Transnational Legal Spillover? A Reappraisal of the OECD Anti-Bribery Convention*

Elizabeth Acorn University of Toronto Michael O. Allen Yale University

elizabeth.acorn@utoronto.ca

michael.allen@yale.edu

Last revision: February 17, 2022

Abstract

Can prosecutions by United States authorities help spread enforcement of anti-foreign bribery laws to other countries? In this article, we explore this question by re-examining an earlier study that found that US prosecutions of foreign defendants under the Foreign Corrupt Practices Act increases the likelihood that the defendant's home state will enforce its own anti-foreign bribery laws. Using a conditional frailty Cox model that allows us to model anti-foreign bribery enforcement actions as repeat-events, we find that the relationship reported in earlier scholarship does not hold. Instead, our research indicates that the exposure of states to risks of foreign bribery is an important and overlooked predictor of the likelihood of enforcement. Still, while our findings indicate a more limited role of US enforcement actions in this particular instance, we nonetheless see many promising avenues for future research on transnational law enforcement relating to bribery in international business and in other areas.

Word count: 6,586

^{*}For their helpful feedback on earlier drafts of this paper, the authors would like to thank Rachel Brewster, Kevin Davis, Danielle Gilbert, and Rachel Whitlark as well as the participants at 2019 Law and Society Annual Meeting, the 2019 Annual Meeting of the American Political Science Association, and the 2021 Roundtable on Evidence-Based Anticorruption Enforcement at NYU Law School.

1 Introduction

Criminal law has historically been quintessentially territorial and used by states to govern activity within their borders. But in a globalized world, criminal activity and law enforcement are increasingly transnational. Perhaps nowhere is this more apparent than foreign bribery. The crime of foreign bribery is itself transnational—prohibiting the payment of bribes to public officials of other countries. The investigation and prosecution of foreign bribery crimes also frequently cross borders, drawing on evidence and witnesses from multiple countries. Further, it is not only a business's home state—the country where it is incorporated—that investigates and prosecutes foreign bribery. Most notably, the United States has regularly deployed its anti-foreign bribery law, the Foreign Corrupt Practices Act ("FCPA"), to punish foreign corporations for the bribery of government officials in other countries.

The transnational dimension of foreign bribery, and in particular US enforcement of the FCPA against foreign defendants is the focus of this paper. The US was the first country in the world to prohibit foreign bribery with the adoption of the FCPA in 1977 and advocated for the spread of anti-foreign bribery laws to other countries through international instruments like the Organization for Economic and Cooperation and Development's ("OECD") 1997 Convention on Combatting the Bribery of Foreign Public Officials in International Business Transactions ("Anti-Bribery Convention" or "ABC"). Much of the world now criminally prohibits foreign bribery, but the enforcement of these prohibitions has been a persistent challenge. Apart from the US, and a handful of other states, many countries have failed to enforce these laws at all or have been slow to do so. Prosecutions of foreign defendants by the US could potentially change this, propelling other states to enforce their own anti-foreign bribery laws. Given the US's role in pioneering anti-foreign bribery laws, the expansive jurisdiction of the FCPA, and the long-standing attraction of US financial markets to corporations across the globe, the US is uniquely situated to potentially export not only foreign bribery laws, but also their enforcement.

Existing research provides support for the argument that US FCPA enforcement can propel foreign bribery enforcement in other states. In a 2011 article, Sarah Kaczmarek and Abraham Newman advanced what they termed the "spillover hypothesis." Specifically, the authors find that an FCPA prosecution against a foreign defendant is associated with an increased likelihood that the defendant's home country will enforce its own laws against foreign bribery. In this paper, we re-examine this finding using new data on enforcement of anti-foreign bribery laws. Here we similarly ask: do US FCPA prosecutions of foreign defendants make enforcement of anti-foreign bribery laws more likely in the defendant's home country?

Our results provide much more limited support for the spillover hypothesis and reach a more cautious conclusion about the role of US prosecutions in other states' anti-foreign bribery enforcement. Instead, we argue that the best predictor of a country's likelihood of enforcing its anti-foreign bribery laws is the country's risk of foreign bribery.

We reach this conclusion in three steps. First, we replicate Kaczmarek and Newman's research using updated data on FCPA and anti-foreign bribery enforcement through the end of 2018. With ten additional years of anti-foreign bribery enforcement and more consistent data, drawn from OECD sources, we are able to replicate their main finding that US FCPA enforcement is positively associated with a country's first use of its anti-foreign bribery laws. However, using our improved dataset we find that the magnitude of the effect of FCPA prosecution on another state's enforcement falls by roughly 80-85% from that estimated by Kaczmarek and Newman.

Next, we reconsider and alter an important modeling decision from Kaczmarek and Newman's work. This earlier research modeled enforcement of anti-foreign bribery laws by other OECD countries as a non-repeatable event, focusing only on the first time that a country enforces it anti-foreign bribery laws. However, we see drawbacks to this approach in truncating the available data and overlooking the importance of continued enforcement of anti-

^{1.} Kaczmarek and Newman 2011.

^{2. 747, 764.}

foreign bribery laws. Instead, we take a repeat-event approach that allows us to examine the impact of an FCPA prosecution on a country's subsequent enforcement of its anti-foreign bribery laws—that is, looking beyond the first time a country enforces these laws to the second, third, fourth, etc. foreign bribery enforcement action. By modeling anti-foreign bribery enforcement actions in this way, we find that the impact of FCPA enforcement further diminishes and is no longer statistically distinguishable from zero. Our estimates indicate that while FCPA enforcement may increase the odds of short-term or one-off enforcement, it has little lasting power.

Finally, we turn to consider an important and overlooked variable in the enforcement of a country's anti-foreign bribery laws: the country's risks of encountering corruption in international business. In short, we argue that enforcement of anti-foreign bribery laws is driven by the supply of cases, which is likely influenced by the degree to which the country's international business profile exposes it to corruption. We construct a variable of corruption exposure that measures countries' levels of exports to countries with high levels of corruption and include it in our preferred model. Once we account for corruption exposure, we find that FCPA enforcement against a foreign defendant is no longer a significant predictor of first or subsequent enforcement by the defendant's home state. Instead, we find that increasing exposure of a country's businesses to corruption increase the odds of its anti-foreign bribery enforcement.

The paper proceeds as follows. The next section introduces the FCPA and international efforts to combat bribery in international business, including long-standing challenges in enforcing anti-foreign bribery law across the OECD. Here we introduce the spillover hypothesis in more detail. We then explain why we think a revaluation of the spillover hypothesis is warranted. The paper then turns to our research design and analysis, first setting out our replication of Kaczmarek and Newman's findings with updated data. We move on to our preferred model to examine the impact of FCPA prosecutions of foreign defendants on anti-foreign bribery enforcement in home states, modelling anti-foreign bribery enforcement

actions as repeat-events and accounting for corruption exposure.

This research makes several important contributions. To start, it argues for caution regarding the commonly held belief in the spillover hypothesis as it pertains to transnational law enforcement, particularly in the area of anti-foreign bribery. We do not argue this is the end of the matter, however. Indeed, because our conclusions differ from prior empirical work on this question, we see many promising avenues for future research. For example, future research is needed to explore the relevant mechanisms and more fully conceptualize transnational law enforcement and its potential impact. Further, the paper contributes to research in this area by better aligning our modeling choices with relevant theory related to anti-foreign bribery enforcement and improving data transparency and reproducibility. Finally, the paper also has important policy implications. As our findings indicate that anti-foreign bribery enforcement is predicted by a country's exposure to corruption and risks of foreign bribery, it calls for greater nuance in how we assess the significance of enforcement. Low or even no anti-foreign bribery enforcement in countries with little exposure to corruption in international business is much less concerning than a similar enforcement pattern in a country with high exposure to corruption.

2 Existing Research: A Chronic Enforcement Problem and The Spillover Hypothesis

Foreign bribery laws are common today in many countries.⁴ The US was the first country to prohibit foreign bribery with the adoption of the FCPA in 1977. For other countries, their national anti-foreign bribery laws stem from commitments under international law, like the OECD Anti-Bribery Convention.⁵ The US championed the creation of the Anti-Bribery

^{3.} E.g., Spahn 2012; Hock 2019; Verdier 2020.

^{4.} Brewster and Dryden 2018, 239; Kennedy and Danielsen 2011, 5

^{5.} In addition to the OECD Anti-Bribery Convention, there are other regional conventions that target foreign bribery, such as the Organization for American States' 1997 Inter-American Convention Against Corruption, as well as the 2003 United Nation Convention Against Corruption.

Convention, which was signed in 1997 by the then 29-OECD member states, along with 5 other non-OECD states, and went into force in 1999.⁶ The core obligation of the Anti-Bribery Convention is found in Article 1, which requires state parties to enact national criminal prohibitions against the payment of bribes to foreign public officials to obtain a business advantage.⁷ As a treaty that binds the wealthy OECD countries that are the source of much of the world's foreign direct investment and exports, many see real promise in the Anti-Bribery Convention to "turn off the spigot" of bribery in international business.⁸

But while anti-foreign bribery laws are common today, the presence of these law has not consistently translated into enforcement. In fact, several scholars have noted a widespread lack of enforcement of these shared prohibitions against bribery in international business. Rachel Brewster and Christine Dryden sum up this assessment in a 2018 article on the OECD Anti-Bribery Convention: as they write, "under-enforcement has become the state of affairs." Or as the OECD's Secretary General described it in 2016, there is a "significant enforcement gap" in anti-foreign bribery enforcement across Anti-Bribery Convention states. 11

Data collected by the OECD on anti-foreign bribery enforcement illustrates this general "under-enforcement" or "gap" in the national enforcement of anti-foreign bribery laws; further, this data also shows inconsistent enforcement across the OECD, with some countries, notably the US, regularly completing dozens of enforcement actions in a single year while others complete handfuls or none. ¹² Particularly in the early years of the Anti-Bribery Convention's operation, anti-foreign bribery enforcement outside of the US was infrequent. By 2009, a decade into the Convention's operation, only 10 of the 33 original signatory states to

^{6.} Abbott and Snidal 2002; Wouters, Ryngaert and Cloots 2013.

^{7.} Article 1 of the Anti-Bribery Convention provides that: "Each Party shall take such measures as may be necessary to establish that it is a criminal offence under its law for any person intentionally to offer, promise or give undue pecuniary or other advantage...to a foreign public official...in order that the official act or refrain from acting in relation to the performance of official duties...to obtain or retain business or other improper advantage in the conduct of international business."

^{8.} Pieth and Labelle 2012.

^{9.} See e.g., Tarullo 2004; Gilbert and Sharman 2014; Brewster and Dryden 2018.

^{10.} Brewster and Dryden 2018, 239.

^{11.} Organization for Economic Cooperation and Development. *Anti-Bribery Ministerial Meeting: Towards a New Era of Enforcement*, Statement by Angel Gurria, Secretary General, 2016.

^{12.} See e.g., Working Group on Bribery 2020.

the Convention other the US had completed a single enforcement action for a foreign bribery crime. ¹³ Even now, more than two-decades into the Convention's operation, 8 of the original signatories to the Anti-Bribery Convention have yet to complete an enforcement action, while many other states have persistently low frequencies of foreign bribery enforcement. ¹⁴

In some ways, lackluster enforcement of anti-foreign bribery laws is not all that surprising. Prosecutions of complex economic crimes often perpetrated by sophisticated actors are challenging for law enforcement generally, and for foreign bribery—a crime that by definition has a cross-border component—investigating and prosecuting these cases can be costly in time and resources. What's more, states may not see an immediate short-term interest in bringing these cases, and instead face incentives that point in the other direction. While states undertook to criminalize foreign bribery by signing on to the OECD Convention, as Rachel Brewster explains, states nonetheless still face short-term economic incentives that encourage them not to prosecute national businesses. She writes that even with the OECD Convention in place "each state has an incentive to defect if other states are enforcing a ban on corruption" to allow its cross-border corporations to win competitive and lucrative foreign business opportunities. 15

It's with this context in mind that scholars have turned to the question of what might propel states to take the step from the adoption of anti-foreign bribery laws to their enforcement. One explanation that has emerged is that US prosecutions of foreign defendants can propel enforcement in the defendant's home country—the "spillover hypothesis." In a 2011 article, Kaczmarek and Newman find empirical support for this hypothesis, arguing that an FCPA prosecution of a foreign defendant makes it more likely that the defendant's home state will enforce its laws against foreign bribery in the future. US prosecutions of

^{13.} Canada, Germany, Hungary, Italy, Japan, South Korea, Norway, Sweden, Switzerland, the United Kingdom, and the United States had all completed at least one anti-foreign bribery enforcement action by the end of 2008, see Working Group on Bribery 2010.

^{14.} The Czech Republic, Greece, Iceland, Ireland, Mexico, New Zealand, Portugal, and Slovakia have yet to complete a foreign bribery enforcement action. See Working Group on Bribery 2020.

^{15.} Brewster 2014, 96.

^{16.} On the varied ways OECD countries have implemented their obligations under the Convention see Acorn 2018.

foreign defendants are possible thanks to the expansive jurisdictional reach provided for in the FCPA, which allows US prosecutors to bring cases not only against US citizens and corporations, but also many foreign corporations.¹⁷

In introducing the spillover hypothesis, Kaczmarek and Newman point to two motivating examples: Germany and the United Kingdom. As they point out, both these countries took on obligations to criminalize foreign bribery as original state parties to the OECD Anti-Bribery Convention; but, both of these countries only began enforcing their anti-foreign bribery laws after US authorities began foreign bribery cases against a British firm (BAE Systems) and a German firm (Daimler AG).¹⁸

Kaczmarek and Newman test the spillover hypothesis quantitatively on data they compiled from 1998–2008 of FCPA enforcement actions against foreign defendants and enforcement of anti-foreign bribery laws by the original OECD state signatories to the Anti-Bribery Convention. ¹⁹ Using a discrete event history analysis, Kaczmarek and Newman report that US prosecutions of foreign defendants have "a positive and statistically significant association with a country's likelihood of enforcing their own national [foreign bribery] laws." ²⁰ They estimate that an FCPA prosecution against a foreign defendant will increase the odds of the defendant's home country enforcing its anti-foreign bribery laws by over twenty times. The authors argue that what's happening is that US prosecutions of foreign defendants "unsettle weak enforcement equilibrium" in the home state by increasing the costs and uncertainty of maintaining a weak enforcement regime. ²¹ Specifically, the authors point to three mechanisms through which FCPA prosecutions of a foreign corporation could destabilize a low- or non-enforcement equilibrium in the home country. ²² First, US

^{17.} The FCPA prohibits foreign bribery by "issuers"—corporations with shares listed on an American exchange—which catches many foreign corporations within the FCPA. Further, a foreign corporation can also be prosecuted for violations of the FCPA if it "engage[s] in any act in furtherance of a corrupt payment…while in the territory of the United States." 15 U.S.C. §78dd-1 and 3(a).

^{18.} Kaczmarek and Newman 2011, 753-56.

^{19. 757.}

^{20.760.}

^{21.750.}

^{22. 750.}

prosecutions could alert firms in that country to the risk of punishment²³. Second, they could help generate institutional support and resources for national enforcement efforts. And third, by drawing attention to foreign bribery and the lack of enforcement in that country, such US prosecutions could even generate support for opposition parties and impact electoral outcomes. A key implication of this theory is that enforcement will increase after the low-enforcement equilibrium is broken. However, the authors only examine the time to initial enforcement, which gives us a limited picture of whether US prosecutions influence home country enforcement. We improve on this test below by examining the effect of FCPA prosecutions on subsequent enforcement patterns in home countries as well.

While Kaczmarek and Newman's 2011 article remains the only empirical examination of the spillover hypothesis in the context of transnational law enforcement of which we are aware, the logic of the argument remains prominent in recent scholarship. Elizabeth Spahn, for instance, argues that the US prosecutes foreign defendants for violations of the FCPA "to strengthen, or pressure...jurisdictions perceived as lagging, unable, or unwilling to prosecute their own national champions." A recent book by Pierre-Hugues Verdier describes the influence of US FCPA enforcement as follows: "by enforcing its laws against foreign firms, the United States was able to overcome a first-mover disadvantage and prompt a shift toward stronger anticorruption enforcement worldwide." Branislav Hock also argues in his 2019 book that FCPA enforcement can "incentivize non-US jurisdictions to step forward with their own anti-bribery enforcement." And yet, despite the dramatic increases in US enforcement against foreign firms over the last two decades, many OECD countries remain stuck within a low-enforcement equilibrium. In the next section, we discuss additional reasons to re-examine the spillover hypothesis given this context.

^{23.} See also, Griffith and Lee 2019.

^{24.} Spahn 2012, 42.

^{25.} Verdier 2020, 36.

^{26.} Hock 2019, 4, 8.

^{27.} Christensen, Maffett and Rauter 2020.

^{28.} Brewster and Dryden 2018.

3 Why Re-Examine? The Potential Limits of Spillover

More than twenty years after the creation of the OECD Anti-Bribery Convention and ten years after Kaczmarek and Newman's article was published, we see several important reasons to revisit the spillover hypothesis. To start, with another decade passed of the operation of the Anti-Bribery Convention, there is now more and better data on anti-foreign bribery enforcement in the US and across the Convention state parties. Notably, the OECD has been collecting and reporting data on anti-foreign bribery enforcement since 2008. The organization has also continued its country review process, which provides detailed descriptions of each county's implementation of the Convention, including enforcement.²⁹

In addition, revisiting the spillover hypothesis provides us with an opportunity to reconsider what drives national anti-foreign bribery enforcement generally and how we can best assess the role of US FCPA prosecutions in propelling enforcement in other states. Here we see two theoretical reasons to re-examine the spillover hypothesis, which lead us to modify how we test the spillover hypothesis from earlier research.

First, there is good reason to suspect some underlying common factor attracting both US and home-country prosecutors. Specifically, the same factors that make an FCPA enforcement action against a foreign corporation of a particular state more likely are also the same factors that make anti-foreign bribery enforcement by a state more likely. To begin to address this, we consider a variable overlooked in earlier research: the risks of a country's businesses to corruption. As noted above, both Germany and the UK completed their first anti-foreign bribery enforcement actions following US prosecutions of German and British defendants for foreign bribery related crimes, in 2005 and 2008, respectively. However, Germany and the UK are also both leading OECD economies, with significant integration into

^{29.} The OECD actively monitors the Anti-Bribery Convention's implementation through its review process. The review process is one of peer review, where states parties evaluate the Convention's implementation in other states parties. The OECD has completed three "rounds" of peer reviews and the fourth round is currently underway. Each round of review includes a detailed report on each country's implementation of the Convention, including foreign bribery enforcement actions in the country. For an overview of the OECD's review process see Bonucci 2013.

the global economy that likely brings exposure to corruption, instances of foreign bribery, and opportunities for enforcement by German and British authorities. All of which is to say, the UK and Germany may well have been both likely to attract the attention of US prosecutors and to enforce their own anti-foreign bribery laws because of their relatively high exposure to corruption globally.

Second, revisiting the spillover hypothesis allows us to examine anti-foreign bribery enforcement by OECD states as a repeat event. Earlier research examined the impact of a US FCPA prosecution of a foreign defendant only on initial enforcement. However, given that the spillover hypothesis contemplates that a US FCPA prosecution serves to destabilize a weak enforcement equilibrium in the defendant's home country, an empirical implication is that enforcement in the home country should also be more likely for subsequent enforcement actions. That is, once a weak enforcement equilibrium is unsettled by a US prosecution, we should expect the home country to keep enforcing its anti-foreign bribery laws. With the addition of more than a decade of data, we can now test this empirical implication of the spillover model.

Even more, there are practical policy reasons to explore the impact of a US FCPA prosecution of a foreign defendant beyond initial enforcement in the defendant's home state. As discussed above, more than 20 years into the operations of the OECD Anti-Bribery Convention, enforcement of anti-foreign bribery laws remains challenging. The Anti-Bribery Convention directs states to punish foreign bribery "by effective, proportionate and dissuasive criminal penalties" (Article 3(1)). Doing so requires consistent enforcement, not just one-time enforcement. And finally, revisiting this earlier research provides an opportunity to reconsider some of the other methodological choices made in previous research, which we turn to discuss next.

4 Data & Methods

We test our argument using a conditional frailty Cox model.³⁰ This approach enables us to model anti-bribery enforcement actions as repeat-events, in addition to allowing the rate of enforcement to vary as countries enforce their anti-foreign bribery laws more. Our sample runs from 1999 (the first year the Anti-Bribery Convention entered into force) to 2018 and includes the 29 OECD member-states that are original signatories of the ABC. Countries enter the sample either the year in which they become subject to the Convention or the year their implementing legislation enters into force, whichever is earlier.³¹ We next discuss our data before elaborating on our modeling decisions.

4.1 OECD Home Country Enforcement

We compile anti-foreign bribery enforcement data from both OECD peer-review monitoring reports³² as well as yearly statistical reports that are collected and published by the OECD's Working Group on Bribery in International Business Transactions.³³ As part of the peer-review process, representatives from Working Group member-states conduct on-site visits and interview relevant investigators and policymakers.³⁴ The Working Group also requests information on a variety of topics related to a country's implementation of its obligations under the Convention. These reviews are thus not only a thorough representation of cross-national implementation of the OECD Anti-Bribery Convention, but also carry real costs for the countries under review.³⁵ Because we rely exclusively on official data that has

^{30.} Box-Steffensmeier and De Boef 2006; Box-Steffensmeier, De Boef and Joyce 2007.

^{31.} For example, the Czech Republic enters the dataset in 1999 because that is the year its implementing legislation entered into effect, even though its obligations under the Convention did not enter into effect until March 2000. These dates are obtained from the OECD at https://www.oecd.org/daf/anti-bribery/WGBRatificationStatus.pdf.

^{32.} These reports can be found online at https://www.oecd.org/daf/anti-bribery/countryreportsontheimplementationoftheoecdanti-briberyconvention.htm

^{33.} The Working Group's enforcement data can be found at https://www.oecd.org/daf/anti-bribery/data-on-enforcement-of-the-anti-bribery-convention.htm. Archived versions of these reports are also on file with the authors and available upon request.

^{34.} For an overview of the monitoring process see Bonucci 2013.

^{35.} Jensen and Malesky 2018.

been either reported to the OECD by member states themselves or collected by members of the Working Group during the peer-review process, portions of our data differ (sometimes considerably so) from those used in prior work, which relied on unofficial reports compiled by Transparency International.

Following OECD practice, we include in our home country enforcement data any criminal action for foreign bribery that has reached a final disposition. This includes all charges for foreign bribery that were resolved through a negotiated resolution, plea bargain, or trial, even if the enforcement action led to an acquittal or is being appealed. Such a broad definition is appropriate for our purposes because we are interested in assessing the ability and willingness of local enforcement authorities to enforce. An acquittal, while in some sense a "failed" action, nevertheless demonstrates the ability of the local enforcement agency to identify, investigate and prosecute foreign bribery cases. Statutes of limitations point to another consideration. Italy, for example, has an onerous statutes of limitations. Many of the early anti-bribery cases in that country were thwarted by these laws. Excluding these cases would give the impression that Italian prosecutors were inactive, when in fact they were (compared to their OECD peers) quite active. We therefore consider an active enforcement agency to be one that is capable of regularly bringing cases to completion, regardless of the outcome of any given case. We assign a 1 for every year in which a given country brings a criminal case related to its foreign bribery laws to a final disposition and a 0 otherwise.

We code this variable in "enforcement-years" (i.e. a country-year is coded as 1 for a given year if the country concludes 1 or more cases that year) rather than yearly case counts because our goal is to measure patterns of enforcement over time. Case counts can be highly misleading. If we were to look only at the number of anti-bribery actions brought to completion, Hungary would come across as a highly active enforcer with over two dozen actions. All of these actions, however, came out of a single investigation, the Magyar Telekom case. For comparison, Finland has only enforced a handful of cases (some of which led to acquit-

^{36.} Working Group on Bribery 2011.

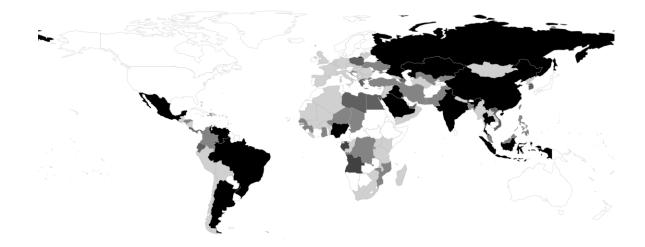


Figure 1: Distribution of Illicit Payments Subject to FCPA Enforcement Actions, 1995–2018

Note: Graph plots the distribution of FCPA enforcement actions by the country in which the illicit payment occurred. Darker shading indicates more enforcement actions. Data are derived from the Foreign Corrupt Practices Act Clearinghouse run by Stanford Law School and Sullivan & Cromwell LLP (https://fcpa.stanford.edu).

tals) but nevertheless initiates enforcement actions on a near yearly basis. We therefore code Hungary as a 1 for the first year in which the series of enforcement actions stemming from that investigation concluded (i.e. 2008) and a 0 thereafter, while Finland receives a 1 for each year during which it completed a new enforcement action (2009, 2011, 2013, 2014, 2015, 2016). Because the goal of the Anti-Bribery Convention is to promote regular enforcement over time, we believe that Finland's enforcement record is more in line with the consistent enforcement anticipated by the Convention. We therefore constructed a coding rule that best reflects that substantive determination. A complete break down of our coding decisions and sources can be found in Appendix B.

4.2 Measuring Exposure to Corruption

As we argue above, the relationship between FCPA extraterritorial prosecution and OECD home enforcement is likely to be subject to omitted variable bias as whatever factors in-

crease the odds of an FCPA enforcement action are also very likely to increase the odds of home enforcement. We argue that the main driver of ABC enforcement is the supply of cases: how at-risk each country's firms are to committing bribery. Scholars have found that the location of illicit payments subject to FCPA enforcement actions tend to cluster in countries with relatively high levels of corruption.³⁷ To demonstrate this we plot the cumulative number of illicit payments subject to FCPA enforcement actions per country from 1995-2018 (see Figure 1). Existing scholarship supports our contention that doing business in corrupt countries increases the risk of firms engaging in foreign bribery. For example, one study has found that firms operating in corrupt regimes experienced losses in firm value after the introduction of anti-foreign bribery laws in the UK.³⁸ Another study found that firms subject to the FCPA tended to increase internal control resources while acquiring firms in corrupt regimes after the dramatic expansion of FCPA enforcement in the mid-2000s.³⁹

To capture this underlying risk, we define our measure of *Corruption Exposure* as the log of the yearly value of a country's exports to countries with heightened risks of corruption. We assess the level of corruption in importing countries using the Corruption Index reported in the PRS Group's International Country Risk Guide (ICRG).⁴⁰ Any country with a yearly average at or below the Corruption Index's midpoint (3) is included in the set of high-risk countries for that year. We then sum the value of exports from each OECD country to all countries in this set every year. Export data is taken from the IMF Direction of Trade Statistics.⁴¹

4.3 Extraterritorial FCPA Enforcement

We obtained data on extraterritorial FCPA enforcement actions from the Foreign Corrupt Practices Act Clearinghouse run by Stanford Law School and Sullivan & Cromwell LLP. We

^{37.} Choi and Davis 2014; Lippitt 2013.

^{38.} Zeume 2017.

^{39.} Christensen, Maffett and Rauter 2020.

^{40.} These data are not publicly available but can be purchased from the PRS Group at https://www.prsgroup.com/explore-our-products/international-country-risk-guide/.

^{41.} A plot of each country's yearly exports to risky countries is included in Appendix C

focus on prosecutions against firms incorporated outside of the United States; this means that we include foreign subsidiaries of US parents only when the subsidiary itself is a named defendant. We estimate the model using both the earliest known start date of the investigation and the date the enforcement action was resolved. To identify an investigation date, we searched SEC disclosures to identify the first date on which the defendant first publicly disclosed that they were subject to an FCPA investigation.

4.4 Additional Variables

We also control for a variety potential confounders. Countries that are more integrated into global markets may face greater demand for anti-bribery enforcement. We therefore include measures of outward stock of foreign direct investment as a percentage of GDP from the United Nations Conference on Trade and Development's UNCTADstat service as well as trade dependence (imports + exports / GDP), obtained from the World Bank's World Development Indicators. Per capita GDP and inflation (consumer price index) are also taken from the World Bank World Development Indicators. Following Kaczmarek and Newman, we also include measures of *Protestantism* (percent of the population that is Protestant), *Common Law*, ⁴² and a dummy indicating whether a country has transitioned from a command economy.

To account for the potential of mounting peer-pressure through the OECD to increase enforcement against foreign bribery we include dummy variables representing when countries have undergone OECD reviews. ⁴³ We identify when countries undergo Phase 2 reviews, which evaluated the adequacy of each country's implementing legislation, and Phase 3 reviews, which focused more on enforcement. Each country report includes an enumerated list of recommendations to which countries are required to respond. Another source of enforcement pressure may come from increased enforcement by peer countries. We therefore include a term indicating the percentage of OECD states that have enforced their foreign

^{42.} Protestantism and Common Law are taken from La Porta et al. 1999.

^{43.} Jensen and Malesky 2018.

bribery laws at least one time.

4.5 Home Enforcement as a Repeat-event

Prior research has modeled home enforcement of the ABC as a non-repeatable event. 44 This modelling decision has at least two drawbacks. First, it is inefficient. Because Kaczmarek and Newman only estimate initial enforcement, they discard information on enforcement patterns that occur after the first enforcement action (our approach increases the number of observations in the analysis by over 40%). Such a decision is defensible under the assumption that time to initial enforcement is representative of subsequent enforcement patterns. Truncating the dataset, however, prevents us from determining whether whatever factors are associated with increased initial enforcement persist beyond that first enforcement action. We present evidence below that this assumption may be unwarranted. Second, the Anti-Bribery Convention requires "effective, proportionate, and dissuasive" sanctions for foreign bribery (Article 3(1)), which relies on consistent, not one-time, enforcement by states. Countries differ in their propensity to enforce even within the subset of countries that enforce at all. For example, the single-state approach treats Germany (which enforces essentially every single year) as similar to Hungary (which has only enforced in one year) simply because their initial enforcement actions were close together in time (2005 and 2008, respectively). Incorporating subsequent enforcement data allows us to discriminate between persistent enforcers (like Germany) and one-off enforcers (like Hungary).

The repeat-event approach provides three advantages over prior work. First, it allows us to model enforcement of the Anti-Bribery Convention as a *recurring* process, as opposed to a single, one-off event. Second, we can adjust for changes in the baseline hazard conditional on enforcement experience.⁴⁵ This is necessary because it may be the case that enforcement becomes more likely as states enforce more due to the development of greater institutional expertise, funding, etc. To capture this process, we allow the baseline hazard

^{44.} Kaczmarek and Newman 2011.

^{45.} Box-Steffensmeier and De Boef 2006; Box-Steffensmeier, De Boef and Joyce 2007.

to shift by stratifying the model on prior enforcement levels. Third, we can evaluate empirically Kaczmarek and Newman's implicit assumption that the first enforcement action is representative of later enforcement actions. We do this by interacting the FCPA variable with a dummy variable indicating whether the country has previously been subject to an FCPA enforcement action. This allows us to estimate the effect of FCPA enforcement on home enforcement conditional on varying levels of prior enforcement. If the first action is representative of later actions, then these coefficients should be of similar magnitudes. In sum, this modelling approach thus both allows us to incorporate a larger data set while also granting us the flexibility to identify how the effect of FCPA enforcement might change (or not) over time.

Another important decision in event history models is how to incorporate time. Because our aim is to estimate the regularity of enforcement, we estimate the time-to-enforcement for each enforcement-year, with the clock resetting upon each enforcement-year. This is commonly referred to as a gap-time approach. That is, we are estimating the time it takes to enforce since either a) entry into the data set or b) a country's previous enforcement action. That is, a country does not enter the "at risk" group for the kth enforcement action until it has completed action k-1.

Finally, there may be some unobserved, time-invariant country-level factors that make some countries more prone to enforce than others. To help reduce bias induced by within-country correlation, we include a country-level random effects (or "frailty") term that we estimate using the EM algorithm. In summary, we estimate a stratified Cox model with country-level frailties, or a "conditional frailty" model⁴⁶ of the following form:

$$\lambda_{ik}(t) = \lambda_{0k}(t - t_{k-1})e^{\beta_1 \text{FCPA} + \beta_2 \text{Corr. Exp.} + \beta_p \mathbf{X} + \omega_i}$$
(1)

 λ_{0k} represents the baseline hazard that varies by enforcement action k using a gap time structure, i.e. $(t-t_{k-1})$. **X** is a vector of time-varying independent variables and β_p is a

^{46.} Box-Steffensmeier and De Boef 2006; Box-Steffensmeier, De Boef and Joyce 2007.

vector of coefficients; ω_i represents the country-level frailty term.

5 Analysis

Column 1 from Table 1 reports the results from our reanalysis of Kaczmarek and Newman using our updated and corrected data. As a reminder, in this baseline model we follow their approach by modelling enforcement of anti-foreign bribery laws as a single, non-recurring event (i.e. countries drop out of the data set after their first home enforcement) rather than a recurring process. Under this assumption, we successfully replicate their main finding: US FCPA enforcement is positively associated with a country's *first* home enforcement action. Our model's estimated effect size, however, is highly attenuated by comparison. Kaczmarek and Newman report an increase in the probability of home enforcement after a defendant from a particular country has been subject to a FCPA enforcement action by a factor of over twenty.⁴⁷ We instead estimate a more modest 4.5 times (= $e^{1.51}$) increase over the base rate in the odds of initial home enforcement conditional on FCPA enforcement.

We next test the assumption that the *first* enforcement action is representative of a country's long-term commitment to enforcement. To do that, we estimate our gap-time model and stratify the model on whether a country has enforced the Convention or not. This allows for the baseline hazard rate to vary between countries that have not enforced before and those that have. By interacting the FCPA indicator with the stratum indicator, we also estimate the effect of FCPA enforcement conditional on whether a country has previously enforced. Column 2 presents the results. We estimate that the change in the probability of initial home-country enforcement (after it has experienced FCPA enforcement) decreases further to about 2.92 times (= $e^{1.07}$) or roughly 14% the magnitude of K&N's estimate. The coefficient on FCPA_{k≥1} (i.e. the subset of countries that have already enforced anti-foreign bribery laws), however, falls in magnitude and is no longer statistically distinguishable from zero. These estimates indicate that while FCPA enforcement may increase the odds of short-term

 $^{47.} e^{3.05} = 21.12$. See Model 1 in Table 1, Kaczmarek and Newman 2011, 761.

Event type:	Single	Repeat			
	(1)	(2)	(3)	(4)	(5)
FCPA	1.51**			0.23	0.33
	(0.60)			(0.34)	(0.33)
$FCPA_{k=0}$		1.07^{**}	0.46		
		(0.51)	(0.54)		
$FCPA_{k\geq 1}$		0.59	0.22		
		(0.37)	(0.38)		
Corruption Exposure			0.55***	0.58***	0.56***
			(0.14)	(0.16)	(0.14)
Total Trade/GDP	-0.01	-0.00	-0.00	-0.00	-0.00
	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)
FDI Stock/GDP	0.00	0.00	0.00	0.00	0.00
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
OECD Emulation	-0.28**	0.00	0.01	0.01	0.01
	(0.13)	(0.02)	(0.02)	(0.02)	(0.02)
Peer Review _{Phase 2}	1.15	1.06	0.80	0.72	1.50^{*}
	(1.14)	(0.87)	(0.88)	(0.92)	(0.77)
Peer Review _{Phase 3}	-0.61	0.06	-0.08	-0.16	-0.09
	(1.39)	(0.42)	(0.43)	(0.46)	(0.43)
ln GDP per cap.	2.04**	0.05	0.36	0.40	0.38
	(0.94)	(0.46)	(0.50)	(0.52)	(0.50)
CPI	0.07	-0.01	0.04	0.06	0.02
	(0.06)	(0.07)	(0.06)	(0.05)	(0.06)
% Protestant	-0.01	-0.00	0.01	0.01	0.01^{*}
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Common Law	-1.74**	0.14	0.45	0.53	0.49
	(0.88)	(0.32)	(0.33)	(0.35)	(0.32)
Transition	1.10	-1.24	-0.77	-0.74	-0.72
	(1.49)	(1.15)	(1.17)	(1.18)	(1.16)
Strata	None	$\{0,\geq 1\}$	{0,≥1}	k	None
Enforcement years	18	87	87	87	87
Countries	29	29	29	29	29
Observations	397	560	560	560	560
Log Likelihood	-44.59	-305.78	-298.53	-161.65	-311.34

^{***} p < 0.01; ** p < 0.05; * p < 0.1

Table 1: Main Results

or one-off enforcement, it has little lasting power.

Next, we estimate our preferred model that accounts for each country's exposure to corruption. Adjusting for these factors causes the estimated coefficients on FCPA enforcement to become statistically and substantively insignificant. The estimated magnitudes of the FCPA coefficients fall to 0.46 (k = 0) and 0.22 ($k \ge 1$), though these estimates are indistinguishable from zero. We see, however, that the coefficient on *Corruption Exposure* is highly significant and substantively important. A log point increase in corruption exposure is estimated to increase the odds of enforcement by nearly $1.7x = e^{0.55}$.

Because we find no statistical difference between the FCPA estimates across strata in Model 3, we re-estimate the model without the interaction term in the remaining models. In Model 4, we stratify by every enforcement action (i.e. rather than a strata for k = 0 or $k \ge 1$, we include strata for all k). The results are largely unchanged for the Corruption Exposure variable. Model 5 presents the results for an unstratified model. Again, the substantive results remain unaffected. The decreased model fitness of Model 5 relative to the stratified models suggests that the baseline hazard does vary across levels of enforcement history. In sum, our findings suggest that FCPA prosecution have minimal lasting impact on other OECD countries' levels of anti-foreign bribery enforcement.

One last point to consider here is what our findings indicate about the mechanisms of spillover. Previous research pointed to three mechanisms through which US FCPA prosecutions of foreigners could spur increased anti-foreign bribery enforcement in the defendant's home country: raising awareness among private actors, generating increased support for home country enforcement, and influencing electoral outcomes to favor opposition parties. The mechanisms reflect an assumption that US FCPA prosecutions would have a positive impact on home country enforcement, operating to destabilize low enforcement equilibria. But our results suggest that this need not be the case. We can imagine how some of the proposed mechanisms—like increased attention to foreign bribery crimes—could actually stall

^{48.} This estimate is consistent across countries that have and have not experienced FCPA enforcement actions. See Table D2 in the Appendix.

or prevent home country enforcement if the attention mobilized domestic support to protect national champions or opposition to the dedication of public resources to punish bribery of foreign government officials. Further, our findings suggest that other mechanisms may be at play. For instance, the US's expansive enforcement of the FCPA may serve as an institutional substitution for foreign bribery. That is, FCPA prosecutions of foreign corporations can fill in for the absence of political will or effective local institutions to prosecute foreign bribery in other countries;⁴⁹ or, other countries may simply decide to allow experienced US investigators and prosecutors to take on complex and costly foreign bribery cases. In short, our findings leave open the possibility that the mechanisms of spillover operate in ways unexpected by previous research, or that there are additional mechanisms of spillover that may account for the null results presented here. As we turn to discuss now in the conclusion, closer attention to the mechanisms is one of several promising directions for future research.

6 Conclusion & Next Steps

In this paper, we have examined one area of transnational law enforcement: international anti-foreign bribery law. In contrast to earlier research that found that US FCPA prosecutions of foreign defendants can propel the defendants' home states to enforce their anti-foreign bribery laws, we find limited support for such a "spillover" of US enforcement. Rather, we find support for a simple explanation for anti-foreign bribery enforcement: a country's exposure to corruption in the global economy and supply of foreign bribery cases.

While our findings suggest a more cautious conclusion about the role of US prosecutions in other states' anti-foreign bribery enforcement, we nonetheless see much potential for further research in this area. Here we set out three directions for research, before ending with a discussion of the policy implications of our findings.

First, as suggested above, there is much that we do not know about the potential mech-

^{49.} Davis, Jorge and Machado 2015; Davis 2010.

anisms of spillover. Future research would be well-served by investigating this further, particularly through case studies of US FCPA prosecutions of foreign corporations and interviews with law enforcement and anti-foreign bribery professionals in the corporation's home country. Such research could open up the "black box" of prosecutorial decision-making and help us better understand if and how an American prosecution of a foreign corporation has relevance to the country's anti-foreign bribery enforcement.

A second promising avenue for future research lies in broadening what we conceptualize as "spillover" and shifting the dependent variable to look beyond home country enforcement. Here research should consider whether FCPA prosecutions of foreign defendants influence home countries in ways that do not necessarily relate to enforcement frequencies. US prosecutions of foreign corporations may spread American law to other countries, for instance, potentially helping account for the growing trend in the use of deferred prosecution agreements, which were pioneered in the US and are now common in many other OECD states. Future research should also consider possibilities for spillover beyond state actors and whether US FCPA prosecutions of foreign corporations alter the behavior of private actors, such as by propelling businesses in the home country to strengthen their corporate anti-bribery policies or self-report suspected wrongdoing.

Another direction for future research that we propose is to consider FCPA prosecutions of foreign corporations alongside other expansive applications of US law. While the FCPA is notable for the far-reaching jurisdiction that it creates, it is far from the only area where the US deploys its law and legal system to govern conduct outside of its borders. Scholars have described the "long arm" of American law in several contexts, including other areas of criminal law and securities law,⁵¹ competition law,⁵² and human rights law.⁵³ This creates opportunities for researchers to examine potential "spillover" effects in these areas as well. Even more, examining FCPA prosecutions among this broader class of far-reaching applica-

^{50.} Acorn 2021; Brewster and Ortiz 2020; Ivory and Søreide 2020.

^{51.} Koh 2019; Verdier 2020.

^{52.} Krisch 2014.

^{53.} Beale 2018.

tions of US law highlights law's potential role as a foreign policy instrument. US FCPA prosecutions of foreign corporations may be instances of "weaponized interdependence," where the US leverages its centrality to global markets to police bribery in international business and exert its influence abroad. This raises important unexplored questions concerning the expansive application of the FCPA, such as the strategic determinants of when and how the US pursues foreign bribery cases against foreign corporations as well as the consequences of these actions, including for foreign relations, international anti-foreign bribery law, and even notions of territoriality and norms concerning the legitimate reach of national law enforcement.

Finally, the findings from this paper have important policy implications both for debates over the desirability of the expansive application of the FCPA⁵⁵ and the persistent challenges of enforcement under the OECD Anti-Bribery Convention. Our research indicates that there is insufficient evidence to justify FCPA prosecutions of foreign corporations on the grounds that they will spread anti-foreign bribery enforcement to other countries. However, this is not the only rationale for FCPA prosecutions of foreign corporations. These US prosecutions may well be identifying and punishing instances of bribery in international business that would otherwise go unnoticed. What's more, if part of what helps to explain the absence of a spillover effect is institutional substitution and that some OECD countries are simply allowing the US to cover the field in policing bribery in international business, this suggests an ongoing need for US FCPA prosecutions of foreign corporations. It also suggests that organizations like the OECD and Transparency International that monitor the implementation of the OECD Anti-Bribery Convention, may need to re-think what underenforcement looks like, and whether deferring to US enforcement is an acceptable form of anti-foreign bribery enforcement.

^{54.} Farrell and Newman 2019; Kalyanpur and Newman 2019.

^{55.} See e.g., Barkow and Perry 2014.

References

- Abbott, Kenneth, and Duncan Snidal. 2002. "Values and Interests: International Legalization in the Fight against Corruption". *The Journal of Legal Studies* 31 (S1): S141–77.
- Acorn, Elizabeth. 2018. "Twenty Years of the OECD Anti-Bribery Convention: National Implementation and Hybridization". *UBC Law Review* 51 (3): 613–670.
- Acorn, Elizabeth. 2021. "Behind the SNC-Lavalin Scandal: The Transnational Diffusion of Corporate Diversion". *Canadian Journal of Political Science* 54 (4): 892–917.
- Barkow, Anthony S., and Anne Cortina Perry. 2014. "American Prosecutorial Imperialism?" *Litigation* 41:28–33.
- Beale, Sara Sun. 2018. "The Trafficking Victim Protection Act: The Best Hope for International Human Rights Litigation in the U.S. Courts?" Case Western Reserve Journal of International Law 50:17–48.
- Bonucci, Nicola. 2013. "Monitoring and Follow-Up". In *The OECD Convention on Bribery:* A Commentary, edited by Mark Pieth, Lucinda A. Low and Nicola Bonucci, 534–76. Cambridge: Cambridge University Press.
- Box-Steffensmeier, Janet M., and Suzanna De Boef. 2006. "Repeated Events Survival Models: The Conditional Frailty Model". *Statistics in Medicine* 25:3518–3533.
- Box-Steffensmeier, Janet M., Suzanna De Boef and Kyle A. Joyce. 2007. "Event Dependence and Heterogeneity in Duration Models: The Conditional Frailty Model". *Political Analysis* 15:237–256.
- Brewster, Rachel. 2014. "The Domestic and International Enforcement of the OECD Anti-Bribery Convention". *Chicago Journal of International Law* 15 (1): 84–109.
- Brewster, Rachel, and Christine Dryden. 2018. "Building Multilateral Anticorruption Enforcement: Analogies between International Trade & Anti-Bribery Law." Virginia Journal of International Law 57:221–63.
- Brewster, Rachel, and Andres Ortiz. 2020. "Never Waste A Crisis: Anticorruption Reforms in South America". *Virginia Journal of International Law* 60:531–570.
- Choi, Stephen J., and Kevin E. Davis. 2014. "Foreign Affairs and Enforcement of the Foreign Corrupt Practices Act". *Journal of Empirical Legal Studies* 11 (3): 209–445.
- Christensen, Hans B., Mark Maffett and Thomas Rauter. 2020. "Policeman of the World: The Impact of Extraterritorial FCPA Enforcement on Foreign Investment and Internal Controls". Working Paper.
- Davis, Kevin E. 2010. "Does the Globalization of Anti-Corruption Help Developing Countries?" In *International Economic Law, Globalization and Developing Countries*, edited by Julio Faundez and Celine Tan, 283–306. Northmapton, MA: Edward Elgar.

- Davis, Kevin E., Guillermo Jorge and Maíra R Machado. 2015. "Transnational Anticorruption Law in Action: Cases from Argentina and Brazil". *Law & Social Inquiry* 30 (3): 664–699.
- Farrell, Henry, and Abraham L. Newman. 2019. "Weaponized Interdependence: How Global Economic Networks Shape State Coercion". *International Security* 44 (1): 42–79.
- Gilbert, Jo-Anne, and J. C. Sharman. 2014. "Turning a Blind Eye to Bribery: Explaining Failures to Comply with the International Anti-corruption Regime". *Political Studies* 64 (1): 74–89.
- Griffith, Sean J, and Thomas H. Lee. 2019. "Toward an Interest Group Theory of Foreign Anti-Corruption Laws". *University of Illiois Law Review* 4:1227–1266.
- Hock, Branislav. 2019. Extraterritoriality and International Bribery. Routledge.
- Ivory, Radha, and Tina Søreide. 2020. "The International Endorsement of Corporate Settlements in Foreign Bribery Cases." *International and Comparative Law Quarterly* 69 (4): 1–34.
- Jensen, Nathan M., and Edmund J. Malesky. 2018. "Nonstate Actors and Compliance with International Agreements: An Empirical Analysis of the OECD Anti-Bribery Convention". *International Organization* 72:33–69.
- Kaczmarek, Sarah C., and Abraham L. Newman. 2011. "The Long Arm of the Law: Extraterritoriality and the National Implementation of Foreign Bribery Legislation". *International Organization* 65 (4): 745–770.
- Kalyanpur, Nikhil, and Abraham L. Newman. 2019. "Mobilizing Market Power: Jurisdictional Expansion as Economic Statecraft". *International Organization* 73 (1): 1–34.
- Kennedy, David, and Dan Danielsen. 2011. Busting Birbery: Sustaining the Global Momentum of the Foreign Corruption Practices Act. New York: Open Society Foundation.
- Koh, Steven Arrigg. 2019. "Foreign Affairs Prosecutions". New York University Law Review 94:340–401.
- Krisch, Nico. 2014. "The Decay of Consent: International Law in an Age of Global Public Goods". *The American Journal of International Law* 108, no. 1 (January): 1–40.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny. 1999. "The Quality of Government". *The Journal of Law, Economics, and Organization* 15 (1): 222–279.
- Lippitt, Anne H. 2013. "An Empirical Analysis of the Foreign Corrupt Practices Act". Virginia Law Review 99 (8): 1893–1930.
- Pieth, Mark, and Huguette Labelle. 2012. Making Sure That Bribes Don't Pay, December.
- Spahn, Elizabeth. 2012. "Multijurisdictional Bribery Law Enforcement: The OECD Anti-Bribery Convention". Virginia Journal of International Law 53:1–52.

- Tarullo, Daniel. 2004. "The Limits of Institutional Design: Implementing the OECD Anti-Bribery Convention". *Virginia Journal of International Law* 44:665–710.
- Verdier, Pierre-Hugues. 2020. Global Banks on Trial: U.S. Prosecutions and the Remaking of International Finance. Oxford: Oxford University Press.
- Working Group on Bribery. 2010. 2009 Enforcement of the Anti-Bribery Convention. Report. OECD.
- Working Group on Bribery. 2011. Phase 3 Report on Implementing the OECD Anti-Bribery Convention in Italy. Report. OECD.
- Working Group on Bribery. 2020. 2019 Enforcement of the Anti-Bribery Convention. Report. OECD.
- Wouters, Jan, Cedric Ryngaert and Ann Sofie Cloots. 2013. "The International Legal Framework against Corruption: Achievements and Challenges". *Melbourne Journal of International Law* 14:1–76.
- Zeume, Stefan. 2017. "Bribes and Firm Value". *The Review of Financial Studies* 30 (5): 1457–1489.

Appendix

Table of Contents

A Summary Statistics and Data Sources	2
B OECD Home Enforcement Data	3
C Additional Information on Corruption Exposure Measure	6
D Alternative Specifications	9
D.1 Main Specification with Four Strata	. 9
D.2 Corruption Exposure, Strata Interaction	. 10
D.3 Complete FCPA Investigations	. 11
E Predicted Enforcement Rates	12

A Summary Statistics and Data Sources

Variable	Mean	SD	Min	Max	Source
Home Enforcement	0.16	0.36	0.00	1.00	OECD
FCPA	0.35	0.48	0.00	1.00	Foreign Corrupt Practices Act Clearinghouse
log Corruption Exposure	24.22	1.47	19.21	27.11	IMF Direction of Trade Statistics and ICRG
Trade Openness	91.42	56.89	18.35	408.36	World Bank, World Development Indicators
FDI Stock / GDP	46.61	59.82	0.16	415.15	UNCTAD
OECD Emulation	31.38	21.89	0.00	67.86	OECD
Peer Review 2	0.67	0.47	0.00	1.00	OECD
Peer Review 3	0.32	0.47	0.00	1.00	OECD
log GDP per capita	10.42	0.62	8.95	11.63	World Bank, World Development Indicators
CPI	2.87	5.12	-4.48	64.87	World Bank, World Development Indicators
Protestant	26.30	33.16	0.00	97.80	La Porta et al. 1999
Common Law	0.17	0.38	0.00	1.00	La Porta et al. 1999
Transition Economy	0.11	0.31	0.00	1.00	CIA World Factbook

B OECD Home Enforcement Data

Home enforcement data was collected from various OECD sources including official enforcement data collected by the OECD's Working Group on Bribery (WGB) as well as individual country reports. In the table below, we provide citations for each year during which a country enforced the Anti-Bribery Convention (i.e. a case reached a final disposition).

Country	Year	Source
Australia	2017	Phase 4 follow up, p. 34
	2018	Phase 4 follow up, p. 33
Belgium	2013	"EU cereals subsidies," Phase 3, p. 10
	2016	WGB Data, 2017
	2017	WGB Data, 2018
Brazil	2017	WGB Data, 2018
Bulgaria	2004	Phase 3, p. 7
Canada	2005	Phase 3, p.9
	2011	WGB Data, 2012
	2013	WGB Data, 2014
	2014	WGB Data, 2015
	2017	WGB Data, 2018
Chile	2016	Phase 4, p. 81
	2018	WGB Data, 2019
Finland	2009	"Wärstilä," Phase 4, p. 50
	2011	"Patria (Slovenia)." Phase 4, p. 49
	2013	"Instrumentarium," Phase 4, p. 48
	2013	"Patria," Phase 4, p. 49
	2014	WGB Data, 2015
	2015	WGB Data, 2016
	2016	WGB Data, 2017
France	2008	"Congolese sports," Phase 3, p. 85
	2009	"Leading group," Phase 3, p. 85
	2009	"Petrolem," Phase 3, p. 86
	2010	"Equipments import," Phase 3, p. 86
	2011	"Hydraulic drilling," Phase 3, p. 86
	2011	"Leading group," Phase. p. 85
	2013	WGB Data, 2014
	2015	WGB Data, 2016
	2017	WGB Data, 2018
	2018	WGB Data, 2019
Germany	2005	
	2006	
	2007	

Continued on next page

Country	Year	Source
	2008	
	2009	WGB Data, 2010
	2010	WGB Data, 2011
	2011	WGB Data, 2012
	2012	WGB Data, 2013
	2013	WGB Data, 2014
	2014	WGB Data, 2015
	2015	WGB Data, 2016
	2016	WGB Data, 2017
	2017	WGB Data, 2018
	2018	WGB Data, 2019
Hungary	2008	"Magyar Telekom," Phase 4, p. 9
Italy	2008	"Oil for Food," Phase 3, p. 64
	2008	"Oil company," Phase 3, p. 72
	2009	"Libyan Arms Traffickers," Phase 3, p. 66
	2010	"Pirelli," Phase 3, p. 68
	2011	"COGIM," Phase 3, p. 71
	2011	"Oil company," Phase 3, p. 72
	2014	WGB Data, 2015
	2015	WGB Data, 2016
	2017	WGB Data, 2017
	2018	WGB Data, 2018
Japan	2007	Phase 4, p. 10
	2009	Phase 4, p. 10
	2013	Phase 4, p. 10
	2014	Phase 4, p. 10
	2018	Phase 4, p. 11
Korea, Rep. of	2011	"BUSAN SHIPPING," Phase 4, p. 82
	2012	"China Eastern," Phase 4, p. 85
	2012	"Filipino Casion," Phase 4, p. 85
	2016	"CCTV," Phase 4, p. 81
	2018	"HANWHA," Phase 4, p. 81
	2018	"FELDA," Phase 4, p. 82
Luxembourg	2013	WGB Data, 2014
Netherlands	2012	"Ballast Nedam," Phase 4, p. 11
	2014	"SBM Offshore," Phase 4, p.11
	2016	"Vimpelcom," Phase 4, p. 11
	2017	"Teliasonera," Phase 4, p. 12
Norway	2004	"Statoil," Phase 3, p. 8
	2007	"Research Company," Phase 3, p. 9
	2011	"Norconsult," Phase 4, p. 10

Continued on next page

Table B1: List of OECD Home Enforcement Years

Country	Year	Source
	2014	"Cabu Chartering," Phase 4, p. 11
	2014	"Yara International," Phase 4
Spain	2017	WGB Data, 2018
Sweden	2004	"World Bank Case," Phase 3, p. 55
	2013	Phase 3 (2014, follow up)
	2015	WGB Data, 2016
	2016	WGB Data, 2017
Switzerland	2001	Phase 2, p. 56
	2010	Phase 3, p. 55
	2011	"Alstom Network," Phase 3, p. 56
	2014	WGB Data, 2015
	2016	WGB Data, 2017
	2018	WGB Data, 2019
Turkey	2011	"Military Supply Case," Phase 3, p. 11 + WGB Data, 2012
United Kingdom	2008	Phase 3, p. 73
	2009	Phase 3, p. 73
	2010	WGB Data, 2011
	2012	WGB Data, 2013
	2013	WGB Data, 2014
	2014	WGB Data, 2015
	2015	WGB Data, 2016
	2016	WGB Data, 2017
	2017	WGB Data, 2018
	2018	WGB Data, 2019

Table B1: List of OECD Home Enforcement Years

C Additional Information on Corruption Exposure Measure

The *Corruption Exposure* variable is defined as the sum of the total value of exports (on a free on board basis) from a given country to all countries with an ICRG Corruption score below the midpoint (i.e. a value of 3 or below) for a given year. To provide some substance to this cutoff point, Table C1 lists all of the counties included in the corruption exposure group for 2014. Exports to any of these countries in the year 2014 is included in that year's *Corruption Exposure* measure and exports to all other countries are excluded. Export data are taken from the International Monetary Fund's Direction of Trade Statistics. The resulting measure for each country is plotted in Figure C1.

Country	Corruption	Country	Corruption	Country	Corruption
Albania	2.17	Guinea-Bissau	1.46	Nigeria	1.50
Algeria	2.00	Guyana	1.50	Oman	2.54
Angola	1.46	Haiti	1.00	Pakistan	2.00
Argentina	2.00	Honduras	1.62	Panama	2.00
Armenia	1.54	Hungary	3.00	Papua New G.	2.00
Azerbaijan	1.50	India	2.50	Paraguay	1.62
Bahrain	3.00	Indonesia	3.00	Peru	2.00
Bangladesh	3.00	Iran	1.50	Philippines	2.50
Belarus	1.54	Iraq	1.00	Romania	2.04
Bolivia	2.00	Italy	2.50	Russia	1.50
Brazil	2.46	Jamaica	2.00	Saudi Arabia	2.54
Brunei	2.50	Jordan	2.54	Senegal	2.50
Bulgaria	2.04	Kazakhstan	1.50	Serbia	2.00
Burkina Faso	2.04	Kenya	1.50	Sierra Leone	2.00
Cameroon	2.00	Korea, DPR	1.00	Slovakia	2.54
China	2.00	Korea, Rep. of	3.00	Somalia	1.00
Colombia	2.50	Kuwait	2.54	South Africa	2.50
Congo	1.50	Latvia	2.54	Sri Lanka	2.50
Congo, DR	1.50	Lebanon	1.50	Sudan	0.50
Costa Rica	2.54	Liberia	2.50	Suriname	2.00
Croatia	2.08	Libya	1.00	Syria	1.46
Cuba	2.50	Lithuania	2.58	Taiwan	3.00
Czech Rep.	2.54	Madagascar	2.00	Tanzania	2.00
Côte d'Ivoire	1.58	Malawi	2.00	Thailand	2.00
Domin. Rep.	1.71	Malaysia	2.50	Togo	1.54
Ecuador	2.46	Mali	1.54	Trin. & Tobago	2.00
Egypt	2.00	Mexico	1.92	Tunisia	2.50
El Salvador	2.04	Moldova	2.00	Turkey	2.04
Ethiopia	2.00	Mongolia	2.00	Uganda	1.50
Gabon	2.00	Morocco	2.04	Ukraine	1.50
Gambia	2.00	Mozambique	2.00	Venezuela	1.00
Ghana	2.54	Myanmar	1.50	Vietnam	2.50
Greece	2.04	Namibia	3.00	Yemen	1.46
Guatemala	2.00	Nicaragua	1.50	Zambia	2.50
Guinea	1.50	Niger	1.50	Zimbabwe	1.00

Table C1: List of Countries with ICRG Corruption Scores at or below 3 in 2014

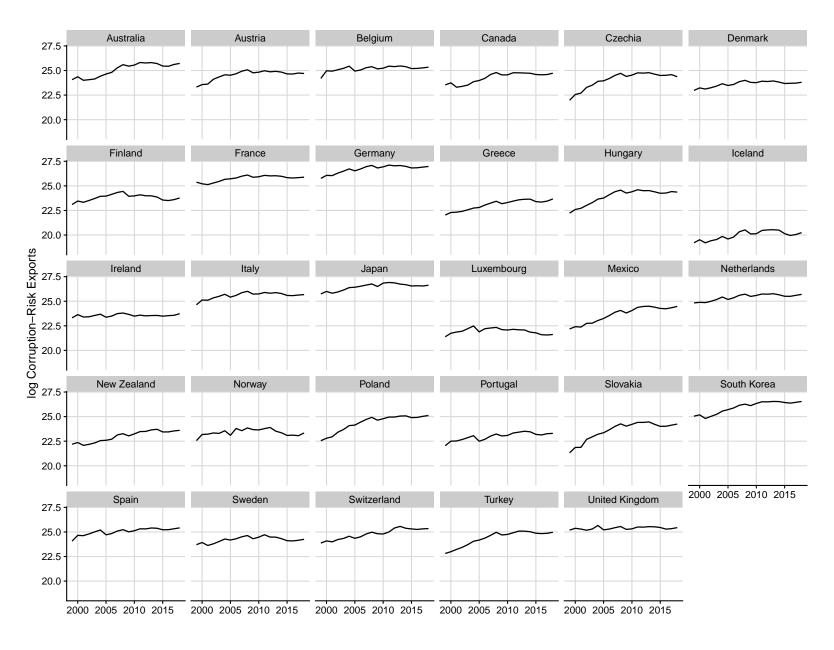


Figure C1: Corrupt Trade Exposure

D Alternative Specifications

D.1 Main Specification with Four Strata

	(1)
$\overline{\text{FCPA}_{k=0}}$	0.11
	(0.58)
$FCPA_{k=1}$	0.88
	(0.73)
$FCPA_{k=2}$	-0.35
	(0.74)
$FCPA_{k=3}$	-1.03
	(0.87)
$\mathrm{FCPA}_{k\geq 4}$	-0.22
	(0.70)
Corruption Exposure	0.77^{***}
	(0.20)
	•••
Strata	$\{0,1,2,3,\geq 4\}$
Controls	Yes
\mathbb{R}^2	0.06
Enforcement-Years	87
Observations	560
Countries	29
Log Likelihood	-225.45

^{***} p < 0.01; ** p < 0.05; * p < 0.1

Table D1: Four Strata

D.2 Corruption Exposure, Strata Interaction

	(1)
FCPA	0.21
	(0.36)
Corruption Exposure $_{k=0}$	0.73***
	(0.26)
Corruption Exposure _{$k \ge 1$}	0.67^{***}
	(0.22)
	•••
	•••
Strata	$\{0,\geq 1\}$
Controls	Yes
\mathbb{R}^2	0.06
Enforcement-Years	87
Observations	560
Countries	29

^{***} p < 0.01; ** p < 0.05; * p < 0.1

Table D2: Interacting Corruption Exposure and Strata

D.3 Complete FCPA Investigations

In the table below, we recode the year for our FCPA extraterritorial enforcement action variable using the year in which the action was completed. This may be a stronger test of the spillover hypothesis as a completed enforcement action will likely engender greater political attention within the target state than the mere announcement of an investigation.

	(1)	(2)	(3)
$\overline{ ext{FCPA}_{k=0}}$	1.54**	0.94*	0.25
	(0.66)	(0.53)	(0.31)
$FCPA_{k\geq 1}$		0.51	
		(0.36)	
Corruption Exposure			0.56^{***}
			(0.14)
	•••	•••	•••
Strata	None	$\{0,\geq 1\}$	$\{0,\geq 1\}$
Controls	Yes	Yes	Yes
\mathbb{R}^2	0.04	0.04	0.06
Enforcement-Years	18	87	87
Observations	397	560	560
Countries	29	29	29

 $^{^{***}}p<0.01;\ ^{**}p<0.05;\ ^{*}p<0.1$

Table D3: FCPA by Year of Completion

E Predicted Enforcement Rates

This table allows for comparison of the predicted yearly rate of enforcement against the observed rate, ordered by the difference between predicted and estimated enforcement rates.

Country	Observed	Predicted	Difference
Finland	0.29	0.14	0.15
United Kingdom	0.48	0.33	0.15
France	0.40	0.35	0.05
Belgium	0.14	0.10	0.05
Italy	0.40	0.36	0.04
Sweden	0.19	0.15	0.04
Luxembourg	0.05	0.03	0.03
Hungary	0.05	0.03	0.02
Canada	0.24	0.24	0.00
Iceland	0.00	0.00	-0.00
Mexico	0.00	0.01	-0.01
Slovak Republic	0.00	0.01	-0.01
Portugal	0.00	0.01	-0.01
Greece	0.00	0.01	-0.01
Spain	0.05	0.06	-0.01
Poland	0.00	0.01	-0.01
Turkey	0.05	0.07	-0.02
Czech Republic	0.00	0.02	-0.02
Switzerland	0.30	0.33	-0.03
Austria	0.00	0.03	-0.03
Germany	0.67	0.70	-0.03
New Zealand	0.00	0.03	-0.03
Ireland	0.00	0.04	-0.04
Japan	0.24	0.28	-0.04
Norway	0.19	0.25	-0.06
Denmark	0.00	0.09	-0.09
South Korea	0.19	0.28	-0.09
Netherlands	0.21	0.31	-0.10
Australia	0.10	0.21	-0.12

Table E1: Observed and Predicted Yearly Enforcement Rates