that have not been involved in FCPA enforcement may also experience unfavorable reaction from the stock market, financial analysts, and auditors. I will investigate this possibility in the future.

Finally, another potential effect of heightened FCPA enforcement may be delistings and reduced new listings of foreign shares in the U.S. capital market. In recent years, an increasing number of foreign issuers have been involved in FCPA enforcement actions, which heightens the FCPA risk for foreign firms that wish to list in the U.S. capital market. Anecdotal evidence suggests that the delistings of Siemens and Daimler may have been related to their costly FCPA cases. Overall, the deterrent effect of FCPA on foreign listings may be an important consequence of recent FCPA enforcement. I will examine this possibility in future research.

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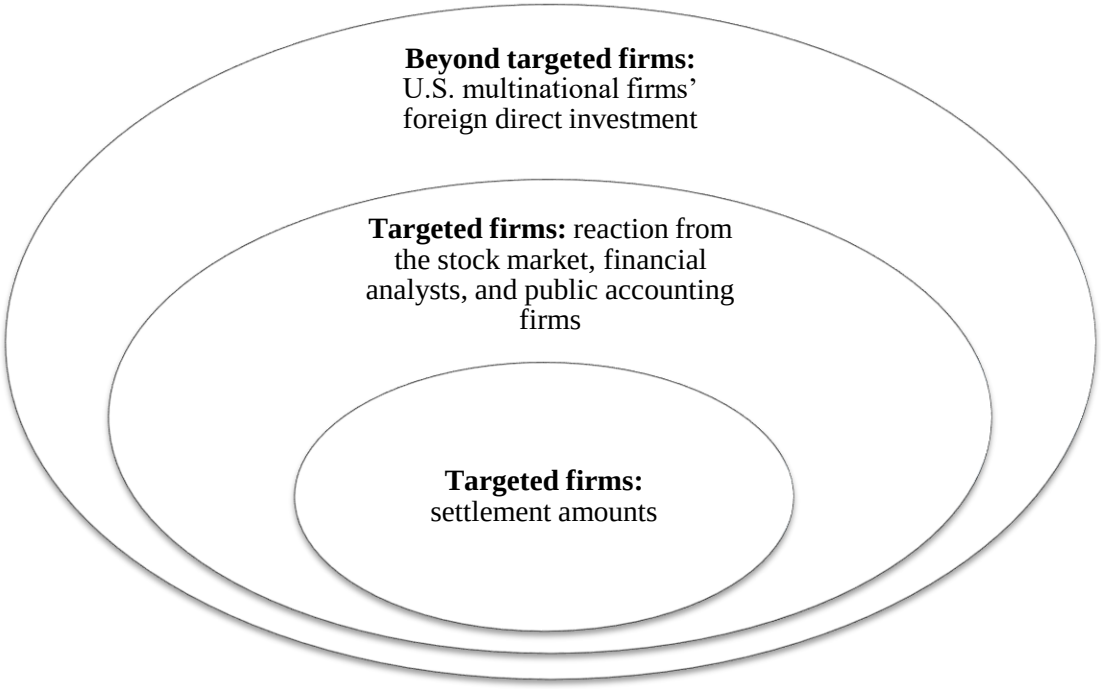
APPENDIX A
Variable Definitions

Variable	Definition
LN(NAF+1)	Natural log of non-audit fees plus one
LN(AF)	Natural log of audit fees
LN(TOL)	Natural log of total fees, which is the sum of audit fees and non-audit fees
FCPA	An indicator variable equal to one for all firm-years for the treatment sample, and zero for the control sample
POST_IN	An indicator variable equal to one for all firm-years after FCPA investigation year, and zero for all firm-years before FCPA investigation year. For firms targeted in ongoing FCPA investigations, FCPA enforcement year is the year that the investigation was initially revealed. For firms targeted in resolved FCPA cases, I start with the year in which final resolution of the case was announced, and push back three years to proxy for the year that initial investigation started. I choose three years because the average duration of FCPA investigations is 3.5 years
POST_RE	An indicator variable equal to one for all firm-years after resolution of the case was announced, and zero otherwise
ROA	Return on asset calculated as income before extraordinary items (IB) divided by total assets (AT) at the end of the fiscal period
CA	Current assets (ACT) divided by total assets (AT)
AQC	An indicator variable equal to one if cash flow related to acquisitions (AQC) is nonzero, and zero otherwise
QUICK	Cash (CH) divided by total assets (AT)
CASHFLOW	Cash flow from operating (OANCF) activities divided by total assets (AT)
SPECIAL	An indicator variable equal to one if special items (SPI) is negative, and zero otherwise
FOREIGN	Sales from non-U.S. segments divided by total sales
LEV	Leverage ratio calculated as total liabilities (LT) divided by total assets (AT)
LOSS	An indicator variable equal to one if net income (NI) is negative, and zero otherwise
BIG4	An indicator variable equal to one if the signing auditor is a Big 4 firm, and zero otherwise
LN(AT)	Natural log of total assets
SEGMENT	Number of operating segments reported by the firm
GC	An indicator variable equal to one if the company received a going-concern modified opinion in the current year, and zero otherwise
$\Delta LN(FDI_{i,t})$	Change in the natural log of U.S. outward FDI position in industry i from year t-1 to year t, i.e., $\log(FDI_{i,t})-\log(FDI_{i,t-1})$. It is approximately equal to the growth rate of U.S. outward FDI position in industry i from year t-1 to year t
$\Delta LN(FDI_{i,t})\_2$	Change in the natural log of U.S. outward FDI position in industry i from year t-2 to year t, i.e., $\log(FDI_{i,t})-\log(FDI_{i,t-2})$. It is approximately equal to the growth rate of U.S. outward FDI position in industry i from year t-2 to year t
$FCPA\_BINARY_{i,t}$	A binary variable equal to one if there are FCPA enforcement activities against firms in industry i in year t-1 or year t, and zero otherwise
$IND\_CORRUPTION_i$	Bribe Payers Index for industry i, the higher the BPI, the lower the perceived likelihood of bribery. BPI is short for Briber Payers Index and is published in a report by Transparent International in 2011. BPI for each sector ranges from 0 to 10, "where a maximum score of 10 corresponds with the view that companies in that sector never bribe and a 0 corresponds with the view that they always do" (Transparent International 2011, 14)

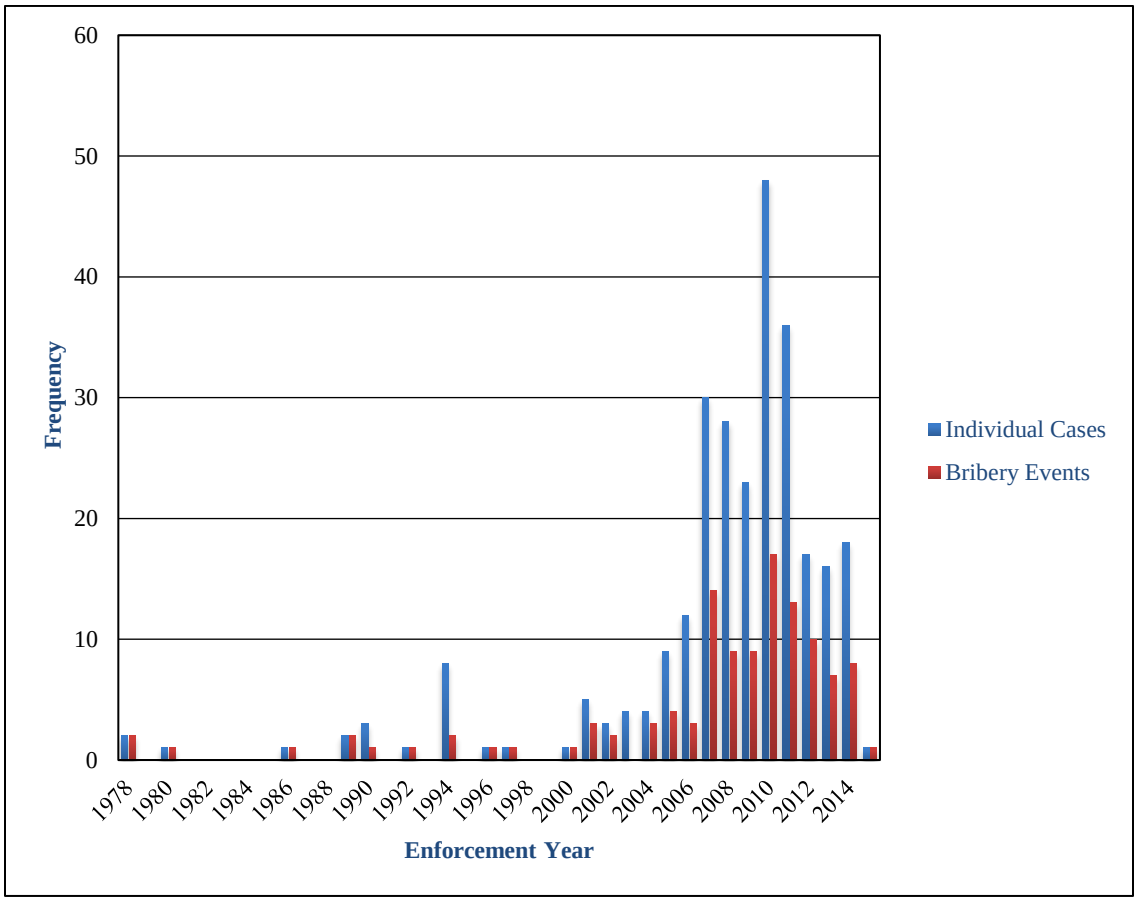
$IND\_LN(ASSETS)_{i,t}$	Natural log of market size of industry i at year t-1. Market size is calculated as the sum of total assets of all firms in industry i in the Compustat universe
$IND\_\Delta LN(ASSETS)_{i,t}$	Change in IND_LN(ASSETS) from year t-1 to year t. It is approximately equal to the growth rate of LN(ASSETS) from year t-1 to year t
$IND\_HERFINDAHL_{i,t}$	Herfindahl index of industry i at year t. Herfindahl index measures the level of industry competition. Larger values of the index suggest lower market competition and greater monopolistic power for the industry
$\Delta LN(FDI_{h,t})$	Change in the natural log of U.S. outward FDI position in host country h from year t-1 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-1 to year t
$FCPA\_BINARY_{h,t}$	A binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and zero otherwise
$FCPA\_DOMESTIC_{h,t}$	A binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by domestic U.S. firms, and zero otherwise
$FCPA\_FOREIGN_{h,t}$	A binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by foreign companies, and zero otherwise
$HOST\_LN(GDP)_{h,t}$	Natural log of GDP for host country h in year t-1 (in billions of U.S. dollars)
$HOST\_\Delta LN(GDP)_{h,t}$	Change in HOST_LN(GDP) from year t-1 to year t. It is approximately equal to the growth rate of host country GDP from year t-1 to year t
$HOST\_RULE_{h,t}$	Host country h's Rule of Law (ROL) index at year t from the Worldwide Governance Indicators (WGI) created by the World Bank. A high ROL index means better rules of society. According to WGI, ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013 update)
$HOST\_LANGUAGE_{h}$	An indicator variable equal to one if host country h's official language is English, and zero otherwise
$HOST\_DISTANCE_{h}$	Natural log of the distance between U.S. and host country h. This distance is "calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population)" for the host country and U.S. (Mayer and Zignago 2005)
$US\_\ \Delta LN(GDP)_{t}$	Change in the natural log of U.S. GDP from year t-1 to year t. It is equivalent to the growth rate of U.S. GDP from year t-1 to t
$\Delta LN(FDI_{h,t})\_2$	Change in the natural log of U.S. outward FDI position in host country h from year t-2 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-2 to year t
$HOST\_LN(GDP)_{h,t}\_2$	Natural log of GDP for host country h in year t-2 (in billions of U.S. dollars)
$HOST\_\Delta LN(GDP)_{h,t}\_2$	Change in HOST_LN(GDP) from year t-2 to year t. It is approximately equal to the growth rate of host country GDP from year t-2 to year t

FIGURE 1
The Ripple Effects of FCPA Enforcement on U.S. Multinational Firms



This figure illustrates the two sets of ripple effects of FCPA enforcement studied in this paper: (1) the effects on targeted firms that go beyond settlement amounts, and (2) the effects on U.S. multinational firms in general that go beyond FCPA-targeted firms.

FIGURE 2
Frequency of Resolved FCPA Cases by Enforcement Year



This table presents the frequency of resolved FCPA cases by enforcement year. The number of resolved FCPA cases is measured at both the individual case (blue bar) and the bribery event levels (red bar). Note that the relatively small number of cases in 2015 is the result of my data collection, which stopped in April 2015.

TABLE 1
Sample Selection

Description of selection procedures	# of bribery events
Total number of resolved FCPA cases undertaken by the DOJ and the SEC from January 1978 to April 2015	150
(+) Total number of ongoing FCPA investigations undertaken by the DOJ and the SEC as of January, 2015	124
= Total number of FCPA enforcement activities from January1978 to April 2015	274
(-) Resolved cases with missing identifiers in COMPUSTAT, i.e., gvkeys	(34)
(-) Ongoing cases with missing identifiers in COMPUSTAT, i.e., gvkeys	(13)
= Total number of FCPA enforcement activities with gvkeys from January1978 to April 2015	227
Number of bribery events with non-missing data that are included in each test:	
Stock return test	188
Analyst forecast revision test	143
Audit fee test	167
Foreign direct investment test-industry level	231*
Foreign direct investment test-host country level	217*

This table presents the sample selection process. I collect FCPA enforcement data from multiple sources. I start from the official websites of the SEC and the DOJ where legal documents of resolved cases are posted. There are 150 resolved FCPA enforcement actions from January 1978 to April 2015. I then identify an additional 124 ongoing FCPA investigations from the Corporate Investigations List provided online by the FCPA Blog. I verify this list with a similar list provided in FCPA Digest by Sherman & Sterling LLP. I then delete 47 cases with missing identifiers in COMPUSTAT database, keeping 227 bribery events with available identifiers.

*For foreign direct investment tests, I do not require targeted firms to have identifiers in COMPUSTAT. Cases are included if industry of the targeted firms and host countries are available.

TABLE 2
Description of FCPA Enforcement Activities

Panel A: Distribution of FCPA enforcement activities by industry

Industry	Number of cases	Percentage of total
Agriculture, Forestry, Fishing and Hunting	3	1.3%
Mining, Quarrying, and Oil and Gas Extraction	24	10.6%
Construction	4	1.8%
Wholesale Trade	9	4.0%
Retail Trade	1	0.4%
Transportation and Warehousing	5	2.2%
Information	19	8.4%
Finance and Insurance	18	7.9%
Real Estate and Rental and Leasing	3	1.3%
Professional, Scientific, and Technical Services	11	4.8%
Administrative and Support and Waste Management and Remediation Services	2	0.9%
Health Care and Social Assistance	1	0.4%
Accommodation and Food Services	2	0.9%
Manufacturing Total	125	55.1%
Total	227	100.0 %
Breakdown of manufacturing sector		
Food	4	3.2%
Beverages and tobacco products	3	2.4%
Textiles, apparel, and leather products	1	0.8%
Paper	2	1.6%
Petroleum and coal products	10	8.0%
Chemicals	28	22.4%
Plastics and rubber products	2	1.6%
Nonmetallic mineral products	1	0.8%
Primary metals	3	2.4%
Fabricated metal products	3	2.4%
Machinery	14	11.2%
Computers and electronic products	29	23.2%
Electrical equipment, appliances, and components	6	4.8%
Transportation equipment	10	8.0%
Miscellaneous manufacturing	9	7.2%
Subtotal	125	55.1%

This table presents the distribution of FCPA cases by industry. I use the North America Industry Classification System (NAICS).

TABLE 2 (continued)

Panel B: Distribution of FCPA enforcement activities by host country

No.	Host country	Frequency	Percentage	No.	Host country	Frequency	Percentage
1	China	96	13.62	44	Israel	4	0.57
2	Iraq	45	6.38	45	Philippines	4	0.57
3	Indonesia	44	6.24	46	Turkey	4	0.57
4	Nigeria	35	4.96	47	Uzbekistan	4	0.57
5	Mexico	27	3.83	48	Algeria	3	0.43
6	Argentina	24	3.4	49	Belgium	3	0.43
7	India	24	3.4	50	Benin	3	0.43
8	Egypt	22	3.12	51	Kenya	3	0.43
9	Greece	20	2.84	52	Luxembourg	3	0.43
10	Thailand	19	2.7	53	South Africa	3	0.43
11	Russia	18	2.55	54	Bulgaria	2	0.28
12	Taiwan	18	2.55	55	Congo	2	0.28
13	Saudi Arabia	17	2.41	56	Czech Republic	2	0.28
14	Brazil	15	2.13	57	Dominican Republic	2	0.28
15	Poland	12	1.7	58	Guinea	2	0.28
16	Venezuela	12	1.7	59	Myanmar	2	0.28
17	Angola	10	1.42	60	Spain	2	0.28
18	Kazakhstan	10	1.42	61	Albania	1	0.14
19	Costa Rica	9	1.28	62	Belarus	1	0.14
20	Malaysia	9	1.28	63	Burkina Faso	1	0.14
21	Mozambique	9	1.28	64	Chile	1	0.14
22	United Arab Emirates	9	1.28	65	Cyprus	1	0.14
23	Bangladesh	8	1.13	66	Denmark	1	0.14
24	Croatia	8	1.13	67	Gabon	1	0.14
25	Kyrgyzstan	8	1.13	68	Georgia	1	0.14
26	South Korea	8	1.13	69	Jamaica	1	0.14
27	The Bahamas	8	1.13	70	Malawi	1	0.14
28	Azerbaijan	7	0.99	71	Mali	1	0.14
29	Bolivia	7	0.99	72	Mauritania	1	0.14
30	Ecuador	7	0.99	73	Mongolia	1	0.14
31	Honduras	7	0.99	74	Morocco	1	0.14
32	Hungary	6	0.85	75	Nepal	1	0.14
33	Macedonia	6	0.85	76	Nicaragua	1	0.14
34	Montenegro	6	0.85	77	Oman	1	0.14
35	France	5	0.71	78	Pakistan	1	0.14
36	Germany	5	0.71	79	Peru	1	0.14
37	Iran	5	0.71	80	Serbia	1	0.14
38	Italy	5	0.71	81	Slovakia	1	0.14
39	Romania	5	0.71	82	Syria	1	0.14
40	Vietnam	5	0.71	83	Tanzania	1	0.14
41	Bahrain	4	0.57	84	United Kingdom	1	0.14
42	Colombia	4	0.57	85	Ukraine	1	0.14
43	Equatorial Guinea	4	0.57				
					Total	705	1

This table presents the distribution of FCPA cases by host country. The list is sorted by the frequency of FCPA cases in each host country.

TABLE 2 (continued)

Panel C: Descriptive statistics for resolved FCPA enforcement actions

Part A: Targeted firm and bribe characteristics						
Variables	N	Mean	Q1	Median	Q3	Std
TOTAL_ASSETS ($ millions)	116	46,897.95	1,432.79	6,067.15	30,663.85	148,441.22
INCOME ($ millions)	116	1,645.63	27.77	196.17	1,104.50	3,810.39
DURATION (years)	116	4.94	2.00	4.00	7.00	3.91
BRIBERY_AMOUNT ($ millions)	100	27.26	0.43	2.00	8.40	144.22
ILLICIT_PROFIT ($ millions)	91	35.34	1.71	5.50	18.10	123.16
TOTAL_PENALTIES ($ millions)	116	52.83	0.59	7.91	27.41	136.00
Part B: Enforcement agency:						
Type			Count		Percentage	
Dual enforcement by two agencies			69		59%	
Single enforcement by either agency			47		41%	
Total			116		100%	
Part C: Self-reporting and remedial efforts:						
Type			Count		Percentage	
Self-reporting and/or remedial effort			69		59%	
No self-reporting or remedial effort			47		41%	
Total			116		100%	
Part D: Composition of defendants:						
Defendant type			Count		Percentage	
Corporations only			86		74%	
Both corporations and individuals			30		26%	
Total			116		100%	
Part E: Number of defendants charged in a bribery event:			Count		Percentage	
1			42		36%	
2			39		34%	
3			17		15%	
4			6		5%	
5 and above 5			12		10%	
Total			116		100%	
Part F: Home country of targeted firms:						
U.S.			83		72%	
Foreign			33		28%	
Total			116		100%	

This table presents descriptive statistics for all resolved cases. Part A presents continuous variables on the nature of the violations and penalties. **TOTAL_ASSETS** is total assets of targeted firms calculated at the end of the enforcement year (or the most recent pre-enforcement year in CRSP-COMPUSTAT when enforcement year data are missing) and is denominated in millions of US dollars. **INCOME** is income before extraordinary items of targeted firms for the enforcement year and is denominated in millions of US dollars. **DURATION** is the length of the FCPA violation period and is presented in years. **BRIBERY_AMOUNT** is the amount the payments made to the foreign officials in the FCPA violation period; it is denominated in millions of US dollars. **ILLICIT_PROFIT** measures the profits that targeted firms made from projects obtained or retained by bribing foreign officials; it is denominated in millions of US dollars. **TOTAL_PENALTIES** is the sum of all monetary penalties imposed on the defendants for the FCPA violations, and is denominated in millions of US dollars. In cases where there are parallel enforcement actions, I add the civil penalties (the sum of disgorgement and prejudgment interest) and the criminal penalties (criminal fines) to arrive at the total. Part B lists the number of cases where there are parallel enforcement actions by both the DOJ and the SEC. Part C lists the number of cases where the defendants either self-report or show considerable remedial effort. I collect the data based on whether "self-reporting" or "remedial efforts" appear in the legal documents of the DOJ and the SEC. Part D presents the composition of defendants in terms of defendant types. "Corporations only" suggests that the case only involves corporate defendants. "Both corporations and individuals" suggests that the case includes both corporate and individual defendants. Part E presents the composition of defendants in terms of the number of defendants included in each individual bribery event. Part F presents the percentage of targeted firms that are domestic U.S. versus foreign firms. I use the LOC variable (the location of firms' headquarters) in COMPUSTAT to identify foreign firms.

TABLE 2 (continued)

Panel D: Top 15 resolved FCPA cases based on total penalties

No.	Defendant	Enforcement Date	Enforcement Agency	Total Penalties	Host countries
1	Siemens AG	12/12/2008	SEC, DOJ	800	Argentina, Bangladesh, China, Germany, Iraq, Nigeria, Russia, Venezuela
2	Alstom S.A.	12/22/2014	DOJ	772	Indonesia, Egypt, Saudi Arabia, The Bahamas, Taiwan
3	Halliburton Company	2/11/2009	SEC, DOJ	579	Nigeria
4	BAE Systems	2/4/2010	DOJ	400	Czech Republic, Hungary, Saudi Arabia
5	Total S.A.	5/29/2013	SEC, DOJ	398	Iran
6	Alcoa Inc.	1/9/2014	SEC, DOJ	384	Bahrain
7	ENI, S.p.A	7/7/2010	SEC, DOJ	365	Nigeria
8	Technip S.A.	6/28/2010	SEC, DOJ	338	Nigeria
10	DaimlerChrysler AG	4/1/2010	SEC, DOJ	185	China, Croatia, Egypt, Greece, Hungary, Indonesia
11	Weatherford International Ltd	11/26/2013	SEC, DOJ	184	Angola, Algeria, Saudi Arabia
12	Alcatel-Lucent, S.A.	12/27/2010	SEC, DOJ	137	Costa Rica, Honduras, Malaysia, Taiwan
13	Avon Products Inc.	12/17/2014	SEC, DOJ	135	China
14	Hewlett-Packard Company	4/9/2014	SEC, DOJ	108	Russia, Poland, Mexico, Germany
15	Deutsche Telekom AG	12/29/2011	SEC, DOJ	91	Macedonia, Montenegro

This table presents the top 15 resolved FCPA cases ranked by the amount of total penalties. **Enforcement Date** refers to the date when the case was filed by the DOJ or the SEC or both. **Enforcement Agency** refers to the agency/agencies that were involved in the cases. **Total Penalties** is the sum of all monetary penalties imposed on the defendants for the FCPA violations, and is denominated in millions of US dollars. I add the civil penalties (the sum of disgorgement and prejudgment interest) and the criminal penalties (criminal fines) to arrive at the total. **Host countries** are the foreign countries where FCPA violations occurred.

TABLE 3
Abnormal Stock Returns around FCPA Announcements

Panel A: Abnormal stock returns around FCPA announcements for targeted firms

	FCPA Investigations			FCPA Resolutions		
Return Window	N	Mean Abnormal Return	Median Abnormal Return	N	Mean Abnormal Return	Median Abnormal Return
[-10, -1]	98	0.21%	0.35%	90	-1.77%**	-0.82%*
[-8, -1]	98	0.35%	0.33%	90	-1.62%**	-1.20%*
[-5, -1]	98	-0.16%	0.00%	90	-1.39%**	-0.35%†
[0,0]	98	-0.85%†	-0.08%	90	0.08%	-0.06%
[0,3]	98	-1.45%**	-0.30%†	90	-0.36%	-0.27%
[0,5]	98	-1.40%**	-0.57%†	90	0.46%	0.43%
[0,20]	98	-2.13%*	-1.36%*	90	0.69%	0.03%

Panel B: Correlation between abnormal stock returns and total penalties for targeted firms

Correlation	Variables	N	Abnormal Return [-10, -1]	Abnormal Return [-8, -1]	Abnormal Return [-5, -1]
Pearson	Total Penalties/Market Value	90	-0.21**	-0.23**	-0.16†
Spearman	Total Penalties/Market Value	90	-0.19*	-0.20*	-0.08

This table presents the abnormal stock returns of firms targeted in FCPA cases. Panel A presents the abnormal returns for firms targeted in FCPA investigations and resolved FCPA cases around announcement dates (day 0). Abnormal returns are buy-and-hold market-adjusted returns, where market-adjusted returns are calculated according to the CAPM. I test the statistical significance of mean (median) abnormal returns with a t-test (Wilcoxon signed rank test). Panel B presents Pearson and Spearman correlation coefficients between total penalties scaled by market value and abnormal returns for three different windows. Market Value is equal to closing stock price multiplied by total number of shares outstanding at the end of the previous fiscal year. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. † indicates one-tailed significance at the 10% level with a negative predicted sign.

TABLE 4
Analyst Forecast Revisions around FCPA Announcements

Panel A: Analyst forecast revisions around FCPA announcements for targeted firms

Panel A.1: FCPA Investigations						
Window	Cutoff dates	N	Mean forecast before	Mean forecast after	Mean revision: After-Before	Median revision: After-Before
1	Before: 45 days prior to announcement dates After: prior to announcement dates	78	3.592	3.560	-0.032**	-0.030**
2	Before: prior to announcement dates After: after announcement dates	78	3.560	3.525	-0.035**	-0.010†
3	Before: 45 days prior to announcement dates After: after announcement dates	78	3.592	3.535	-0.067**	-0.010**
Panel A.2: FCPA Resolutions						
Window	Cutoff dates	N	Mean forecast before	Mean forecast after	Mean revision: After-Before	Median revision: After-Before
1	Before: 45 days prior to announcement dates After: prior to announcement dates	65	2.990	2.937	-0.053*	-0.010**
2	Before: prior to announcement dates After: after announcement dates	65	2.937	2.918	-0.019	0.000
3	Before: 45 days prior to announcement dates After: after announcement dates	65	2.990	2.918	-0.072*	-0.020**

Panel B: Correlation between analyst forecast revisions and total penalties for targeted firms

Correlation	Variables	N	EPS Revision Window 1	EPS Revision Window 2	EPS Revision Window 3
Pearson	Total Penalties/# of shares	62	-0.42***	-0.33***	-0.55***
Spearman	Total Penalties/# of shares	62	-0.28**	-0.34***	-0.43***

This table presents analyst forecast revisions for firms targeted in FCPA cases. Panel A presents analyst forecast revisions for one-year ahead EPS for firms targeted in FCPA investigations (Panel A.1) and resolved FCPA cases (Panel A.2). I construct three revision windows by varying the definition of "before" and "after". For example, for the first revision window, consensus forecast before for each firm is the most recent one-year-ahead EPS consensus forecast extant 45 days prior to day of announcement in I/B/E/S summary files. Consensus forecast after is the most recent one-year-ahead EPS consensus forecast extant prior to day of announcement in I/B/E/S summary files. The other two windows are defined similarly. Mean forecast before (after) is the mean of consensus forecasts before (after) for all firms included in the analyses. Forecast revision for each firm is calculated by subtracting consensus forecast before from consensus forecast after. Mean (median) revision is the mean (median) of forecast revisions for all firms included in the analyses. I test the statistical significance of mean (median) forecast revision with a t-test (Wilcoxon signed rank test). Panel B presents Pearson and Spearman correlation coefficients between total penalties scaled by total number of shares used for EPS calculation and analyst forecast revisions for three different windows. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. † indicates one-tailed significance at the 10% level with a negative predicted sign.

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TABLE 5
Audit Fees, Non-audit Fees, and FCPA Enforcement

Panel A: Summary statistics and test of covariate balance for propensity score matching

	Treatment sample, i.e., FCPA=1				PSM control sample, i.e., FCPA=0					
Variables	N	Mean	Median	Std	N	Mean	Median	Std	Treat-Control	t-value
LN(NAF+1)	1,721	13.65	14.05	2.82	1,721	13.11	13.64	3.12	0.54	5.32***
LN(AF)	1,721	15.30	15.37	1.34	1,721	15.01	15.10	1.44	0.29	6.21***
LN(TOL)	1,721	15.66	15.73	1.36	1,721	15.34	15.40	1.41	0.33	6.91***
PSM control variables										
ROA	1,721	0.05	0.06	0.09	1,721	0.05	0.06	0.10	0.00	1.28
CA	1,721	0.46	0.45	0.17	1,721	0.45	0.42	0.20	0.01	1.25
AQC	1,721	0.53	1.00	0.50	1,721	0.54	1.00	0.50	-0.01	-0.62
QUICK	1,721	0.11	0.09	0.09	1,721	0.10	0.07	0.10	0.00	1.13
CASHFLOW	1,721	0.10	0.10	0.08	1,721	0.09	0.10	0.28	0.01	1.07
SPECIAL	1,721	0.68	1.00	0.47	1,721	0.66	1.00	0.47	0.02	1.16
FOREIGN	1,721	0.52	0.52	0.26	1,721	0.49	0.48	0.26	0.03	2.76***
LEV	1,721	0.55	0.55	0.20	1,721	0.54	0.55	0.22	0.01	0.78
LOSS	1,721	0.16	0.00	0.37	1,721	0.18	0.00	0.38	-0.02	-1.22
BIG4	1,721	0.93	1.00	0.26	1,721	0.92	1.00	0.27	0.01	0.91
LN(AT)	1,721	8.73	8.78	2.09	1,721	8.57	8.68	2.15	0.17	2.30**
SEGMENT	1,721	2.49	2.00	1.85	1,721	2.52	2.00	1.86	-0.03	-0.48
GC	1,721	0.00	0.00	0.06	1,721	0.01	0.00	0.09	0.00	1.35

This table presents summary statistics and test of covariate balance for propensity score matching. **LN(NAF+1)** is the natural log of non-audit fees plus one. **LN(AF)** is the natural log of audit fees. **LN(TOL)** is the natural log of total fees, which is the sum of audit fees and non-audit fees. **ROA** is income before extraordinary items (IB) divided by total assets (AT) at the end of the fiscal period. **CA** is current assets (ACT) divided by total assets (AT). **AQC** is an indicator variable equal to one if cash flow related to acquisitions (AQC) is nonzero, and zero otherwise. **QUICK** is cash (CH) divided by total assets (AT). **CASHFLOW** is cash flow from operating (OANCF) activities divided by total assets (AT). **SPECIAL** is an indicator variable equal to one if special items (SPI) is negative, and zero otherwise. **FOREIGN** is sales from non-U.S. segments divided by total sales. **LEV** is total liabilities (LT) divided by total assets (AT). Loss is an indicator variable equal to one if net income (NI) is negative, and zero otherwise. **BIG4** is an indicator variable equal to one if the signing auditor is a Big 4 firm, and zero otherwise. **LN(AT)** is the natural log of total assets. **SEGMENT** is the number of operating segments reported by the firm. **GC** equals one if the company received a going-concern modified opinion in the current year, and zero otherwise. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

TABLE 5 (continued)

Panel B: Regression analyses – post FCPA investigation

Variables	Predicted sign	(1) LN(AF)	(2) LN(NAF+1)	(3) LN(TOL)
FCPA	+/-	0.128***	0.143	0.152***
		(2.71)	(0.86)	(3.13)
POST_IN	+/-	-0.034	-0.182	-0.024
		(-0.80)	(-0.89)	(-0.56)
FCPA*POST_IN	+	0.136**	0.476*	0.138**
		(2.30)	(1.91)	(2.34)
ROA	+/-	-0.633***	2.816***	-0.408*
		(-2.67)	(2.86)	(-1.78)
CA	+	0.713***	0.701	0.726***
		(4.89)	(1.42)	(5.30)
AQC	+	0.076**	0.261**	0.122***
		(2.26)	(2.34)	(3.66)
QUICK	+/-	-0.021	-1.492	-0.076
		(-0.10)	(-1.39)	(-0.38)
CASHFLOW	-	-0.148**	-0.487***	-0.139***
		(-2.52)	(-3.03)	(-3.31)
SPECIAL	+	0.171***	0.458**	0.171***
		(5.13)	(2.54)	(5.03)
FOREIGN	+	0.286***	0.981**	0.345***
		(3.22)	(2.51)	(3.93)
LEV	+	0.723***	1.356***	0.743***
		(6.99)	(3.37)	(7.32)
LOSS	+/-	-0.029	-0.149	-0.018
		(-0.57)	(-0.90)	(-0.36)
BIG4	+	0.027	1.314***	0.080
		(0.39)	(2.96)	(1.17)
LN(AT)	+	0.548***	0.715***	0.573***
		(36.99)	(13.38)	(38.74)
SEGMENT	+	0.050***	0.007	0.046***
		(4.54)	(0.19)	(4.10)
GC	+	-0.054	-2.206*	-0.061
		(-0.26)	(-1.67)	(-0.30)
CONSTANT		9.159***	3.405***	9.057***
		(55.30)	(4.90)	(58.98)
Fixed effects		Year, industry	Year, industry	Year, industry
SE Cluster		Firm	Firm	Firm
Observations		3,442	3,442	3,442
R-squared		0.851	0.428	0.841

This table presents the relationship between FCPA investigations and audit, non-audit fees paid to accounting firms by targeted firms. Firms targeted in resolved FCPA cases and ongoing investigations are both included in the treatment sample. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. I perform one-to-one propensity score matching with replacement on all control variables used in the regressions. **POST_IN** is an indicator variable equal to one for all firm-years after FCPA investigation year, and zero for all firm-years before FCPA investigation year. For firms targeted in ongoing FCPA investigations, FCPA enforcement year is the year that the investigation was initially revealed. For firms targeted in resolved FCPA cases, I start with the year in which final resolution of the case was announced, and push back three years to proxy for the year that initial investigation started. All other variables are defined in Table 5 Panel A.

TABLE 5 (continued)

Panel C: Regression analyses – post FCPA resolution

Variables	Predicted sign	(1) LN(AF)	(2) LN(NAF+1)	(3) LN(TOL)
FCPA	+/-	0.157**	0.290	0.205***
		(2.43)	(1.57)	(3.09)
POST_RE	+/-	-0.075	-0.094	-0.054
		(-1.19)	(-0.46)	(-0.85)
FCPA*POST_RE	+	0.191***	0.148	0.148**
		(2.65)	(0.56)	(2.03)
ROA	+/-	-0.202	1.588	-0.203
		(-0.55)	(1.26)	(-0.56)
CA	+	0.698***	1.505**	0.720***
		(3.40)	(2.15)	(3.50)
AQC	+	0.056	0.293**	0.094**
		(1.32)	(2.36)	(2.13)
QUICK	+/-	0.044	-0.974	0.092
		(0.14)	(-0.88)	(0.28)
CASHFLOW	-	-0.624**	-0.197	-0.448*
		(-2.32)	(-0.18)	(-1.70)
SPECIAL	+	0.186***	0.360**	0.182***
		(3.72)	(2.26)	(3.53)
FOREIGN	+	0.371***	0.538	0.380***
		(3.12)	(1.24)	(3.11)
LEV	+	0.765***	1.197**	0.806***
		(4.90)	(2.57)	(5.21)
LOSS	+/-	0.069	-0.285	0.034
		(1.05)	(-1.27)	(0.53)
BIG4	+	-0.006	1.821***	0.094
		(-0.06)	(2.92)	(0.94)
LN(AT)	+	0.562***	0.736***	0.583***
		(23.68)	(13.42)	(24.60)
SEGMENT	+	0.047***	0.036	0.045***
		(3.09)	(0.89)	(2.95)
GC	+	-0.069	-1.302	-0.121
		(-0.26)	(-1.02)	(-0.48)
CONSTANT		8.267***	4.810***	8.971***
		(37.50)	(5.24)	(41.51)
Fixed effects		Year, industry	Year, industry	Year, industry
SE Cluster		Firm	Firm	Firm
Observations		1,884	1,884	1,884
R-squared		0.862	0.485	0.850

This table presents the relationship between the resolution of FCPA cases and audit, non-audit fees paid to accounting firms by targeted firms. Only Firms targeted in resolved FCPA cases are included in the treatment sample. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. I perform one-to-one propensity score matching with replacement on all control variables used in the regressions. **POST_RE** is an indicator variable equal to one for all firm-years after resolution of the case was announced, and zero otherwise. All other variables are defined in Table 5 Panel A.

TABLE 6
U.S. Foreign Direct Investment (FDI) and FCPA Enforcement
Industry Level Tests

Panel A: Summary statistics (subscript: i-industry; t-year)

Variables	N	Mean	Median	Std Dev	Minimum	Maximum
$\Delta LN(FDI_{i,t})$	351	0.08	0.09	0.21	-0.91	0.93
$\Delta LN(FDI_{i,t})\_2$	324	0.17	0.16	0.31	-1.27	1.32
$FCPA\_BINARY_{i,t}$	351	0.34	0.00	0.47	0.00	1.00
$IND\_CORRUPTION_{i}$	351	6.63	6.80	0.34	5.30	7.10
$IND\_LN(ASSETS)_{i,t}$	351	13.03	12.98	2.13	8.90	18.16
$IND\_\Delta LN(ASSETS)_{i,t}$	351	0.06	0.06	0.08	-0.27	0.70
$IND\_HERFINDAHL_{i,t}$	351	0.06	0.04	0.06	0.01	0.36

Panel B: Correlation matrix (subscript: i-industry; t-year)

	Variables	1	2	3	4	5	6	7
1	$\Delta LN(FDI_{i,t})$	-	0.683*	-0.118*	0.009	-0.019	0.129*	0.013
2	$\Delta LN(FDI_{i,t})\_2$	0.731*	-	-0.099*	0.031	0.043	0.091	-0.025
3	$FCPA\_BINARY_{i,t}$	-0.100*	-0.091	-	0.028	0.406*	0.022	-0.250*
4	$IND\_CORRUPTION_{i}$	0.020	0.037	0.033	-	-0.043	-0.072	0.116*
5	$IND\_LN(ASSETS)_{i,t}$	-0.002	-0.006	0.414*	0.043	-	0.134*	-0.855*
6	$IND\_\Delta LN(ASSETS)_{i,t}$	0.114*	0.099*	-0.033	-0.029	0.078	-	-0.164*
7	$IND\_HERFINDAHL_{i,t}$	-0.005	0.011	-0.218*	0.163*	-0.700*	-0.074	-

This table presents summary statistics for industry-level test on the deterrent effect of FCPA. **$\Delta LN(FDI_{i,t})$** is the change in the natural log of U.S. outward FDI position in industry i from year t-1 to year t, i.e., $\log(FDI_{i,t})$-$\log(FDI_{i,t-1})$. It is approximately equal to the growth rate of U.S. outward FDI position in industry i from year t-1 to year t. **$\Delta LN(FDI_{i,t})\_2$** is the change in the natural log of U.S. outward FDI position in industry i from year t-2 to year t, i.e., $\log(FDI_{i,t})$-$\log(FDI_{i,t-2})$. It is approximately equal to the growth rate of U.S. outward FDI position in industry i from year t-2 to year t. **$FCPA\_BINARY_{i,t}$** is a binary variable equal to one if there are FCPA enforcement activities against firms in industry i in year t-1 or year t, and zero otherwise. **$IND\_LN(ASSETS)_{i,t}$** is the natural log of market size of industry i at year t-1. Market size is calculated as the sum of total assets of all firms in industry i in the Compustat universe. **$IND\_\Delta LN(ASSETS)_{i,t}$** is the change in **IND_LN(ASSETS)** from year t-1 to year t. Market size is calculated using the same method described above. **$IND\_HERFINDAHL_{i,t}$** is the Herfindahl index of industry i at year t. Herfindahl index measures the level of industry competition. Larger values of the index suggest lower market competition and greater monopolistic power for the industry. **$IND\_CORRUPTION_{i}$** is the Bribe Payers Index (BPI) for industry i, the higher the BPI, the lower the perceived likelihood of bribery. In Panel B, Pearson correlations are reported on the left bottom corner and Spearman correlations are reported on the right top corner. * denotes two-tailed significance at the 10% level.

TABLE 6 (continued)

Panel C: Regression analyses

Variables	Predicted Sign	(1) $\Delta LN(FDI_{i,t})$	(2) $\Delta LN(FDI_{i,t})$	(3) $\Delta LN(FDI_{i,t})$	(4) $\Delta LN(FDI_{i,t})\_2$
$FCPA\_BINARY_{i,t}$	-	-0.049*	-0.065*	-0.081**	-0.101*
		[-1.89]	[-1.86]	[-2.18]	[-1.80]
$IND\_\Delta LN(ASSETS)_{i,t}$	+	0.284**	0.226*	0.098	-0.056
		[2.03]	[1.66]	[0.54]	[-0.20]
$IND\_LN(ASSETS)_{i,t}$	+	0.003	0.008	-0.109	-0.261*
		[0.40]	[0.19]	[-1.23]	[-1.77]
$IND\_HERFINDAHL_{i,t}$	+/-	-0.009	0.941*	0.481	1.640*
		[-0.03]	[1.74]	[0.76]	[1.66]
$IND\_CORRUPTION_{i}$	+	0.016	-	-	-
		[0.46]	-	-	-
CONSTANT		-0.061	-0.294	0.983	2.177
		[-0.27]	[-0.66]	[1.10]	[1.47]
Fixed Effects		No	Industry	Year, industry	Year, industry
Observations		351	351	351	324
R-squared		0.024	0.095	0.128	0.186

This table presents the relationship between FCPA enforcement activities and U.S. foreign direct investment at the industry level. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. **$\Delta LN(FDI_{i,t})$** is the change in the natural log of U.S. outward FDI position in industry i from year t-1 to year t, i.e., $\log(FDI_{i,t})$-$\log(FDI_{i,t-1})$. It is approximately equal to the growth rate of U.S. outward FDI position in industry i from year t-1 to year t. **$\Delta LN(FDI_{i,t})\_2$** is the change in the natural log of U.S. outward FDI position in industry i from year t-2 to year t, i.e., $\log(FDI_{i,t})$-$\log(FDI_{i,t-2})$. It is approximately equal to the growth rate of U.S. outward FDI position in industry i from year t-2 to year t. **$FCPA\_BINARY_{i,t}$** is a binary variable equal to one if there are FCPA enforcement activities against firms in industry i in year t-1 or year t, and zero otherwise. **$IND\_LN(ASSETS)_{i,t}$** is the natural log of market size of industry i at year t-1. Market size is calculated as the sum of total assets of all firms in industry i in the Compustat universe. **$IND\_\Delta LN(ASSETS)_{i,t}$** is the change in **$IND\_LN(ASSETS)$** from year t-1 to year t. Market size is calculated using the same method described above. **$IND\_HERFINDAHL_{i,t}$** is the Herfindahl index of industry i at year t. Herfindahl index measures the level of industry competition. Larger values of the index suggest lower market competition and greater monopolistic power for the industry. **$IND\_CORRUPTION_{i}$** is the Bribe Payers Index for industry i, the higher the BPI, the lower the perceived likelihood of bribery.

TABLE 7
U.S. FDI and FCPA Enforcement
Host Country Level Tests

Panel A: Summary statistics (subscript: h-host country; t-year)

Variables	N	Mean	Median	Std Dev	Minimum	Maximum
$\Delta LN(FDI_{h,t})$	2,779	0.08	0.07	0.43	-3.81	4.21
$FCPA\_BINARY_{h,t}$	2,779	0.12	0.00	0.33	0.00	1.00
$FCPA\_DOMESTICc_{h,t}$	2,779	0.06	0.00	0.23	0.00	1.00
$FCPA\_FOREIGN_{h,t}$	2,779	0.04	0.00	0.19	0.00	1.00
$HOST\_LN(GDP)_{h,t}$	2,779	10.52	10.44	2.20	3.17	15.41
$HOST\_\Delta LN(GDP)_{h,t}$	2,779	0.04	0.04	0.05	-0.71	0.72
$HOST\_RULE_{h,t}$	2,779	0.14	0.00	1.00	-2.23	2.12
$HOST\_LANGUAGE_{h}$	2,779	0.30	0.00	0.46	0.00	1.00
$HOST\_DISTANCE_{h}$	2,779	8.90	8.95	0.56	6.31	9.69
$US\_\ \Delta LN(GDP)_{t}$	2,779	0.02	0.02	0.02	-0.02	0.05
$\Delta LN(FDI_{h,t})\_2$	2,521	0.17	0.16	0.56	-3.81	4.32
$HOST\_LN(GDP)_{h,t}\_2$	2,521	10.61	10.63	2.18	3.17	15.37
$HOST\_\Delta LN(GDP)_{h,t}\_2$	2,521	0.07	0.07	0.08	-0.87	0.98

This table presents summary statistics for host country-level test on the deterrent effect of FCPA. **$\Delta LN(FDI_{h,t})$** is the change in the natural log of U.S. outward FDI position in host country h from year t-1 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-1 to year t. **$FCPA\_BINARY_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and zero otherwise. **$FCPA\_FOREIGN_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by foreign companies, and zero otherwise. **$FCPA\_DOMESTIC_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by domestic U.S. firms, and zero otherwise. **$HOST\_LN(GDP)_{h,t}$** is the natural log of GDP for host country h in year t-1 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}$** is the change in the natural log of host country GDP from year t-1 to year t. It is approximately equal to the growth rate of host country GDP from year t-1 to year t. **$HOST\_RULE_{h,t}$** is host country h's Rule of Law (ROL) index at year t from the Worldwide Governance Indicators (WGI) created by the World Bank. A high ROL index means better rules of society. According to WGI, ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013 update). **$HOST\_LANGUAGE_{h}$** is an indicator variable equal to one if host country h's official language is English, and zero otherwise. **$HOST\_DISTANCE_{h}$** is the natural log of the distance between U.S. and host country h. This distance is "calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population)" for the host country and U.S. (Mayer and Zignago 2005). **$US\_\ \Delta LN(GDP)_{t}$** is the change in natural log of U.S. GDP from year t-1 to year t. It is approximately equal to the growth rate of U.S. GDP from year t-1 to year t. **$\Delta LN(FDI_{h,t})\_2$** is the change in the natural log of U.S. outward FDI position in host country h from year t-2 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-2 to year t. **$HOST\_LN(GDP)_{h,t}\ \_2$** is the natural log of GDP for host country h in year t-2 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}\ \_2$** is the change in the natural log of host country GDP from year t-2 to year t. It is approximately equal to the growth rate of host country GDP from year t-2 to year t.

TABLE 7 (continued)

Panel B: Correlation matrix (subscript: h-host country; t-year)

	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1	$\Delta LN(FDI_{h,t})$	-	-0.027	-0.033*	-0.011	0.098*	0.092*	0.065*	-0.006	0.011	0.074*	0.669*	0.090*	0.103*
2	$FCPA\_BINARY_{h,t}$	-0.035*	-	0.659*	0.513*	0.237*	0.024	-0.110*	-0.133*	0.009	-0.166*	-0.050*	0.234*	0.049*
3	$FCPA\_DOMESTIC_{h,t}$	-0.040*	0.659*	-	-0.048*	0.124*	-0.008	-0.039*	-0.070*	-0.031	-0.099*	-0.033*	0.120*	0.01
4	$FCPA\_FOREIGN_{h,t}$	-0.011#	0.513*	-0.048*	-	0.107*	0.031	-0.056*	-0.094*	-0.003	-0.074*	-0.035*	0.104*	0.041*
5	$HOST\_LN(GDP)_{h,t}$	0.055*	0.238*	0.127*	0.106*	-	-0.083*	0.414*	-0.262*	-0.061*	-0.039*	0.100*	1.000*	-0.090*
6	$HOST\_\Delta LN(GDP)_{h,t}$	0.045*	0.035*	0.009	0.032*	-0.037*	-	-0.192*	-0.012	0.214*	0.121*	0.108*	-0.102*	0.837*
7	$HOST\_RULE_{h,t}$	0.050*	-0.114*	-0.043*	-0.056*	0.415*	-0.115*	-	0.088*	-0.131*	0.002	0.076*	0.424*	-0.206*
8	$HOST\_LANGUAGE_{h}$	-0.006#	-0.133*	-0.070*	-0.094*	-0.269*	-0.029	0.084*	-	0.195*	0.022	-0.001	-0.253*	-0.005
9	$HOST\_DISTANCE_{h}$	0.019#	0.014	-0.027	0.005	-0.004	0.135*	-0.137*	0.035*	-	-0.015	0.016	-0.056*	0.234*
10	$US\_\Delta LN(GDP)_{t}$	0.041*	-0.147*	-0.094*	-0.058*	-0.042*	0.135*	-0.005	0.018	-0.008	-	0.114*	-0.03	0.039*
11	$\Delta LN(FDI_{h,t})\_2$	0.674*	-0.047*	-0.035*	-0.025	0.069*	0.066*	0.055*	-0.019	0.027	0.069*	-	0.100*	0.122*
12	$HOST\_LN(GDP)_{h,t}\_2$	0.044*	0.234*	0.122*	0.102*	1.000*	-0.063*	0.425*	-0.261*	0.002	-0.03	0.069*	-	-0.104*
13	$HOST\_\Delta LN(GDP)_{h,t}\_2$	0.047*	0.056*	0.018	0.047*	-0.037*	0.844*	-0.138*	-0.03	0.157*	0.051*	0.074*	-0.057*	-

This table presents the correlation matrix for all variables used in host country-level test on the deterrent effect of FCPA. Pearson correlations are reported on the left bottom corner and Spearman correlations are reported on the right top corner. * denotes two-tailed significance at the 10% level. **$\Delta LN(FDI_{h,t})$** is the change in the natural log of U.S. outward FDI position in host country h from year t-1 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-1 to year t. **$FCPA\_BINARY_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and zero otherwise. **$FCPA\_FOREIGN_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by foreign companies, and zero otherwise. **$FCPA\_DOMESTIC_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by domestic U.S. firms, and zero otherwise. **$HOST\_LN(GDP)_{h,t}$** is the natural log of GDP for host country h in year t-1 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}$** is the change in the natural log of host country GDP from year t-1 to year t. It is approximately equal to the growth rate of host country GDP from year t-1 to year t. **$HOST\_RULE_{h,t}$** is host country h's Rule of Law (ROL) index at year t from the Worldwide Governance Indicators (WGI) created by the World Bank. A high ROL index means better rules of society. According to WGI, ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013 update). **$HOST\_LANGUAGE_{h}$** is an indicator variable equal to one if host country h's official language is English, and zero otherwise. **$HOST\_DISTANCE_{h}$** is the natural log of the distance between U.S. and host country h. This distance is "calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population)" for the host country and U.S. (Mayer and Zignago 2005). **$US\_\Delta LN(GDP)_{t}$** is the change in natural log of U.S. GDP from year t-1 to year t. It is approximately equal to the growth rate of U.S. GDP from year t-1 to year t. **$\Delta LN(FDI_{h,t})\_2$** is the change in the natural log of U.S. outward FDI position in host country h from year t-2 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-2 to year t. **$HOST\_LN(GDP)_{h,t}\_2$** is the natural log of GDP for host country h in year t-2 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}\_2$** is the change in the natural log of host country GDP from year t-2 to year t. It is approximately equal to the growth rate of host country GDP from year t-2 to year t.

TABLE 7 (continued)

Panel C: Regression analyses – one-year FDI growth

Variables	Predicted Sign	(1) $\Delta LN(FDI_{h,t})$	(2) $\Delta LN(FDI_{h,t})$	(3) $\Delta LN(FDI_{h,t})$	(4) $\Delta LN(FDI_{h,t})$
$FCPA\_BINARY_{h,t}$	-	-0.068***	-0.054**	-0.040*	-0.054*
		[-2.73]	[-2.06]	[-1.79]	[-1.80]
$HOST\_LN(GDP)_{h,t}$	+	0.014***	0.011**	0.011**	0.053
		[3.58]	[2.42]	[2.48]	[0.83]
$HOST\_\Delta LN(GDP)_{h,t}$	+	0.431***	0.395***	0.451**	0.368*
		[2.58]	[2.31]	[2.47]	[1.88]
$HOST\_RULE_{h,t}$	+		0.013	0.011	0.024
			[1.35]	[1.16]	[0.47]
$HOST\_LANGUAGE_{h}$	+		0.001	-0.001	-
			[0.04]	[0.08]	-
$HOST\_DISTANCE_{h}$	-		0.014	0.014	-
			[0.94]	[1.12]	-
$US\_\ \Delta LN(GDP)_{t}$	+		0.832*	-	-
			[1.65]	-	-
CONSTANT		-0.069*	-0.188	-0.128	-0.401
		[-1.69]	[-1.37]	[-1.04]	[-0.82]
Fixed Effects		No	No	Year	Year, host country
SE Cluster		No	No	Host country	No
Observations		2,779	2,779	2,779	2,779
R-squared		0.008	0.010	0.025	0.087

This table presents the relationship between FCPA enforcement activities and U.S. foreign direct investment at the host country level using one-year growth rate as the dependent variable. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. **$\Delta LN(FDI_{h,t})$** is the change in the natural log of U.S. outward FDI position in host country h from year t-1 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-1 to year t. **$FCPA\_BINARY_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and zero otherwise. **$HOST\_LN(GDP)_{h,t}$** is the natural log of GDP for host country h in year t-1 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}$** is the change in the natural log of host country GDP from year t-1 to year t. It is approximately equal to the growth rate of host country GDP from year t-1 to year t. **$HOST\_RULE_{h,t}$** is host country h's Rule of Law (ROL) index at year t from the Worldwide Governance Indicators (WGI) created by the World Bank. A high ROL index means better rules of society. According to WGI, ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013 update). **$HOST\_LANGUAGE_{h}$** is an indicator variable equal to one if host country h's official language is English, and zero otherwise. **$HOST\_DISTANCE_{h}$** is the natural log of the distance between U.S. and host country h. This distance is "calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population)" for the host country and U.S. (Mayer and Zignago 2005). **$US\_\ \Delta LN(GDP)_{t}$** is the change in natural log of U.S. GDP from year t-1 to year t. It is approximately equal to the growth rate of U.S. GDP from year t-1 to year t.

TABLE 7 (continued)

Panel D: Regression analyses – two-year FDI growth

Variables	Predicted Sign	(1) $\Delta LN(FDI_{h,t})\_2$	(2) $\Delta LN(FDI_{h,t})\_2$	(3) $\Delta LN(FDI_{h,t})\_2$	(4) $\Delta LN(FDI_{h,t})\_2$
$FCPA\_BINARY_{h,t}$	-	-0.119***	-0.094***	-0.057	-0.094**
		[-3.54]	[-2.68]	[-1.52]	[-2.40]
$HOST\_LN(GDP)_{h,t}\_2$	+	0.023***	0.019***	0.019**	0.092
		[4.44]	[3.01]	[2.80]	[1.02]
$HOST\_\Delta LN(GDP)_{h,t}\_2$	+	0.575***	0.546***	0.604***	0.498***
		[4.23]	[3.94]	[2.99]	[3.03]
$HOST\_RULE_{h,t}$	+		0.017	0.015	0.007
			[1.27]	[0.79]	[0.11]
$HOST\_LANGUAGE_{h}$	+		-0.012	-0.016	-
			[-0.47]	[-0.51]	-
$HOST\_DISTANCE_{h}$	-		0.019	0.019	-
			[0.84]	[0.78]	-
$US\_\ \Delta LN(GDP)_{t}$	+		1.92***	-	-
			[2.86]	-	-
CONSTANT		-0.097*	-0.272	-0.141	-0.730
		[-1.70]	[-1.47]	[-0.56]	[-1.06]
Fixed Effects		No	No	Year	Year, host country
SE Cluster		No	No	Host country	No
Observations		2,521	2,521	2,521	2,521
R-squared		0.016	0.020	0.041	0.156

This table presents the relationship between FCPA enforcement activities and U.S. foreign direct investment at the host country level using two-year growth rate as the dependent variable. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. **$\Delta LN(FDI_{h,t})\_2$** is the change in the natural log of U.S. outward FDI position in host country h from year t-2 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-2 to year t. **$FCPA\_BINARY_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and zero otherwise. **$HOST\_LN(GDP)_{h,t}\_2$** is the natural log of GDP for host country h in year t-2 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}\_2$** is the change in the natural log of host country GDP from year t-2 to year t. It is approximately equal to the growth rate of host country GDP from year t-2 to year t. **$HOST\_RULE_{h,t}$** is host country h's Rule of Law (ROL) index at year t from the Worldwide Governance Indicators (WGI) created by the World Bank. A high ROL index means better rules of society. According to WGI, ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013 update). **$HOST\_LANGUAGE_{h}$** is an indicator variable equal to one if host country h's official language is English, and zero otherwise. **$HOST\_DISTANCE_{h}$** is the natural log of the distance between U.S. and host country h. This distance is "calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population)" for the host country and U.S. (Mayer and Zignago 2005). **$US\_\ \Delta LN(GDP)_{t}$** is the change in the natural log of U.S. GDP from year t-1 to year t. It is approximately equal to the growth rate of U.S. GDP from year t-1 to year t.

TABLE 7 (continued)

Panel E: Regression analyses -- domestic vs. foreign firms

Variables	Predicted Sign	(1) $\Delta LN(FDI_{h,t})$	(2) $\Delta LN(FDI_{h,t})$	(3) $\Delta LN(FDI_{h,t})$	(4) $\Delta LN(FDI_{h,t})$	(5) $\Delta LN(FDI_{h,t})$	(6) $\Delta LN(FDI_{h,t})$
$FCPA\_DOMESTIC_{h,t}$	+	-0.076**		-0.071**		-0.082**	
		[-2.14]		[-2.01]		[-2.14]	
$FCPA\_FOREIGN_{h,t}$	+/-		-0.029		-0.010		-0.018
			[-0.66]		[-0.40]		[-0.37]
$HOST\_LN(GDP)_{h,t}$	+	0.010**	0.009**	0.010**	0.009**	0.044	0.042
		[2.20]	[1.97]	[2.52]	[2.29]	[0.68]	[0.65]
$HOST\_\Delta LN(GDP)_{h,t}$	+	0.387**	0.384**	0.446**	0.445**	0.359*	0.361*
		[2.27]	[2.25]	[2.46]	[2.46]	[1.84]	[1.84]
$HOST\_RULE_{h,t}$	+	0.015*	0.017*	0.013	0.014	0.026	0.033
		[1.64]	[1.80]	[1.36]	[1.55]	[0.52]	[0.67]
$HOST\_LANGUAGE_{h}$	+	0.001	0.001	-0.001	-0.001	-	-
		[0.05]	[0.05]	[-0.07]	[-0.06]	-	-
$HOST\_DISTANCE_{h}$	-	0.013	0.015	0.013	0.015	-	-
		[0.90]	[0.99]	[1.06]	[1.17]	-	-
$US\_\ \Delta LN(GDP)_{t}$	+	0.886*	0.965*	-	-	-	-
		[1.77]	[1.93]	-	-	-	-
CONSTANT		-0.172	-0.178	-0.115	-0.119	-0.337	-0.320
		[-1.26]	[-1.30]	[-0.94]	[-0.96]	[-0.69]	[-0.65]
Fixed Effects		No	No	Year	Year	Year, host country	Year, host country
SE Cluster		No	No	Host country	Host country	No	No
Observations		2,779	2,779	2,779	2,779	2,779	2,779
R-squared		0.010	0.008	0.025	0.025	0.088	0.086

This table presents the differential relationship between FCPA enforcement activities against domestic U.S. firms vs. foreign firms and U.S. foreign direct investment at the host country level. ***, **, and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively. **$\Delta LN(FDI_{h,t})$** is the change in the natural log of U.S. outward FDI position in host country h from year t-1 to year t. It is approximately equal to the growth rate of U.S. outward FDI position in host country h from year t-1 to year t. **$FCPA\_FOREIGN_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by foreign companies, and zero otherwise. **$FCPA\_DOMESTIC_{h,t}$** is a binary variable equal to one if there are FCPA enforcement activities targeting violations in host country h in year t-1 or year t, and all such violations are by domestic U.S. firms, and zero otherwise. **$HOST\_LN(GDP)_{h,t}$** is the natural log of GDP for host country h in year t-1 (in billions of U.S. dollars). **$HOST\_\Delta LN(GDP)_{h,t}$** is the change in the natural log of host country GDP from year t-1 to year t. It is approximately equal to the growth rate of host country GDP from year t-1 to year t. **$HOST\_RULE_{h,t}$** is host country h's Rule of Law (ROL) index at year t from the Worldwide Governance Indicators (WGI) created by the World Bank. A high ROL index means better rules of society. According to WGI, ROL index "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence" (WGI, 2013 update). **$HOST\_LANGUAGE_{h}$** is an indicator variable equal to one if host country h's official language is English, and zero otherwise. **$HOST\_DISTANCE_{h}$** is the natural log of the distance between U.S. and host country h. This distance is "calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population)" for the host country and U.S. (Mayer and Zignago 2005). **$US\_\ \Delta LN(GDP)_{t}$** is the change in the natural log of U.S. GDP from year t-1 to year t. It is approximately equal to the growth rate of U.S. GDP from year t-1 to year t.