# Does Anti-bribery Enforcement Deter Foreign Investment?

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#### Abstract

We hand-collect data on individual FCPA enforcement actions initiated by the U.S. Department of Justice and use them in a panel difference-in-difference estimator to provide the first systematic empirical evidence that anti-bribery enforcement is followed by a reduction in U.S. fixed capital investments in countries targeted by enforcement actions.

KEYWORDS: Foreign Corrupt Practices Act, Multinational Firms, Cross-Border Mergers, Foreign Direct Investment, Anti-Bribery Legislation *JEL* CLASSIFICATION NUMBERS: F2, K2, G3

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#### 1. Introduction

The Foreign Corrupt Practices Act ("FCPA")<sup>1</sup> is one the most controversial laws affecting multinational firms (e.g., Lindsey (2009), Grimm (2010), Westbrook (2011), Yockey (2012)). The FCPA prohibits US corporations from making certain kinds of informal payments in foreign countries. A recent surge in enforcement during the past ten years (see Figure 1) has sparked a vigorous public debate about whether the FCPA discourages US companies from investing abroad.

The law's original congressional proponents argued that the FCPA would encourage foreign investment by providing US multinationals with a rationale for resisting foreign demands for informal payments, thus reducing the cost of doing business abroad (e.g., Koehler (2012)).



Figure 1. FCPA Enforcements Per Year<sup>2</sup>

At the same time, some scholars have argued that FCPA enforcement discourages international investments, for three reasons. First, in many developing countries informal payments substitute for the formal economic institutions familiar to enforcement officials in developed countries, implying that bans on informal payments reduce US companies' *de facto* access to foreign economic institutions (e.g., Yockey (2011)).

<sup>&</sup>lt;sup>1</sup>15 U.S.C. §§78dd-1, et seq.

<sup>&</sup>lt;sup>2</sup>Note: This table reports the number of distinct Department of Justice FCPA enforcement actions at the countryyear level. Thus, we count as two enforcements a situation where the DOJ brought a case against company X involving allegations of improper informal payments involving subsidiaries headquartered in countries A, and B, These data were hand collected from the Department of Justice Website.

Second, FCPA enforcement imposes direct costs on international investments through fines, profit disgorgement, and reputational degradation that occur when companies are targeted by the DOJ and SEC. Legal scholars have observed that the FCPA's wording is sufficiently vague that enforcement agencies possess enormous latitude when deciding which payments to classify as "bribes" (e.g., Salbu (1999)). This observation has led legal scholars to characterize recent FCPA enforcement patterns as unpredictable and arbitrary (e.g., Westbrook (2011), Koehler (2012)). US multinationals thus face nonzero expected fines when investing abroad. These enforcement risks predominate for cross-border acquisitions, which comprise the majority of foreign direct investment, in which a US company buys a foreign company outright. This is because the DOJ and SEC's doctrine of successor liability holds US acquirers liable for payments made by target firms headquartered in foreign countries, even if the informal payments were made years before the acquisition took place (e.g., Lindsey (2009), Grimm (2010)).<sup>3</sup>

Third, the lack of clarity regarding which informal payments trigger enforcement has led to increased defensive legal and due diligence spending by US multinationals that also raise the cost of investing abroad.

These three theoretical arguments have been supported with anecdotal evidence that FCPA enforcement has caused US companies to abandon international investments (Lindsey (2009), Koehler (2010), Grimm (2010)). For example, Lockheed Martin abandoned a proposed acquisition of Titan Corp. in 2004 due to an FCPA investigation involving previous bribery by Titan in Benin.<sup>4</sup>

Despite the presence of these anecdotal and theoretical arguments, there are no studies that have systematically shown whether FCPA enforcement deters foreign fixed investment. The lack of empirical evidence is understandable given that the FCPA was virtually unenforced during the first twenty years of its existence. The recent surge in enforcement implies that FCPA stringency is time-varying, so traditional difference-in-difference estimators using the law's passage in 1977 are unlikely to be econometrically informative (e.g. Hines (1995), Cuervo-Cazurra (2008)).

We overcome this challenge by hand-collecting information about every instance of FCPA enforcement by the US Department of Justice, and this provides us with time- and cross-sectional variation in FCPA enforcement intensity. We then construct a panel of bilateral cross-border acquisitions and implement a panel difference-in-difference specification that controls for a variety of

<sup>&</sup>lt;sup>3</sup>See FCPA Release 2003-01, available at: http://www.justice.gov/criminal/fraud/fcpa/opinion/2003/0301.pdf

<sup>&</sup>lt;sup>4</sup>Renae Mearle, Lockheed Martin Scuttles Titan Acquisition: San Diego Defense Advisor Fails to Settle Federal Bribery Investigation, Washington Post, June 27, 2004: http://www.washingtonpost.com/wp-dyn/articles/A8745-2004Jun26.html.

standard determinants of cross-border acquisitions along with country-pair and year fixed effects to estimate the impact of FCPA enforcement actions involving particular countries on the subsequent cross-border acquisition decisions of US companies with respect to these countries. Our estimates show that an FCPA enforcement action is associated with a 40 percent reduction in subsequent investment in the country targeted by DOJ enforcement actions. An important caveat is that our approach does not indicate the extent to which this reduction reflects a diversion of investments away from high-enforcement countries toward the US or toward other foreign countries that are less frequently targeted for enforcement by the Department of Justice.

#### 2. Empirical Specification

We implement the following difference-in-difference specification:<sup>5</sup>

$$CB_{jt} = \alpha + \beta FCPA_{jt} + \Omega X_{jt} + \tau_t + \tau_j + \varepsilon_{jt}, \tag{1}$$

where  $CB_{jt}$  is the number of acquisitions announced by U.S. acquirers in year t of targets headquartered in country j. The annual data is obtained from Thomson's *SDC Platinum* database and covers the period January 1, 1990 to January 1, 2010.

The variable  $FCPA_{jt}$  takes a value of unity in all years following the announcement of an FCPA enforcement action involving an acquisition announced by a U.S. company of a target headquartered in country j. We identified these enforcement activities by reading all FCPA case descriptions on the United States Department of Justice website, identifying those that involved a cross-border acquisition, and recording the date the enforcement action was made public and the nationality of the foreign target.

We control for a variety of standard determinants of bilateral cross-border acquisitions (e.g. Stroup (2013)), including distance in miles between Washington, D.C. and the country's capital measured in logarithms, and indicator variables for whether the countries share a common language, share a physical border, or are both members of the World Trade Organization. We also control for the logarithm of country j's GDP and GDP per capita, country j's market capitalization as a percent of GDP, net domestic credit measured in logarithms and domestic lending rate, along with

<sup>&</sup>lt;sup>5</sup>Because our goal is to explain the impact of enforcement activity rather than to forecast cross-border acquisition behavior, we estimate the difference-and-difference specification (1) with heteroskedasticity and autocorrelationrobust standard errors rather than by forecasting with vector autoregressions. This approach focuses attention on the impact of prior FCPA enforcement actions while producing estimates robust to arbitrary forms of serial correlation (Wooldridge (2002)).

country j's resource-intensity measured as a country's natural resource output as a percentage of GDP. All specifications include year fixed effects. Additional specifications employ country-specific fixed effects and proxies for corruption including the World Bank's indices for ease of doing business, property rights protection, and legal rights.

Our main specification estimates (1) via a negative binomial model, because  $CB_{jt}$  is a count variable, though for robustness we will also report estimates using a Poisson model and ordinary least squares. All equations are estimated with appropriate standard errors robust to any form of heteroskedasticity and serial correlation (see p. 275 of Wooldridge (2002)).<sup>6</sup>

## 3. Results

The first column of Table 1 presents the results from a negative binomial version of Eq. (1) estimated via maximum likelihood. The estimated coefficient on prior FCPA litigation is negative and statistically significant, indicating that announcement of an FCPA enforcement activity involving country j is followed by fewer cross-border acquisitions of targets headquartered in that country. We compute the incidence rate ratio (irr) to interpret the economic magnitude of the estimated coefficient. The incidence rate ratio captures the percent decrease in cross-border acquisitions following an FCPA enforcement activity and is equal to 0.60, indicating that an FCPA enforcement activity is associated with a subsequent 40 percent reduction in the incidence of U.S. cross-border acquisitions of targets headquartered in that country. U.S. firms are thus significantly less likely to acquire foreign targets in countries that have been previously targeted by FCPA enforcement, consistent with the view that anti-bribery enforcement actions raise the cost of doing business for U.S. firms, rather than providing a way to escape from a bribery arms-race. Indeed, in our dataset no U.S. firm that was penalized by the U.S. DOJ for FCPA violations involving acquisition of a target headquartered in country j subsequently conduct a cross-border acquisition in the same country.

For robustness, Column (2) estimates a poisson-regression analogue of Eq. (1). As before, the estimated coefficient is negative and statistically significant, and the computed irr (0.55) implies large subsequent declines in cross-border acquisition investment in countries that have been previously involved in merger-related FCPA enforcement.

<sup>&</sup>lt;sup>6</sup>We check for the possibility of a unit root by estimating panel-data analogues of the familiar Dickey-Fuller and Phillips-Perron tests (Choi (2001)). These tests reject the null of a unit root at the 1 percent level, indicating that (1) is appropriately estimated in levels on our dataset.

An alternative interpretation of our results is that foreign institutional quality is positively correlated with cross-border merger activity but negatively correlated with FCPA enforcement actions. This possibility arises because poor property rights in a target country impede the process of acquiring a foreign target and subsequently conducting business in the foreign country and that the Department of Justice focuses FCPA activity on U.S. corporations that do business in such countries. This reasoning suggests that institutional quality may, if omitted from the regression, lead to downward-bias in the estimated effect of FCPA enforcement on cross-border acquisition activity. Columns (3)-(5) address this possibility by including proxies that capture foreign business conditions or institutional quality in the negative binomial regressions. Column (3) includes the World Bank's Ease of Doing Business index, with higher numbers indicating poor business conditions for foreign investors. The estimated coefficient is negative as expected and, more importantly, including this control does not impact the estimated sign or significance of the coefficient on FCPA enforcement actions. Similarly, Columns (4) and (5) include the World Bank's legal rights index and index of lack of property rights. The estimated coefficient on FCPA enforcement continues to be negative and statistically significant in both of these specifications.

As a further robustness check, Column (6) estimates a panel Poisson regression with countryspecific fixed effects to control for time-invariant institutions and other features of foreign countries.<sup>7</sup> The estimated sign and significance of the coefficient on FCPA enforcement are the same as in previous models.

As a final robustness check, since most enforcement actions occurred after the year 2000, we re-estimated the negative binomial specification on the sub-sample of data drawn from the years 2000-2010. The estimated coefficients are presented in Column (7). As before, the estimated coefficient on a prior FCPA enforcement action is negative and statistically significant, with a comparable magnitude to the analogous estimation on the full data sample.

### 4. Conclusion

Though legal scholars and ethicists are divided about the ethical implications of informal payments made abroad by US firms, a central and unanswered *economic* question in this debate is about whether the FCPA discourages foreign direct investment. We use hand-collected data on individual

<sup>&</sup>lt;sup>7</sup>We also estimated a linear model via OLS with serial-correlation and heteroskedasticity-robust standard errors and with country-specific fixed effects (results not reported). The estimate of the effect of FCPA enforcement on future cross-border mergers was negative and both statistically and economically significant.

enforcement actions to provide the first systematic empirical evidence that FCPA enforcement actions in a particular country lead to lower cross-border fixed investments in that country by U.S. firms.

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Variable	(1)	$\frac{-7}{(2)}$	(3)	(4)	(5)	(6)	(7)
Variabio	(1)	(2)	(0)	(1)	(0)	(0)	(•)
FCPA Envorcement	0 508***	0 607***	0 5/3***	0.464***	0.357***	0.949**	0 564***
r Or A Envorcement	(0.197)	(0.103)	(0.131)	(0.130)	(0.120)	(0.116)	(0.125)
	(0.127)	(0.103)	(0.131)	(0.130)	(0.129)	(0.110)	(0.125)
Common Language	0 /02***	0.965***	0 /59***	0 305***	0 /39***		0 305***
Common Danguage	(0.102)	(0.056)	(0.402)	(0.050)	(0.102)		(0.083)
Distance	0.508***	0.566***	(0.001) 0.407***	(0.001) 0.445***	0.455***		0.448***
Distance	(0.020)	(0.111)	(0.083)	(0.081)	(0.455)		(0.113)
Chanad Dandan	(0.011)	(0.111)	(0.003)	(0.001)	(0.079) 0.977*		(0.113)
Shared Dorder	0.227	(0.224)	(0.242)	(0.140)	(0.140)		(0.270)
	(0.140)	(0.147)	(0.103)	(0.149)	(0.149)		(0.211)
Both in W10	(0.241)	0.010	(0.000)	(0.000)	(0.001)		0.181
	(0.081)	(0.114)	(0.093)	(0.090)	(0.091)		(0.106)
Deep of lains husinger			0 400***				
Ease of doing business			-0.420				
T 1 · 1 / · 1			(0.088)	0.170**			
Legal rights index				$0.173^{-1}$			
<b>D</b>				(0.076)	0 010***		
Property protection					-0.619		
					(0.074)		
CDD	0 000***	0.095***	0 000***	0.070***	0 009***	0.005***	0.000***
GDP	(0.092)	0.955	(0.002)	(0.005)	(0.003)	(0.023)	(0.922)
	(0.025)	(0.032)	(0.025)	(0.025)	(0.024)	(0.228)	(0.032)
CDP per-capita	0 079***	-0.030	-0.000	0 081***	0.053**	0.250	0.030
GDI per capita	(0.012)	(0.030)	(0.031)	(0.026)	(0.000)	(0.206)	(0.030)
Market can net CDP	0.020)	0.000	(0.001)	0.020)	(0.020) 0.002***	0.001	0.002***
Market cap pet.OD1	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0,002)
Not domostic crodit	0.000)	0.105***	0.000)	0.001	(0.000)	0.061	0.035*
Net domestic credit	(0.020)	(0.103)	(0.025)	(0.015)	(0.022)	(0.001)	(0.010)
Posourco intensity	0.010)	0.020***	0.021***	0.010)	0.010)	0.020**	(0.019) 0.027***
Resource intensity	-0.028	-0.029	-0.031	(0.005)	(0.020)	(0.020)	-0.037
Domostia londing noto	0.004)	(0.004)	0.000)	(0.005)	(0.004)	0.000)	(0.005)
Domestic lending rate	-0.000	-0.001	-0.000	-0.000	-0.000	-0.000	-0.003
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)
Vear fixed effects	Ves	Ves	Ves	Ves	Ves	Ves	Ves
Country fixed effects	No	No	No	No	No	Yes	No
Observations	1.312	1.312	1.249	1,249	1,249	1,288	735

Table 1	-	Estimates	of	Eq.	(1)	)
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Note: This table presents estimates of equation (1). The dependent variable in each equation is the number of acquisitions in year t of targets headquartered in country j by U.S. acquirers. Columns (1)-(5) and (7) present estimates of equation (1) obtained via negative binomial regressions. Columns (2) and (6) present estimates of equation (1) using Poisson regression models. The variable of interest is FCPA Enforcement, which, for country j takes a value of unity in year t if a FCPA enforcement action, associated with a prior cross-border merger, has been initiated in any year t-k. This variable and the covariates are described in detail in the paper body. Robust standard errors appear in parentheses beneath the coefficient estimates. \*, \*\*, and \*\*\* indicate statistical significance at 10, 5 and 1 percent levels, respectively.