The Conditional Arm of the Law. The Effect of the OECD Anti-Bribery Convention on Foreign Direct Investment*

Lorenzo Crippa[†] January 13, 2021

Abstract

Corporate criminal regulations are often criticized for increasing costs to firms and deterring their foreign investment. Yet, the conditions for the effect to occur are understudied. This paper studies the impact of corporate criminal policies home states adopted with the 1997 OECD Anti-Bribery Convention on their firms' outward investment. It argues that their effect on investment depends on the level of corruption of the host economy. The effect is null in clean countries. Where corruption is mild, anti-bribery laws empower firms: they provide a legal leverage to refuse paying costly bribes. The effect on investment is positive. Where corruption is endemic, instead, these policies deter investment: they expose firms to the risk of prosecution without providing any effective leverage. The effect is negative. Multilevel logit models test the argument, explaining investment decisions of 3871 individual firms between 2006 and 2011. Companies from signatories have a 40% higher probability of investing in mildly corrupt economies than those from non-signatories, which plummets to -50% in extremely corrupt countries. Difference-in-differences models of country-dyad investment flows corroborate this finding. Results show that anti-bribery policies pull firms away from extremely corrupt economies, which are left exposed to companies that are not bound by anti-corruption standards. This informs a re-evaluation of anti-bribery policies.

Keywords: Foreign direct investment; multinational corporations; corporate regulations; anti-bribery; OECD Anti-Bribery Convention

^{*}I am thankful to Federica Genovese, Han Dorussen, Nicole Baerg, Martin Steinwand, Laura Saavedra-Lux, James Wood, Alina Mungiu-Pippidi, Ina Kubbe, Carolina Garriga, Rabia Malik, Kristian Gleditsch, Brian Phillips, Miranda Simon, Sara Polo for precious feedback on this work. The paper also benefitted from comments by audiences at the ECPR 2020, PSA ECN 2020, IASOC 2020, University of Essex, Department of Government internal PhD colloquium and IR PhD workshop. I also thank Lucio Picci and Laarni Escresa for sharing material necessary to compute the PACI measure. Needless to say, all mistakes are mine.

[†]PhD student, Department of Government, University of Essex. l.crippa@essex.ac.uk

Introduction

Firms inform their decision of a foreign investment by assessing long-term costs (Jensen, 2008). Investments create jobs, technological spillovers, and favor growth of the host country. Yet, companies often resort to nasty business practices in host economies. Home states have adopted corporate regulations to curb wrongdoing in violation of environmental, social, and governance (ESG) principles by their firms' foreign-owned branches. Such corporate regulations imposed by home countries are often blamed for increasing risk to companies, raising costs of investing in host countries with poor ESG records. This would undermine investment, an undesired outcome for both home and host economies.

Anti-bribery policies offer perhaps the best example of the problem. Bribery is a documented strategy that firms can resort to when investing abroad to circumvent competition and extract rents (Malesky et al., 2015). Its detrimental effects are well known (Rose-Ackerman, 1975). In the 1990s the main exporters of investment have adopted policies to prevent their firms from engaging in such behaviors abroad. These anti-bribery policies have been frequently criticized for disadvantaging companies in corrupt host economies $vis-\hat{a}-vis$ competitors without such standards (Gutterman, 2015; Tarullo, 2004).

Do anti-bribery policies deter foreign investment in corrupt countries? Studies in political economy still offer no conclusive answer. An opposite hypothesis can be advanced alongside the deterrence argument. Anti-bribery policies can also empower firms, providing them with a legal leverage to resist bribe requests from public officials in corrupt economies and to cut bribery-induced costs (Davis, 2019). This prerogative is precluded to competitors that have no such legal standards, who then operate at a disadvantage. Empirical studies on the matter offer no conclusive evidence, with studies finding a negative, positive, or null effect of anti-bribery policies on investment. Almost all of them rely on country-aggregated data. The choice is flawed by methodological shortcomings: it prevents to trace existing heterogeneous effects of anti-bribery policies on individual firms' decisions (Zhu and Shi, 2019).

In this article I study the effect of home countries' anti-bribery policies on foreign investments by their multinational corporations (MNCs). I propose a single argument to unify the *deterrence* and *empowerment* hypotheses. I argue that both pulls are simultaneously at play. The direction of the resulting effect depends on the *level* of corruption of the host economy. Anti-bribery policies provide firms with a legal ground which is strong enough to refuse bribe requests from public officials only where their bargaining power is relatively low. Public officials' power to demand bribes increases in the level of corruption of a country (Ades and Di Tella, 1999). I thus claim the resulting effect of the policies is null in very clean countries, positive in mildly corrupt ones, and negative only in extremely corrupt destinations. I focus on laws under the 1997 OECD Anti-Bribery Convention¹, that made bribe payments abroad a criminal offence in 44 signatory countries.

¹For the sake of brevity, in the text I refer to the "1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions" as "OECD Anti-Bribery Convention", "OECD Convention", "the Convention", or similar (always capitalized).

Two empirical exercises support my argument. First, I leverage on data from Beazer and Blake (2018) and model individual decisions by 3871 firms to invest in a foreign location between 2006 and 2011. Consistently with my argument, I show that firms under OECD anti-bribery policies make investment decisions conditionally on the squared level of corruption of the host economy. Firms from signatories are no more likely than their competitors to invest in very clean economies. They have a higher probability of investing in mildly corrupt host economies, up to a peak of 40%. Instead, they are 50% less likely to invest in extremely corrupt destinations. Results are robust to a vast series of tests. Second, I corroborate my findings employing country-dyadic data. Findings show that home anti-bribery policies affect firms' investment choices, but not in a univocal way. Concerns about the anti-business nature of these laws should therefore be taken with skepticism.

Substantively, findings show that home countries' cross-border corporate regulations in furtherance of ESG values have no univocal adverse effect on political risk and foreign investment. Rather, they interact with characteristics of the host economy, such as its ESG record. Home state corporate policies to oversee foreign behaviors are numerous and include laws on merges (Damro, 2001; Griffin, 1999), trade with sanctioned countries (Rodman, 1995), and money laundering (Sharman, 2011). I contribute to a growing literature in international political economy that has studied various features of these policies, including their causes (Putnam, 2009), and effects (Jensen and Malesky, 2018; Kaczmarek and Newman, 2011; Kalyanpur and Newman, 2019). Methodologically, the study provides more reasons for scholars of FDI to study individual firms' behaviors rather than country-level flows, which obscure heterogeneous effects (Zhu and Shi, 2019).

Finally, a nuanced view of anti-corruption policies emerges. Where it is common, bribery has numerous detrimental effects (Rose-Ackerman, 1975). Anti-corruption regulations from the 1990s represent a milestone in the effort to reduce its international supply-side. Yet, they are often blamed for jeopardizing firms' competitiveness in corrupt economies. I document that in fact firms gain from these policies in a range of mid-level corrupt countries. This is good news for their home states. Rather, it is bad news for the most corrupt host countries. Anti-bribery policies pull firms away from these destinations, where they would be perhaps most needed. These host countries are then left exposed to investments from companies that are not bound by similar standards. This pessimistic conclusion adds to previous findings on the perverse effects of anti-bribery policies (Brazys and Kotsadam, 2020; Chapman et al., 2020).

The next section expands on the puzzle, reviewing literature and anecdotal evidence that speaks to the research question advanced. Then, an argument is proposed for the effect of OECD anti-bribery policies on firms' investments, conditional on the level of corruption of the host economy. Two empirical exercises follow. I then discuss limitations and conclude.

1 What effect for anti-bribery policies on foreign investment?

Foreign investment is made of individual decisions of private or public-owned firms to project their presence abroad. In contrast to international trade, it entails the ownership² of a firm in the host country (called "subsidiary") from another firm in the headquarter or home country (called "parent")³. Firms decide to go multinational if expected advantages in ownership, location or internalization (OLI)⁴ terms outweigh costs (Caves, 1971; Dunning, 1977, 1980) and political risk (Jensen, 2008). The resulting investment has positive effects in the host country. It creates jobs and technology spillovers which foster economic growth (Borensztein et al., 1998), and it favors democratization (Eichengreen and Leblang, 2008; Li and Reuveny, 2003). It also has detrimental consequences. Foreign investors often adopt unfair competition practices to crowd out local competitors (Görg, 2000), and worsen economic inequality (Bornschier et al., 1978).

Firms can resort to bribery⁵ as a business strategy in foreign markets (Søreide, 2006). Bribe payments are documented in procurement and registration of an MNC in corrupt economies (Gueorguiev and Malesky, 2012). The effect of corruption on investments has been subject to intense scrutiny. Corruption generally deters business (Habib and Zurawicki, 2002). It reduces the probability that an investment will take place (Barassi and Zhou, 2012) because it increases its costs, like a tax (Treisman, 2007; Wei, 2000). Corrupt contracts are also uncertain and inefficient, since they lack systems to be enforced (Lambsdorff, 2002; Rose-Ackerman, 1975). Yet, in specific markets bribery is a profitable strategy to crowd out competitors and establish oligopolies, from which firms can extract considerable rents (Zhu, 2017). In this case it is worth its price. This scheme has been shown to work particularly well if played by MNCs from developed countries active in less-advanced economies (Pinto and Zhu, 2016). It is observed in extractive industries, where the existence of natural barriers facilitates market exclusion (Knutsen et al., 2017), but also in markets artificially restricted by institutions (Malesky et al., 2015).

Home states have adopted corporate policies to intervene in this calculus and univocally increase costs of corruption to firms (Cuervo-Cazurra, 2008). Policies under the 1997 OECD Convention⁶ grant home states jurisdiction to scrutinize and prosecute bribery perpetrated beyond national borders by their

²In this article I explicitly do not consider other strategies to invest in a foreign market than ownership, such as licensing or joint ventures with local partners (Das, 1999).

³Foreign ownership can occur in the form of a "greenfield" – setting up an entirely new overseas branch – or a "brownfield" investment – acquisition of already-existing facilities. The two strategies present different advantages to firms (Görg, 2000) but I equate them in the argument presented here.

⁴Ownership advantages include access to foreign patents or technologies. Location advantages cover proximity to strategic foreign markets or cheaper factors of production, and the possibility of bypassing trade barriers. Internalization advantages include incentives to keep strategic assets and information within the firm (Jensen, 2008). This framework thus combines elements from the so-called "horizontal integration" and "vertical integration" theories (Barassi and Zhou, 2012).

⁵I abide by a traditional definition of bribery as a specific instance of corruption (Heywood, 1997). It is an informal contract between a private bribe-payer (a firm) and a public official bribe-taker, who exploits a position of power and exchanges a favorable decision for an illicit payment. In particular I consider *foreign* bribery, where the bribe-payer and payee are of different nationalities, and bribes cross borders. These informal contracts typically involve the discretionary award of a public order or licence, and they are usually associated with investments (Della Porta and Vannucci, 1999).

⁶The Convention is among the strongest anti-corruption regulations (Bukovansky, 2006; Spahn, 2013). MNCs under this regulatory umbrella account for more than 80% of global outbound foreign direct investment stocks and include 95 of the 100 largest non-financial enterprises (OECD, 2018). As of September 2020, 44 signatory countries include all current OECD members and 7 non-member states: Argentina, Brazil, Bulgaria, Costa Rica, Peru, South Africa, Russia.

companies, foreign employees, or entities they own abroad (Brewster, 2017). Signatory home states thus regularly impose fines on firms for corrupt payments made by their foreign subsidiaries. For instance, in June 2019 the U.S. corporation Walmart Inc. disbursed \$282 million to U.S. federal authorities in admission of corrupt payments made by its Brazilian subsidiary.

These policies have received criticisms over time for their intrusion into overseas business. The U.S. unilaterally⁸ adopted a legislation to prohibit foreign bribery in 1977: the Foreign Corrupt Practices Act (FCPA). Immediately, U.S. firms lamented the FCPA was an anti-business policy that increased their cost and disadvantaged them in international markets *vis-à-vis* competitors with no such standards (Brewster, 2017). An early report found U.S. foreign investment suffered from this law in the 1980s (Hines, 1995). A common OECD anti-bribery regulation was aimed at mitigating these concerns, but its adoption was delayed for 20 years precisely due to resistances among U.S. partners about its possible deterrent effect on investment (Gutterman, 2015; Tarullo, 2004).

European and U.S. anti-bribery policies have kept receiving criticisms even after they were eventually coordinated at the OECD⁹ (Gutterman, 2017). The existence of two legal standards, with some firms who are bound by anti-bribery policies and some who are not, is an ongoing concern not only in the opinion of politicians or reporters. Recent studies pointed out that bribery by MNCs outside the umbrella of the OECD Convention has *increased*, somehow filling a gap left by their competitors (Chapman et al., 2020; Jensen and Malesky, 2018).

Empirical evidence about the effect of these policies on investment, yet, is not conclusive. Some studies find firms subject to anti-bribery policies invest less in corrupt economies, because they risk prosecution (Blundell-Wignall and Roulet, 2017; Cuervo-Cazurra, 2008; Hines, 1995). Others argue public officials are more likely to demand bribes from firms that are *not* subject to these policies, because they lack a legal ground to oppose the request (Kaufmann and Wei, 1999), an argument which finds evidence to support it (Jensen and Malesky, 2018; Brazys and Kotsadam, 2020). All else equal, this should *favor* firms with anti-bribery standards in international competition. Still others find no evidence for any effect (Hakkala et al., 2008; Smarzynska and Wei, 2000; Wei, 2000).

One explanation for such mixed evidence is the use of country-level data. This methodological custom turns into a twofold problem. First, it obscures heterogeneous effects (Zhu and Shi, 2019). It makes it impossible to explicitly disentangle two competing arguments on the effect of anti-bribery policies on individual firms' investment decisions in corrupt countries.

 $^{^7\}mathrm{See}$ statements from the DOJ: https://www.justice.gov/opa/pr/walmart-inc-and-brazil-based-subsidiary-agree-pay-137-million-resolve-foreign-corrupt and the SEC: https://www.sec.gov/news/press-release/2019-102 (both accessed on September 23rd, 2020).

⁸In the middle of the post-Watergate outrage, the U.S. was the first country in the world to do so and it would take 20 years for its OECD partners to follow the lead.

 $^{^9}$ In 2012 Donald Trump called the U.S. anti-bribery policy "a horrible law" which "should be changed". See: https://fcpaprofessor.com/donald-trump-the-fcpa-is-a-horrible-law-and-it-should-be-changed/ (accessed on September 23rd, 2020). European anti-bribery laws have received no milder judgment: See: https://www.theguardian.com/law/2011/apr/01/revamped-bribery-act-firms-jitters (accessed on September 24th 2020).

Second, the use of country-level data turns into a problem of selection bias that is usually overlooked: only investments that have been decided are observable (Barassi and Zhou, 2012). This prevents from understanding how anti-bribery policies affect the choice for an investment to corrupt countries in the first place. The only study on the matter that, to my knowledge, employs individual firms' data and explicitly accounts for this problem finds no effect of OECD anti-bribery policies on firms' decisions (Hakkala et al., 2008). Yet, it relies on observations from Swedish companies only, a sample with very specific characteristics which severely undermine the external validity of the results. Moreover, its observations stretch until 1998, *i.e.* only one year after the ratification of the Convention, and in fact one year before its entry into force. The lack of an effect cannot be taken as conclusive.

Finally, anecdotal evidence does not suggest that MNCs from countries with anti-bribery regulations are necessarily penalized by them. In fact, firms have not univocally opposed them. In the 1990s a coalition of anti-corruption non-governmental organizations and businesses emerged first in the U.S., then in other OECD countries, to lobby for the adoption of global anti-corruption policies (Gutterman, 2015). In 1997 U.S. Senator Sarbanes, who was working on a revision of corporate laws, even received a letter signed by the CEOs of 35 major corporations, expressing their wish for a quick ratification and implementation of the OECD Convention (US Senate, 1998). At the very least this suggests that anti-bribery laws are not necessarily disadvantageous to companies. What is their effect on investment decisions, then? Are concerns about their anti-business effect in corrupt countries justified? Next section proposes an answer to these questions.

2 The argument: The conditional effect of anti-bribery laws on foreign investment

Policies under the OECD Convention impose various types of costs to firms for foreign bribery. First, judicial authorities can (and do) levy blockbuster fines ¹⁰. Second, monetary disbursements extend beyond fines. A common practice in corporate law enforcement, particularly in the U.S., consists in reaching out-of-court agreements between prosecutors and the firm. This prevents the perils of a judiciary prosecution for the company and its officers. Yet, it represents a painful and costly process. The firm admits guilt, cooperates with prosecutors, pays an expensive monetary settlement, and pledges to undertake a severe re-structure of its corporate organization and culture to ensure future compliance with anti-bribery standards (Garrett, 2011). Terms often include turning executive offices inside out; setting up systems of internal investigations; having third-parties monitoring activities of a firm for a probation period; and implementing strategies to avoid managers established personal connections with local foreign

 $^{^{10}}$ Penalties have increased consistently over the years, to reach records in the order of billions of U.S. dollars in recent judiciary cases. For a top-ten of disbursements under the U.S. FCPA see: $\frac{\text{https://fcpablog.com/2020/02/03/airbus-shatters-the-fcpa-top-ten/}{\text{(accessed on September the 25th, 2020)}}.$

authorities¹¹.

Finally, financial markets impose reputational costs for corporate crime (Karpoff et al., 2008). When discovered, foreign bribery easily turns into scandals with wide international resonance. Inquiries unveil corrupt deals where large quantities of money are secretly channeled to personal accounts of dirty public officials, and where the bribe-payer firm extracts huge illicit revenues. Sometimes they involve public figures or politicians in high and visible places in the host country, or companies involved in extensive business around the globe. This is enough material for stories that regularly make the first pages of newspapers and produce outrage in public opinions. Markets react to these stories. It is estimated that on average 80% of every lost dollar in share value, following anti-bribery prosecution of a firm, comes from the effect of these scandals on markets, rather than from fines or monetary settlements (Sampath et al., 2018).

These costs translate into credible information to investors about their home state's behavior in case of foreign bribery. It thus regularizes their long-term expectations. This is valuable information. A foreign investment entails a long-term commitment to the host economy. Uncertainty about its future can deter it. Institutions reduce this "shadow of the future", providing information that improves predictability (Axelrod, 1984). This effect is documented for economic policies (Alesina and Dollar, 2000; Li and Resnick, 2003) and political institutions (Jensen, 2003, 2008) in the host country. International institutions, too, can perform such role (Bodea and Ye, 2017; Gray, 2009; Skovgaard Poulsen, 2014).

How will expectations of anti-bribery costs affect decisions to invest? Two competing arguments can be advanced. I label the first one deterrence. The argument expects firms subject to anti-bribery standards invest less in corrupt economies. Imagine two identical firms, respectively from the U.K. and India, faced decisions to invest in a country like Nigeria, which is known to have corrupt bureaucracies. The U.K. is a ratifier of the OECD Convention, and has anti-bribery regulations in place. India is not. Investments in a corrupt host country like Nigeria often look like a bid between competing firms, where public officials can demand competitors a bribe to facilitate business (Beck and Maher, 1986). Firm agents in Nigeria have an incentive to pay the bribe: winning such bids have licit rewards (such as career advancements, or prestige), and often illicit ones (such as kickbacks agents can re-direct to their own personal accounts).

The headquarter office of the firm from the U.K. anticipates its agents would operate in these conditions, were an investment made. Being subject to OECD anti-bribery policies regularizes expectations about the behavior of the home state's judiciary in that event. In case agents in Nigeria committed bribery, prosecution would be a likely risk. Anti-bribery policies turn a possible scandal of corruption into a significant expected cost for the entire company. The firm from India, instead, does not face the

 $^{^{11}}$ For a textbook example, eee the drastic changes implemented by Siemens AG after an infamous worldwide bribery scandal: https://www.complianceweek.com/how-siemens-worked-to-fix-a-culture-of-institutionalized-corruption/14915.article (accessed on September the 25th, 2020).

same concern: its agents in Nigeria can bribe to secure contracts without the parent risking judiciary repercussions. All else equal anti-bribery standards thus deter the parent firm from the U.K. to invest in Nigeria, while the firm from India is not deterred. *Deterrence* expects firms subject to anti-bribery standards would invest *less* than competitors in corrupt countries.

Yet, a second argument justifies the opposite expectation. I label it *empowerment*. Anti-corruption policies are intended to reduce corruption-induced uncertainty and ensure cleaner business models without off-the-record expenditures (Lambsdorff, 2002). Anti-bribery policies help companies put in place internal systems of compliance to oversee their agents abroad, and deter them from paying bribes (Davis, 2019). They also provide foreign agents and branches a legal ground to refuse paying extra fees, which increases their bargaining power *vis-à-vis* public officials (Hakkala et al., 2008; Kaufmann and Wei, 1999). Public officers are less likely to expect fees from firms in a stronger bargaining position (Svensson, 2003), especially since they could be involved in scandals with worldwide resonance.

Firms under anti-bribery standards can thus leverage on them to cut corruption-induced expenses: bribe fees, uncertainty, and transaction costs (Rose-Ackerman, 1975). In the investment decision stilized before, this argument claims anti-bribery policies empower the firm from the U.K. in Nigeria. On the other hand, the firm from India is not subject to the same regulation. Its agents in Nigeria cannot leverage on these policies to refuse paying bribes, and have no enhanced bargaining power. As a consequence, public officials demand more bribes from unconstrained firms (Brazys and Kotsadam, 2020). Their operations will therefore be more inefficient and costly, and they will be worse off in competition. According to the *empowerment* argument, firms subject to anti-bribery policies would invest *more* in corrupt economies.

How to reconcile these opposite expectations? I argue that both pulls are at play. Their net effect on investment depends on the level of corruption of the host economy, because public officials' power increases in it (Ades and Di Tella, 1999; Svensson, 2003), and so does their operating space for demanding bribes. *Deterrence* prevails when the host country is extremely corrupt. In these economies bribery is perceived as an expected business custom. This gives public official a strong position to demand fees, and makes it highly unlikely that they refrain from doing it. All parent firms include these fees in expected costs, however firms subject to anti-bribery standards face greater costs than competitors, because they risk prosecution in their home country. Anticipating these conditions, they are less likely to invest in very corrupt economies.

In economies where corruption is diffused but milder, instead, *empowerment* prevails. Bribery here is not the necessary way to conduct business and public officials' room to demand bribes is limited. Firms subject to anti-bribery standards find they can leverage on these rules and enhance their bargaining power. They have the legal ground to refuse paying bribes, thus they can cut costs. This possibility is precluded to their competitors, who operate at a disadvantage. As a result, firms from signatories are

more likely to invest in these economies.

In very clean economies, finally, anti-bribery policies should neither advantage nor disadvantage firms, as it is very unlikely that corrupt fees are expected at all. Overall, anti-bribery corporate policies do not necessarily penalize foreign investment. Rather, their effect depends on characteristics of the host country. Companies find themselves advantaged in some economies and at a disadvantage in others, and choose investment destinations accordingly. In this argument the effect of anti-bribery policies on the probability that a firm invests abroad depends non-linearly on the level of corruption of the host economy, which proxies for the bargaining power of public officials.

I formalize this expectation drawing from political economic models of investment decisions conditional on corruption (Barassi and Zhou, 2012; Hakkala et al., 2008; Smarzynska and Wei, 2000). A firm f from country i is observed to invest in country f ($I_{fij} = 1$) only if the value of a latent variable I_{fij}^* , representing its propensity to invest, is greater than 0. Equation 1 expresses the latent variable I_{fij}^* . It is a function of whether country i is a signatory of the OECD Convention ($S_i = 1$), and of a continuous measure for the level of corruption of the host country (C_j). Corruption also appears as a squared term (C_j^2). Both C_j and C_j^2 are multiplied by S_i . This represents the statement that the effect of the OECD Convention (S_i) on the propensity to invest abroad (I_{fij}^*) depends on the level of corruption of the host country, in a non-linear way¹².

$$I_{fij}^* = \beta_1 S_i \times C_j^2 + \beta_2 S_i \times C_j + \beta_3 S_i + \beta_4 C_j^2 + \beta_5 C_j + \mathbf{X}_{fij}' \gamma + u_{fij}$$
(1)

From equation 1, the effect of the OECD Convention on the propensity of a firm to invest equals the partial derivative of I_{fij}^* with respect to S_i :

$$\frac{\partial I_{fij}^*}{\partial S_i} = \beta_1 C_j^2 + \beta_2 C_j + \beta_3 \tag{2}$$

The effect of the OECD Convention on the propensity of a firm to invest abroad, conditional on the level of corruption of the host country, should therefore trace a parabola. Figure 1 illustrates my expectation on its shape. It reports the level of corruption of the host economy C_j on the x axis. The y axis, instead, reports the marginal effect that ratifying the OECD Convention has on the propensity for a home country's firms to invest overseas $(\frac{\partial I^*}{\partial S})$. For low levels of corruption of the host country, the effect should be zero. As the host economy becomes more corrupt, a home country ratifying the Convention advantages its firms and increases their propensity to invest. As the host country becomes more corrupt, this effect reaches a maximum, then decreases. In extremely corrupt host countries, ratifying the OECD Convention disadvantages firms due to higher risks of prosecution. The effect on the propensity to invest

¹²When the model is estimated, in the next section, other factors explaining I_{fij}^* are summarized in the matrix $\mathbf{X}_{\mathbf{fij}}$, while u_{fij} is the idiosyncratic error term.

is negative. In terms of equation 2, this means that parameter β_1 is expected to be negative, β_2 positive and β_3 null.

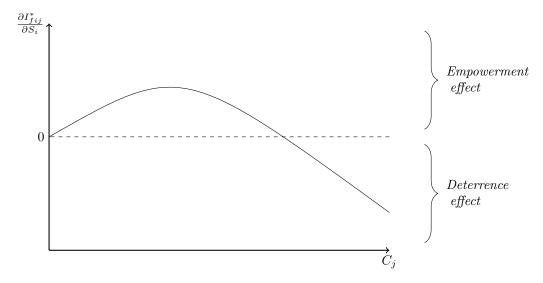


Figure 1: Non-monotonic marginal effect of the OECD Convention on investments, conditional on host country corruption

3 Empirical analysis

3.1 Firm-level data

I estimate model 2 with firm-level data drawn from the Orbis Corporate Ownership Database¹³, retrieved from Beazer and Blake (2018). This dataset reports information on foreign subsidiary incorporation from 3871 individual parent firms between 2006 and 2011. It reports the country of origin of the parent firm (home country) and that of the subsidiary (host country) for each incorporation. Represented home economies are 61, while host countries are 84. Data also include firm-level and country-level covariates.

The dataset reports the "ultimate parent" of each foreign subsidiary. It excludes financial investments and small firms¹⁴. These selections ensure the sample represents a population composed of large MNCs, and investments represent long-term foreign productive enterprises and not speculative ventures¹⁵. Orbis data have a two-year lag between the moment firms' information is disclosed and the moment it is reported in the data, and have various problems when year-specific information is used to obtain time-series (Kalemli-Ozcan et al., 2015). Both issues are avoided here employing a cross-section of observations between 2006 and 2011.

 $^{^{13}}$ Firm-level data are provided by Bureau van Dijk (BvD), a Moody's company that obtains information from compulsory reports that public authorities mandate. Both listed and non-listed firms must disclose information. BvD retrieves and cross-checks it from various country-specific sources.

¹⁴The "ultimate parent" is defined as the firm owning more than 25% in stakes of the foreign subsidiary. Financial companies, insurance firms, hedge funds, and investment banks are excluded. Small firms have less than one million euros in operating revenues a year, total assets less than two million euros, and less than 15 employees.
¹⁵The conventional threshold distinguishing FDI from portfolio investment is 10% in fact. A threshold of 25% is imposed

¹⁵The conventional threshold distinguishing FDI from portfolio investment is 10% in fact. A threshold of 25% is imposed here in order to detect the *ultimate* owner of a firm.

Figure 2 breaks down firms in the database according to their NAICS-2 industrial code. The majority of firms is active in Manufacturing (43%), followed by Management of Companies and Enterprises (17.7%) and Professional, Scientific and Technical Services (8.89%).

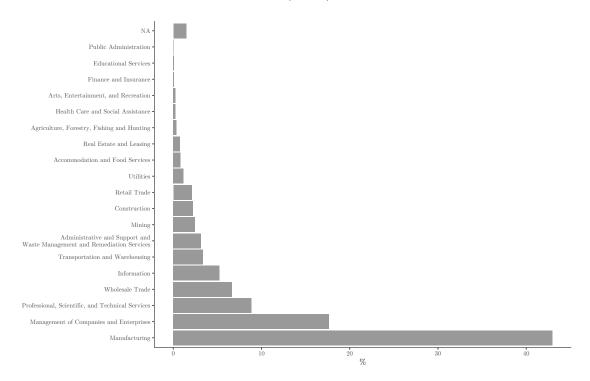


Figure 2: Database description: Percentage of firms in the database by NAICS-2 code

I follow Beazer and Blake (2018) and construct a binary outcome variable, called Subsidiary, representing whether a firm f from country i has incorporated a subsidiary in country j between 2006 and 2011. The measure does not represent the size of an investment, but this is consistent with my argument predicting its probability. The binary dependent variable has a dyadic form. For each parent company f from country i it is assigned a 1 if the firm is reported to have set up a subsidiary in the host country j in the time period of interest. It is assigned a 0, instead, if no subsidiary was established in the (potential) host country j^{16} . Potential host countries are all economies where a subsidiary has been established by at least one firm in the dataset. This is supposed to represent all attractive host countries.

My main independent variable is OECD Signatory. It represents whether the home country i of a parent firm f has ratified the OECD Anti-Bribery Convention by 2005^{17} . The variable is binary: it takes value 1 if this condition is met, 0 otherwise.

Measuring corruption is notoriously difficult. The most common indexes are survey-based and include the World Bank Control of Corruption Estimate (CCE) or Transparency International's Corruption Per-

 $^{^{16}}$ I depart from Beazer and Blake (2018) and impose the condition $i \neq j$, which I deem appropriate in the case of foreign investment. Results do not change significantly relaxing this condition.

¹⁷I consider only countries for which the Convention had entered into force by 2005, to make sure that anti-bribery legislations under the OECD Convention were in place at the time my cross-section starts. Information on ratification status was retrieved from the OECD website: http://www.oecd.org/daf/anti-bribery/WGBRatificationStatus.pdf (accessed on September the 26th, 2020). Table B.1 in appendix reports which home countries belong to each group in the sample.

ception Index. These indicators are typically built surveying the general population or experts (usually businessmen) about perceptions or first-hand experiences of corruption. They are criticized for being weak indicators of the real level of corruption in a country (Olken, 2009). Social desirability biases answers about first-hand experiences (Treisman, 2007). Annual survey-based measures, moreover, are subject to confirmation bias if respondents are informed by previous releases. Finally, they often implicitly adopt a definition of corruption which might not align with respondents' or researchers' (Heywood, 1997). These issues are a notorious source of inconsistency in empirical studies on corruption (Gueorguiev and Malesky, 2012).

An increasingly popular alternative is represented by so-called "objective" measures, that rely upon observable information. These measures have the obvious downside that observed cases of corruption are no good measure of corruption, since when it is most effective it takes place out of sight. The Public Administration Corruption Index (PACI) advanced by Escresa and Picci (2017) proposes a solution. Intuitively, the index compares the *observed* number of cross-border cases of bribery with those that could be *expected* if countries were all equally corrupted, based upon commercial ties. I present the index in more details in appendix. The PACI is suited to measure specifically cross-border bribery as it is defined in this study (see footnote 5).

Escresa and Picci (2017) compute a PACI measure employing information between 1997 and 2012. For each host country j in my dataset I re-compute the index using only information relative to bribes paid between 1997 and 2005 included, since my cross-section starts in 2006. To do so, I draw on the database provided by the authors about observed cases of cross-border bribery. I follow the authors' suggestion and take the natural logarithm of the PACI measure +1 to reduce the skewness of its distribution, and exclude countries for which information is not sufficient to compute a reliable index. The resulting measure $Host\ PACI$ is my main indicator of corruption of the host economy. It ranges from a minimum of 0 (corresponding to very clean economies) to a maximum of 8.90. In a series of robustness tests I substitute it with more traditional perception-based indexes, choosing among the most reliable ones, and verify that my results hold.

I follow Beazer and Blake (2018) and explain my binary outcome variable employing a multilevel logit model¹⁸. This is a forced choice to correctly specify cross-level interaction effects (Bell and Jones, 2015) like the one implied by my argument. This model choice is also suited to the dataset structure, where a firm investing abroad is cross-nested in a directed dyad, and in its home and host countries. Multilevel unobserved heterogeneity in this complex nesting can easily confound the explanation of the outcome variable, therefore it must be properly modelled. To this aim, all specifications include random intercepts at the dyad-level, and at the level of home and host countries. A further specification also includes industry-level intercepts to account for sector-specific heterogeneity. Since no clear hierarchy

 $^{^{18}}$ I maximize the log-likelihood function of this model with a Gauss-Hermite Quadrature method.

can be discerned in the data structure, I employ a cross-classified random effect model. A multilevel model also correctly models the thousands of repeated observations generated by the dyadic structure of the dataset. Unless properly modelled this large number of repeated and correlated observations would artificially reduce standard errors to zero and produce unreliable tests of hypotheses.

Finally, I include control variables that, unless controlled for, can confound the analysis. I consider the 2005 value for all. The economy and institutions of the host country can affect its attractiveness. I control for the (logged) Gross Domestic Product (GDP), per capita GDP, and total trade and net FDI inflows (both as percentages of GDP) of the host country. I also include the POLCON III index for political constraints in the host country, a binary indicator for democracy from Cheibub et al. (2010), and a measure for judicial independence from Linzer and Staton (2015). I also control for home country features that could affect the likelihood it adopted and enforced anti-bribery policies, like: wealth (measured as logged GDP and GDP growth rate), and level of judicial independence. Then, I control for country-dyadic covariates: a measure of the distance in kilometres between capitals of the home and host country, and binary indicators measuring whether a bilateral investment treaty (BIT) was signed by the dyad, whether the two countries have a past colonial relationship, and whether they have a common first or official language. Finally, I control for firm-level features: the number of host countries each firm operates in, its age, and its total assets (all logged). Summary statistics are reported in table B.2¹⁹.

3.1.1 Results

Table 1 presents my results relative to the variables of interest only²⁰. The first four models include random effects at the dyad, home and host country level. The fifth one also includes industry-specific intercepts. All models condition the effect of *OECD Signatory* on the squared and first-degree terms of the host country's corruption measure (*Host PACI*). To ensure that data are not being overfitted, table 1 first includes only the variables of interest. Then, it adds controls at the level of host and home countries (Model 2). Then it adds firm-level covariates (Model 3), then dyadic controls (Model 4). Finally, it adds industry-level intercepts (Model 5).

Results are consistent with expectations. The coefficient associated with the interaction between OECD Signatory and the squared Host PACI is negative in size and estimated with precision. It is distinguishable from zero at the 1% or 5% conventional levels of significance in all specifications but model 3. Here the estimation is less precise, but the coefficient is still significant for conventional levels (p-value: 0.06). Estimates of the coefficient of the interaction with the linear Host PACI term are also positive and statistically significant at the 5% conventional level, but for Model 3 (p-value: 0.07).

The coefficient associated with the un-interacted OECD Signatory, instead, is never distinguishable

¹⁹In the estimation procedure I recenter the distribution of all control variables around their means to help convergence. Descriptive statistics are reported before recentering distributions of these variables.

 $^{^{20}}$ Full disclosure of all estimates is provided in table B.3.

Table 1: Firm-level data. The effect of the OECD Convention on probability of subsidiary incorporation. Multilevel logit models

| | | $Dependent\ variable:$ | | | | | | |
|--------------------------|-----------------|------------------------|-------------|-----------------|-------------|--|--|--|
| | | | Subsidiary | | | | | |
| | (1) | (2) | (3) | (4) | (5) | | | |
| OECD Signatory × | -0.033*** | -0.038*** | -0.023^* | -0.031** | -0.034** | | | |
| Host PACI ² | (0.012) | (0.013) | (0.013) | (0.013) | (0.013) | | | |
| OECD Signatory × | 0.197** | 0.225** | 0.163* | 0.206** | 0.220** | | | |
| Host PACI | (0.090) | (0.092) | (0.090) | (0.096) | (0.096) | | | |
| OECD Signatory | -0.016 | -0.034 | -0.213 | -0.267 | -0.282 | | | |
| Ų į | (0.165) | (0.192) | (0.246) | (0.205) | (0.205) | | | |
| Host PACI ² | -0.041 | 0.013 | 0.003 | 0.011 | 0.013 | | | |
| | (0.033) | (0.029) | (0.026) | (0.027) | (0.028) | | | |
| Host PACI | -0.097 | -0.007 | 0.023 | -0.008 | -0.036 | | | |
| | (0.286) | (0.242) | (0.221) | (0.230) | (0.231) | | | |
| Dyad, country intercepts | √ | √ | √ | √ | √ | | | |
| Industry intercepts | | | | | ✓ | | | |
| Country-level controls | | \checkmark | ✓ | \checkmark | ✓ | | | |
| Dyad-level controls | | | ✓ | ✓ | ✓ | | | |
| Firm-level controls | | | | ✓ | ✓ | | | |
| N. of host countries | 84 | 83 | 83 | 83 | 83 | | | |
| N. of home countries | 61 | 60 | 60 | 57 | 56 | | | |
| Observations | 320,913 | $315,\!657$ | 315,657 | 289,732 | $285,\!295$ | | | |
| Log Likelihood | $-31,\!266.030$ | $-31,\!117.490$ | -30,957.630 | $-25{,}107.560$ | -24,775.21 | | | |
| Akaike Inf. Crit. | 62,550.060 | 62,272.990 | 61,961.250 | 50,267.110 | 49,604.410 | | | |

Note: *p<0.1; **p<0.05; ***p<0.01

from zero. This means that, when the host country is extremely clean ($Host\ PACI=0$), it is not possible to discern an effect of anti-bribery standards on investment decisions. This is consistent with my expectation that the Convention should not enter firms' decision-making process when investing in non-corrupt economies.

The coefficients associated with the un-interacted corruption measures are also not statistically significant. This result informs us that corruption is not a significant determinant of investment decisions for firms that are *not* subject to anti-bribery standards (OECD Signatory = 0). It is consistent with concerns expressed in other studies about the perverse effects of anti-bribery regulations on firms outside their jurisdictions (Brazys and Kotsadam, 2020; Chapman et al., 2020; Jensen and Malesky, 2018).

Interpretation of results is particularly complex in multiplicative models, and requires to compute substantive quantities of interest (Brambor et al., 2006). I then compute the marginal effect of anti-bribery policies to evaluate if the argument formalized by equation 2 is supported. Here, the probability of an investment by a firm is modelled (rather than its propensity). The marginal effect can therefore be computed evaluating the *change* in predicted probability of a firm's *Subsidiary* incorporation when *OECD Signatory* changes from 0 to 1, for given levels of *Host PACI*.

In non-linear specifications marginal effects cannot be computed as with linear models (Ai and Norton, 2003). I follow Beazer and Blake (2018) and compute the change in predicted probability when

OECD Signatory varies from 0 to 1 holding everything else at its mean, *i.e.* when an average firm passes from not being subject to being subject to anti-bribery laws, conditional on observed values of Host PACI. I compute 95% confidence intervals of this estimated difference simulating 1000 draws from its sampling distribution (King et al., 2000).

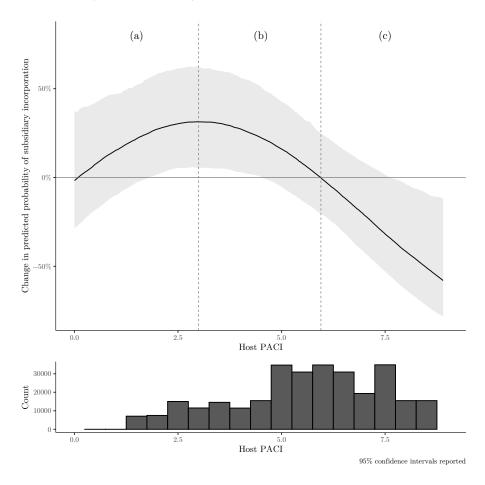


Figure 3: The non-linear effect of OECD Signatory on Subsidiary, conditional on Host PACI

Figure 3 shows the results obtained when considering the estimates of model 1 in table 1 and the data support for the mediator variable, to ensure they do not depend on extrapolation or interpolation (Hainmueller et al., 2019). Results obtained using the estimates of the other models are consistent with these ones, although confidence intervals become larger, especially for very clean host economies where data support is limited. When *OECD signatory* changes from 0 to 1, the predicted probability that a firm will incorporate a subsidiary changes conditionally on the level of corruption of the host economy, in a non-monotonic way.

The effect can be roughly divided in panels (a), (b) and (c). In panel (a) the change in predicted probability is close to zero for very clean host economies (e.g.: Canada, Denmark, Sweden). Then it increases as the host country becomes more corrupt, indicating that firms from countries with anti-bribery policies have a larger probability of investing here. At its maximum, firms from signatories have

a 40% higher probability of investing in host countries in this interval (Singapore, Taiwan) than their competitors. In panel (b), as the host country becomes more corrupt, this quantity remains positive but declines in size. This indicates that OECD anti-bribery policies still benefit firms in economies like Brazil, China, Indonesia, Italy, Mexico, and the United Arab Emirates, but to a lesser extent. For extreme levels of corruption, as in panel (c), firms from signatory countries are worse off. They have a lower probability of investing here than their counterparts, a quantity that reaches a lowest of -50% for host countries at the right-end of the corruption scale like Egypt, India, Kazakhstan, Nigeria, or Russia.

I propose extensive tests to show robustness of these results in appendix (table B.4). I first show that an interaction of *OECD Signatory* with a first-degree polynomial of *Host PACI* produces insignificant estimates. This provides confidence that the effect of the OECD Convention on investment is non-linear in corruption. I then test the use of traditional, perception-based indexes of corruption and show that results hold. I also use the original PACI measure in Escresa and Picci (2017) to enlarge the set of host countries included in the analysis. Next, I exclude outlier countries. Finally, I exclude from the "control" group home countries that ratified the Convention within the 2006-2011 cross-section. Results hold to all such tests.

3.1.2 Sector-specific analysis

I further investigate my argument moving to a sector-specific analysis, which also works as a placebo test. If my argument is correct, the mechanism should be observable only in industries where bribes are typically paid. In sectors where bribery is no typical custom, instead, anti-bribery policies should not enter firms' decision-making. I exploit information in the database from Escresa and Picci (2017) to perform this test. I first obtain a list of industries where at least one case of cross-border bribery was prosecuted before 2005. I argue that these industries represent sectors where bribes are more often paid²¹. I then replicate the analysis proposed in table 1 within two distinct sub-samples of industries: one including those where bribes were paid at least once (which I call "test")²², and one including the rest of the sectors in the sample ("placebo").

Figure 4 reports point estimates and confidence intervals obtained within these subsamples²³. For each subsample I replicate the model including no controls (only random effects) and all controls. Estimates of the coefficients associated with the interaction terms are consistent with the ones presented in table 1 for the "test" subsample. They are even more significant, as standard errors shrink. This indicates that they are estimated with even more precision. They are never distinguishable from zero, instead, in the "placebo" subsample. This provides further confidence on my argument. The conditional effect of the OECD Convention is observed only in industries where corruption is a customary practice.

²¹I consider only cases enforced at least by one other country than the one where bribes were paid, to mitigate concerns about reliability of information.

²²The list of industries in this set and their industrial classification is reported in table B.5.

²³Full disclosure of the results is reported in table B.6.

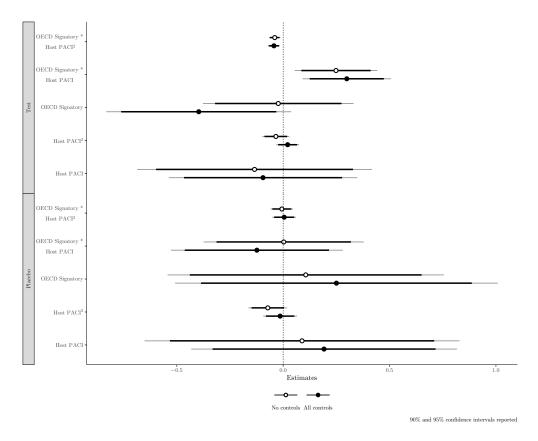


Figure 4: Coefficient plot. Market-specific results. Industries with ("test") and without ("placebo") at least one case of foreign bribery before 2006

3.2 Country-dyadic data

The first empirical exercise shows that investment behaviors of firms who are subject to OECD antibribery policies depend non-linearly on the level of corruption of the host country. The analysis has two main problems. First, selection under OECD policies is not random. Firms under OECD policies have very specific characteristics that distinguish them from those who are not subject to such policies. The previous analysis cannot disentangle these characteristics from anti-bribery policies themselves. Second, by focusing on information between 2006-2011 the firm-level analysis cannot distinguish if investment behavior changed after ratification of the Convention.

Time-varying data would provide a solution to the problems. Unfortunately, Orbis data is not well suited to construct time-series (Kalemli-Ozcan et al., 2015). I therefore proceed differently. I leverage on country-level dyadic data about foreign direct investment from the United Nations Conference on Trade and Development (UNCTAD). My hypothesis is firm-level and predicts probability of an investment rather than its size. Moreover, as argued above, aggregate data obscure heterogeneous effects on individual firms' investment decisions. Yet, I contend this analysis represents the best feasible solution to tackle the two problems highlighted above. Also, if the firm-level argument were correct one should reasonably expect the size of country-level flows would show patterns consistent with it, at least when aggregated properly. Since my argument posits an effect at the home-country level is conditional on host-country

characteristics, dyadic data should allow to observe the effect.

I retrieve UNCTAD dyadic country-level data on foreign investment, country-, and dyad-level covariates from Beazer and Blake (2018). My dependent variable is the logarithm of dyad-level FDI flows. Information ranges from 1994 to 2006, included. It thus covers the period preceding the adoption of the OECD Convention, and spans until the very beginning of my firm-level cross-section. Represented home economies are 93 and host countries are 118. The number of directed dyads included is 3719. I report signatory home economies and descriptive statistics in tables C.1 and C.2

I leverage on time information to tackle the two problems highlighted above. I adopt a two-way fixed-effect (2FE) model strategy to explain investment flows. The model includes a binary independent variable called OECD Convention that takes value 1 after the Convention entered into force for dyads whose home country is a signatory. Consistently with my argument, I interact this variable with a linear and squared measure of corruption using the Host PACI index. By including dyad-level fixed-effect, the model allows to hold dyad-level idiosyncratic characteristics constant. This makes for an analysis that compares observations for a single unit before-treatment and after-treatment. I am therefore able to disentangle adoption of the Convention from characteristics that are peculiar to investments in a given dyad. Year-level fixed-effect, then, controls for time-shocks that affect all dyads in the dataset.

A well-known problem with 2FE emerges when treatment timing varies between units: in that case the estimator produces meaningless comparisons between groups at different times of their treatment (Goodman-Bacon, 2018; Imai and Kim, 2020). This is unfortunately the case with the OECD Convention. Various parametric and non-parametric solutions to the problem have been recently proposed (Callaway and Sant'Anna, 2020; Imai and Kim, 2019). Here I adopt a somehow simpler solution. Given that for most economies the Convention entered into force either in 1999 or in 2001, I exclude observations in the "buffer" years 1999-2001 and compare pre-1999 dyad-level investment flows to post-2001 observations 24 . Assuming the effect of the Convention on investment was not extinguished in the immediate short term, the method should allow me to detect differences between the two periods. Models proposed below also introduce controls at the level of the host country, home country, and dyad adopted in the firm-level analysis.

3.2.1 Results

I estimate 2FE models using ordinary least squares (OLS). Results for the variables of interest²⁵ are reported in table 2. I first introduce only the variables of interest and fixed effects. Next, I introduce controls for the host country. Then, I introduce home-country controls, then dyadic controls. Standard errors are clustered at the dyad level. The estimate of coefficient β_1 is negative and statistically significant

 $^{^{24}}$ I also exclude from the analysis all dyads including either Ireland or Estonia as home country since the Convention entered into force there in 2003 and 2005 respectively, that is within the time-frame of my UNCTAD dataset but outside the "buffer" three-years period. 25 Full disclosure of results in table C.3.

in all specifications. Estimates become somehow less precise in models 3 and 4, where they fall short of conventional threshold for statistical significance (p-values: 0.058 and 0.057 respectively). The estimate of coefficient β_2 is positive, but fails to reach statistical significance due to rather large standard errors. Estimate of coefficient β_3 is positive and statistically significant, contrary to the findings in the firm-level analysis. This informs that, when the host country is very clean, dyads where the home country is a ratifier of the OECD Convention on average see larger investments.

Table 2: Dyadic country-level data. Twoway Fixed-Effect Models

| | Dependent variable: | | | | | | |
|------------------------|---------------------|--------------|--------------|--------------|--|--|--|
| | | Dyad FI | OI (log) | | | | |
| | (1) | (2) | (3) | (4) | | | |
| OECD Convention × | -0.019** | -0.019** | -0.018* | -0.018^* | | | |
| Host PACI ² | (0.008) | (0.010) | (0.010) | (0.010) | | | |
| OECD Convention × | 0.057 | 0.071 | 0.067 | 0.067 | | | |
| Host PACI | (0.065) | (0.082) | (0.082) | (0.082) | | | |
| OECD Convention | 0.831*** | 0.837*** | 0.786*** | 0.783*** | | | |
| | (0.175) | (0.217) | (0.234) | (0.233) | | | |
| Dyad FE | √ | √ | √ | √ | | | |
| Year FE | \checkmark | \checkmark | \checkmark | \checkmark | | | |
| Host country controls | | \checkmark | \checkmark | \checkmark | | | |
| Home country controls | | | \checkmark | \checkmark | | | |
| Dyad controls | | | | \checkmark | | | |
| Observations | 7,744 | 6,456 | $6,\!453$ | 6,453 | | | |
| \mathbb{R}^2 | 0.015 | 0.020 | 0.022 | 0.023 | | | |

Although results are rather consistent with those in the firm-level analysis, these models do not technically control for heterogeneity at the home country-level. Dyad-level fixed-effects only allow to control for idiosyncrasies at the dyad-level. Moreover, observations in the dataset are highly hierarchical and cross-nested (each dyad-year is a lower-level observation nested in a dyad, and cross-nested in home and host countries). Such structure can cause correlation between observations and make for unreliable standard errors unless properly modelled (Bell and Jones, 2015).

I then re-estimate the models in table 2 using random effects, to account for such hierarchical structure, control for home and host-country idiosyncrasies, and ensure correlation is properly modelled in the standard errors. Table C.4 reports the results obtained. I first introduce only the variables of interest and random intercepts at the level of home and host countries (specifying, for both levels, that dyad-years are the lowest level observations). Next, I introduce lagged host-country controls, then home-country controls, then dyad-controls. In all specifications I also include dyad-level random intercepts, with the exception of model 2, where its inclusion caused the model not to converge. Estimates of β_1 are negative and statistically significant, and those of β_2 are positive and statistically significant in the last two models. Estimates of β_3 are statistically significant but again inconsistent with my argument: they are positive in models 1 and 2, and negative in models 3 and 4.

Finally, I propose one last exercise using dyadic data. I employ a Heckman selection model to account for the selection process of investment destinations for firms: only investments that have been decided-upon are observable. This is known to create a relevant selection bias in models that do not account for it (Barassi and Zhou, 2012). Table C.5 presents the results, where controls are introduced step-by-step as done previously. Estimates of β_1 are negative and statistically significant in the selection model. Estimates of β_2 are positive and statistically significant. This indicates that the Convention enters firms' decision-making process as expected. Again, estimates of β_3 are positive, contrary to my expectation. These coefficients are also similar in size and significance in the outcome model (columns 3 and 4), indicating that the Convention plays a similar effect also in terms of the size of an investment, once the selection problem has been accounted for. With the exception of the parameter representing the effect of the Convention in very clean countries (β_3), results in this exercise provide support for the findings in the firm-level analysis.

4 Discussion

This section discusses limitations of the study. The main limit of the empirical analysis is represented by its possibility of inferring causality. Borrowing from the language of randomized controlled trials, in neither of the two empirical exercises the "treatment" is assigned at random. Firms are not randomly assigned to the group subject to anti-bribery laws in the first exercise, neither are dyadic investments in the second exercise. This potentially introduces sources of endogeneity in the analysis.

In fact, firms do not self-select into a treatment or control group either: the Convention was adopted by their home countries. As such, one could argue, concerns on endogeneity are misplaced: "treatment" occurs at the level of the home country i but the effect is studied at the level of the firm f. The argument at best mitigates, but does not rule out concerns of endogeneity, which can still arise if companies from signatories are fundamentally different from those of non-signatories, or if signatory countries factored in their firms' behaviors when deciding whether to adopt the agreement.

Given the absence of randomization this plausible concern is only ruled out insofar as the factors causing heterogeneity have been accounted for in the models. From this point of view, the inclusion of fixed and random effects gives some confidence that much of this heterogeneity is controlled. Yet, the lack of knowledge on the treatment assignment procedure, due to the absence of randomization, fundamentally condemns this study to assume treatment is as if random, conditionally on included controls and random/fixed effects. If the assumption is violated, causality cannot be inferred.

Yet, at a minimum findings describe interesting quantitative patterns in firms' behaviors, holding constant a large series of potential confounders and sources of heterogeneity. This insight is valuable in itself, given that competing arguments can be advanced on firms' investment behavior in relation to anti-bribery policies. It is also a valuable contribution given that existing empirical evidence is not univocal and opposed findings lack unification. Future studies could implement experimental or quasi-experimental strategies to ensure randomization of treatment assignment and to assess whether a solid causality can be inferred to confirm or contradict these findings.

A second limitation of the study concerns the mechanism proposed. The argument advanced expects that home countries' adoption of anti-bribery laws makes firms better or worse-off in international business depending on the level of corruption of the host country. The mechanism proposed explains this hypothesis based on the leverage available to firms under anti-bribery regulations to refuse bribe requests. This operating space, in turn, would depend on the power enjoyed by public officials (Ades and Di Tella, 1999; Svensson, 2003): it shrinks where corrupt public officials enjoy a disproportionately large power.

This mechanism cannot be tested by the present analysis. For instance, it might as well be possible that anti-bribery policies affect investments because they change the behavior of public officials, and not that of companies²⁶. The study cannot really tell a difference between these two mechanisms. Sector-specific evidence presented in figure 4 suggests that the effect in place involves only industries where bribes are a custom, and not the rest. This is consistent with the mechanism provided, which should not hold in industries where bribes are no usual custom, but does not allow a final word on the issue. Future qualitative studies could complement the present analysis. They could investigate negotiations of firms in typically corrupt industries with foreign public officials for the award of contracts. This decision-making process could be studied to assess if the explanation provided here is appropriate, and to what extent competing mechanisms can be advanced, instead. Until then, the quest remains open on which mechanism ultimately explains the findings presented here.

Finally, the study explicitly does not consider strategies to invest in a foreign market other than corporate ownership. Licensing and joint ventures, yet, are potential ways for firms to invest in a foreign economy. They can expose firms from signatories of the Convention to a lesser risk of interaction with corrupt public officials, and might therefore be a preferred strategy (Chapman et al., 2020; Zhu and Shi, 2019). A future study could therefore investigate the effect of the Convention on these alternative investment strategies.

Net of its limitations, this study makes valuable contributions. It shows that firms under anti-bribery policies make investment decisions that are not univocal: they depend on characteristics of the host economy. In particular, they are non-linear in its level of corruption, a finding which mitigates concerns

 $^{^{26}}$ I am thankful to Carolina Garriga for stressing this aspect.

about the adverse effects of anti-bribery policies. Although firms under anti-bribery policies are worse off in extremely corrupt economies, they are better off in a range of mildly corrupt countries.

5 Conclusion

What is the effect of policies imposed by home countries to further ESG values on firms' investments? It is often argued that these types of policies disadvantage firms in economies with poor ESG records $vis-\dot{a}-vis$ competitors who need not abide by similar standards, undermining their investments. In this article I study this question in the case of anti-bribery policies imposed by home countries under the 1997 OECD Convention. Existing studies on the matter provide inconsistent results: while some find a negative effect of anti-bribery policies in corrupt economies, other find positive or null effects.

In fact, I contend two competing arguments can be advanced about the effect of anti-bribery policies on foreign investment. The first one, deterrence, argues firms under anti-bribery policies operate at a disadvantage in corrupt economies due to the costs of sanctions. It expects they will invest less in these economies, as a result. The second one, empowerment, expects the opposite, arguing that firms under anti-bribery policies can leverage on these legal standards to refuse bribe requests and cut expenses. I argue that both mechanisms are simultaneously at play. Their net effect depends on the level of corruption of the host economy, because the bargaining power of public officials increases in it, and so does their operating space for demanding bribes.

I test my argument in two empirical exercises. First, I employ firm-level data on investment decisions by 3781 firms between 2006 and 2011. Multilevel logit models show that firms from signatories of the OECD Convention have up to a 40% higher probability of investing in mildly corrupt economies, a quantity that plummets to -50% in extremely corrupt countries. Results stand to a series of robustness tests. I then corroborate these findings using country-dyadic data on investment flows.

Beyond the study of anti-bribery policies, contributions in the article shed a light on the complex relationship between institutions and foreign investment. Previous studies have tended to concentrate on the effects of institutions of the host (Alesina and Dollar, 2000; Jensen, 2003; Li and Resnick, 2003) and home country (Beazer and Blake, 2018; Habib and Zurawicki, 2002) on FDI. Instead, I concentrate on corporate policies enforced by home countries across borders, and I show that they affect perceptions of political risk for private investors. This is also relevant insight for the study of regulatory international networks and of their effects on transnational private actors (Farrell and Newman, 2016).

Finally, policy implications can be derived. Estimates show that firms from signatories of the OECD Convention benefit from anti-bribery policies in a range of corrupt host countries like China, Mexico and Brazil. Yet, they are less likely to invest in very corrupt economies, including Angola, India, Nigeria, and Russia. The fact that their investments are jeopardized precisely here is a reason of concern. Firms

subject to anti-bribery laws are pulled away from these economies, and investments are undertaken more by firms which do not need to observe the same standards. With mocking irony, this undermines the desired effect of OECD anti-bribery policies precisely in corrupt host countries where they would be most needed. This pessimistic consideration aligns with that of Brazys and Kotsadam (2020). It adds to previous findings on the perverse effects of anti-bribery policies for firms outside the regulatory umbrella (Chapman et al., 2020). The extent to which these policies are the appropriate tool to reduce corruption of bribe-importing countries must be reconsidered.

References

- Ades, A. and Di Tella, R. (1999). Rents, competition, and corruption. *American Economic Review*, 89(4):982–993.
- Ai, C. and Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics Letters*, 80(1):123–129.
- Alesina, A. and Dollar, D. (2000). Who gives foreign aid to whom and why? *Journal of economic growth*, 5(1):33–63.
- Axelrod, R. (1984). The Evolution of Cooperation. New York: Basic Books.
- Barassi, M. R. and Zhou, Y. (2012). The effect of corruption on FDI: A parametric and non-parametric analysis. *European Journal of Political Economy*, 28(3):302–312.
- Beazer, Q. H. and Blake, D. J. (2018). The conditional nature of political risk: How home institutions influence the location of foreign direct investment. *American Journal of Political Science*, 62(2):470–485.
- Beck, P. J. and Maher, M. W. (1986). A comparison of bribery and bidding in thin markets. *Economics Letters*, 20(1):1–5.
- Bell, A. and Jones, K. (2015). Explaining fixed effects: Random effects modeling of time-series cross-sectional and panel data. *Political Science Research and Methods*, 3(1):133–153.
- Blundell-Wignall, A. and Roulet, C. (2017). Foreign direct investment, corruption and the OECD Anti-Bribery Convention. Technical report, Organization for the Economic Cooperation and Development.
- Bodea, C. and Ye, F. (2017). Bilateral investment treaties (BITs): The global investment regime and human rights. *British Journal of Political Science*, Forthcoming.
- Borensztein, E., De Gregorio, J., and Lee, J.-W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1):115–135.
- Bornschier, V., Chase-Dunn, C., and Rubinson, R. (1978). Cross-national evidence of the effects of foreign investment and aid on economic growth and inequality: A survey of findings and a reanalysis. *American Journal of Sociology*, 84(3):651–683.
- Brambor, T., Clark, W. R., and Golder, M. (2006). Understanding interaction models: Improving empirical analyses. *Political Analysis*, 14(1):63–82.
- Brazys, S. and Kotsadam, A. (2020). Sunshine or curse? foreign direct investment, the OECD Anti-Bribery Convention, and individual corruption experiences in Africa. *International Studies Quarterly*.
- Brewster, R. (2017). Enforcing the FCPA: International resonance and domestic strategy. *Virginia Law Review*, pages 1611–1682.
- Bukovansky, M. (2006). The hollowness of anti-corruption discourse. Review of International Political Economy, 13(2):181–209.
- Callaway, B. and Sant'Anna, P. H. (2020). Difference-in-differences with multiple time periods. *Journal of Econometrics*.
- Caves, R. E. (1971). International corporations: The industrial economics of foreign investment. Economica, 38(149):1–27.

- Chapman, T. L., Jensen, N. M., Malesky, E. J., and Wolford, S. (2020). Leakage in international regulatory regimes: Did the OECD Anti-Bribery Convention increase bribery? *Quarterly Journal of Political Science*.
- Cheibub, J. A., Gandhi, J., and Vreeland, J. R. (2010). Democracy and dictatorship revisited. *Public choice*, 143(1-2):67–101.
- Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Altman, D., Bernhard, M., Fish, M. S., Glynn, A., Hicken, A., Lührmann, A., Marquardt, K. L., McMann, K., Paxton, P., Pemstein, D., Seim, B., Sigman, R., Skaaning, S.-E., Staton, J., Wilson, S., Cornell, A., Alizada, N., Gastaldi, L., Gjerløw, H., Hindle, G., Ilchenko, N., Maxwell, L., Mechkova, V., Medzihorsky, J., von Römer, J., Sundström, A., Tzelgov, E., Wang, Y.-t., Wig, T., and Ziblatt, D. (2020). V-dem country-year dataset v10.
- Cuervo-Cazurra, A. (2008). The effectiveness of laws against bribery abroad. *Journal of International Business Studies*, 39(4):634–651.
- Damro, C. (2001). Building an international identity: the EU and extraterritorial competition policy. Journal of European Public Policy, 8(2):208–226.
- Das, S. P. (1999). Direct foreign investment versus licensing. Review of Development Economics, 3(1):86–97.
- Davis, K. E. (2019). Between Impunity and Imperialism: The Regulation of Transnational Bribery. Oxford University Press.
- Della Porta, D. and Vannucci, A. (1999). Corrupt Exchanges. Actors, Reources and Mechanisms of Political Corruption. Aldine de Gruyter.
- Dunning, J. H. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. In *The International Allocation of Economic Activity*, pages 395–418. Springer.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. Journal of International Business Studies, 11(1):9–31.
- Eichengreen, B. and Leblang, D. (2008). Democracy and globalization. *Economics & Politics*, 20(3):289–334.
- Escresa, L. and Picci, L. (2017). A new cross-national measure of corruption. *The World Bank Economic Review*, 31(1):196–219.
- Farrell, H. and Newman, A. L. (2016). The new interdependence approach: theoretical development and empirical demonstration. *Review of International Political Economy*, 23(5):713–736.
- Garrett, B. L. (2011). Globalized corporate prosecutions. Virginia Law Review, 97:1775.
- Goodman-Bacon, A. (2018). Difference-in-differences with variation in treatment timing. Technical report, National Bureau of Economic Research.
- Görg, H. (2000). Analysing foreign market entry the choice between greenfield investment and acquisitions. *Journal of Economic Studies*.
- Gray, J. (2009). International organization as a seal of approval: European union accession and investor risk. *American Journal of Political Science*, 53(4):931–949.

- Griffin, J. P. (1999). Extraterritoriality in US and EU antitrust enforcement. *Antitrust Law Journal*, 67:159.
- Gueorguiev, D. and Malesky, E. (2012). Foreign investment and bribery: a firm-level analysis of corruption in vietnam. *Journal of Asian Economics*, 23(2):111–129.
- Gutterman, E. (2015). Easier done than said: Transnational bribery, norm resonance, and the origins of the US Foreign Corrupt Practices Act. Foreign Policy Analysis, 11(1):109–128.
- Gutterman, E. (2017). Poverty, corruption, trade, or terrorism? strategic framing in the politics of UK anti-bribery compliance. The British Journal of Politics and International Relations, 19(1):152–171.
- Habib, M. and Zurawicki, L. (2002). Corruption and foreign direct investment. Journal of international business studies, 33(2):291–307.
- Hainmueller, J., Mummolo, J., and Xu, Y. (2019). How much should we trust estimates from multiplicative interaction models? simple tools to improve empirical practice. *Political Analysis*, 27(2):163–192.
- Hakkala, K. N., Norbäck, P.-J., and Svaleryd, H. (2008). Asymmetric effects of corruption on FDI: evidence from Swedish multinational firms. *The Review of Economics and Statistics*, 90(4):627–642.
- Heywood, P. M. (1997). Political corruption: Problems and perspectives. Political Studies, 45(3):417–435.
- Hines, J. R. (1995). Forbidden payment: Foreign bribery and American business after 1977. Technical report, National Bureau of Economic Research.
- Imai, K. and Kim, I. S. (2019). When should we use unit fixed effects regression models for causal inference with longitudinal data? *American Journal of Political Science*, 63(2):467–490.
- Imai, K. and Kim, I. S. (2020). On the use of two-way fixed effects regression models for causal inference with panel data. *Political Analysis*.
- Jensen, N. M. (2003). Democratic governance and multinational corporations: Political regimes and inflows of foreign direct investment. *International Organization*, 57(3):587–616.
- Jensen, N. M. (2008). Nation-states and the multinational corporation: A political economy of foreign direct investment. Princeton University Press.
- Jensen, N. M. and Malesky, E. J. (2018). Nonstate actors and compliance with international agreements: An empirical analysis of the OECD Anti-Bribery Convention. *International Organization*, 72(1):33–69.
- Kaczmarek, S. C. and Newman, A. L. (2011). The long arm of the law: Extraterritoriality and the national implementation of foreign bribery legislation. *International Organization*, 65(4):745–770.
- Kalemli-Ozcan, S., Sorensen, B., Villegas-Sanchez, C., Volosovych, V., and Yesiltas, S. (2015). How to construct nationally representative firm level data from the orbis global database: New facts and aggregate implications. Technical report, National Bureau of Economic Research.
- Kalyanpur, N. and Newman, A. L. (2019). Mobilizing market power: Jurisdictional expansion as economic statecraft. *International Organization*, 73(1):1–34.
- Karpoff, J. M., Lee, D. S., and Martin, G. S. (2008). The cost to firms of cooking the books. *Journal of Financial and Quantitative Analysis*, 43(3):581–611.
- Kaufmann, D. and Wei, S.-J. (1999). Does "grease money" speed up the wheels of commerce? Technical report, National bureau of economic research.

- King, G., Tomz, M., and Wittenberg, J. (2000). Making the most of statistical analyses: Improving interpretation and presentation. *American Journal of Political Science*, 44(2):347–361.
- Knutsen, C. H., Kotsadam, A., Olsen, E. H., and Wig, T. (2017). Mining and local corruption in Africa. *American Journal of Political Science*, 61(2):320–334.
- Lambsdorff, J. G. (2002). Making corrupt deals: contracting in the shadow of the law. *Journal of Economic Behavior & Organization*, 48(3):221–241.
- Li, Q. and Resnick, A. (2003). Reversal of fortunes: Democratic institutions and foreign direct investment inflows to developing countries. *International Organization*, 57(1):175–211.
- Li, Q. and Reuveny, R. (2003). Economic globalization and democracy: An empirical analysis. *British* journal of political science, 33(1):29–54.
- Linzer, D. A. and Staton, J. K. (2015). A global measure of judicial independence, 1948–2012. *Journal of Law and Courts*, 3(2):223–256.
- Malesky, E. J., Gueorguiev, D. D., and Jensen, N. M. (2015). Monopoly money: Foreign investment and bribery in Vietnam, a survey experiment. *American Journal of Political Science*, 59(2):419–439.
- OECD (2018). Fighting the crime of foreign bribery. the Anti-Bribery Convention and the OECD Working Group on Bribery. Technical report, Organization for the Economic Cooperation and Development.
- Olken, B. A. (2009). Corruption perceptions vs. corruption reality. *Journal of Public Economics*, 93(7-8):950–964.
- Pinto, P. M. and Zhu, B. (2016). Fortune or evil? the effect of inward foreign direct investment on corruption. *International Studies Quarterly*, 60(4):693–705.
- Putnam, T. L. (2009). Courts without borders: Domestic sources of us extraterritoriality in the regulatory sphere. *International Organization*, 63(3):459–490.
- Rodman, K. A. (1995). Sanctions at bay? hegemonic decline, multinational corporations, and US economic sanctions since the pipeline case. *International Organization*, 49(1):105–137.
- Rose-Ackerman, S. (1975). The economics of corruption. Journal of Public Economics, 4(2):187–203.
- Sampath, V. S., Gardberg, N. A., and Rahman, N. (2018). Corporate reputation's invisible hand: Bribery, rational choice, and market penalties. *Journal of Business Ethics*, 151(3):743–760.
- Sharman, J. C. (2011). The money laundry: Regulating criminal finance in the global economy. Cornell University Press.
- Skovgaard Poulsen, L. N. (2014). Bounded rationality and the diffusion of modern investment treaties. *International Studies Quarterly*, 58(1):1–14.
- Smarzynska, B. K. and Wei, S.-J. (2000). Corruption and composition of foreign direct investment: firm-level evidence. *Available at SSRN 223594*.
- Søreide, T. (2006). Corruption in international business transactions: the perspective of norwegian firms. International handbook on the economics of corruption, pages 381–417.
- Spahn, E. K. (2013). Implementing global anti-bribery norms: from the Foreign Corrupt Practices Act to the OECD Anti-Bribery Convention to the UN Convention Against Corruption. *Ind. Int'l & Comp. L. Rev.*, 23:1.

- Svensson, J. (2003). Who must pay bribes and how much? evidence from a cross section of firms. *The Quarterly Journal of Economics*, 118(1):207–230.
- Tarullo, D. K. (2004). The limits of institutional design: Implementing the OECD Anti-Bribery Convention. *Virginia Journal of International Law*, 44(3):665–710.
- Teorell, J., Dahlberg, S., Holmberg, S., Rothstein, B., Alvarado Pachon, N., and Axelsson, S. (2020). The quality of government standard dataset, version jan20.
- Treisman, D. (2007). What have we learned about the causes of corruption from ten years of cross-national empirical research? *Annual Review of Political Science*, 10:211–244.
- US Senate (1998). Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. Senate Executive Report 105-19 to accompany Treaty Doc. 105-43. July 16.
- Wei, S.-J. (2000). How taxing is corruption on international investors? Review of Economics and Statistics, 82(1):1–11.
- Zhu, B. (2017). MNCs, rents, and corruption: Evidence from China. American Journal of Political Science, 61(1):84–99.
- Zhu, B. and Shi, W. (2019). Greasing the wheels of commerce? corruption and foreign investment. *The Journal of Politics*, 81(4):1311–1327.

Appendix

The Conditional Arm of the Law. The Effect of the OECD Anti-Bribery Convention on Foreign Direct Investment

A The Host PACI measure

In this section I present the Public Administration Corruption Index (PACI), proposed by Escresa and Picci (2017) and adopted in this study. The PACI relies on the following intuition: suppose all countries were equally corrupt. Then the number of observed cases of cross-border bribery occurring in a country should be proportional to its economic inflows: corruption would simply be more likely to occur where more funds were inflowing. Imagine in fact we observed that a large share of bribes paid by firms from country x abroad are paid in country y, but country y is not a major commercial partner of x. This is evidence that public officials in country y are more corrupt than those in the other partners of x, because they attract more bribes than what could be expected by simply looking at economic flows. The PACI generalizes and formalizes this intuition. For each country y, it is computed as the ratio between the number of observed cross-border bribes paid by firms from the set of all countries X ($X \not\supset y$) to y's public officials, and the number of cases that could be expected based on trade flows between all xy pairs. It thus measures by how much observed cases of cross-border corruption involving public officials of a country depart from cases that could be expected assuming all countries were equally corrupt and corruption of y were only proportional to trade inflows.

What matters for the PACI to be valid is thus the spatial distribution of cases of cross-border corruption. The index relies on the assumption that the probability of observing a corrupt transaction involving firms from country x and public officials in country y does not depend on the identity of country y (Escresa and Picci, 2017). One could reasonably expect very corrupt countries to be less likely to enforce cases of corruption. This would violate the assumption and threaten the validity of the PACI. For this reason the index does not consider cases of corruption that were enforced only in country y, and includes exclusively cases that were prosecuted by at least one foreign country²⁷. A second important assumption that needs to hold is that the number of cross-border transactions is proportional to bilateral trade flows (as opposed to other economic flows like FDI). Escresa and Picci (2017) argue that many transactions are not reflected in FDI flows or stocks, and that investments eventually enable trade flows between countries. Thus, they argue, trade flows are a good proxy of economic flows between pairs of countries.

B Firm-level analysis

B.1 Descriptive statistics

Table B.2 presents descriptive statistics for all variables included in the firm-level models. I retrieve from Beazer and Blake (2018) data for the variables Subsidiary, Home GDP (log), Home GDP Growth (%), Home Judiciary Indep., Host GDP (log), Host GDP per Capita, Host FDI (GDP %), Host Trade (GDP %), Host Judiciary Indep., Host Democracy, Host POLCON III, Dyad Distance, Dyad Common Language, Dyad Colonial Relation, Dyad BIT, Firm Age (log), Firm Assets (log), Firm Host Countries (log). Data on anti-bribery actions necessary to build the Host PACI variable are retrieved from the dataset of Escresa and Picci (2017)²⁸. Data on Host CCE and Host V-Dem Bribery have been retrieved respectively from the Quality of Governance dataset (Teorell et al., 2020) and from the V-Dem core database, version 10 (Coppedge et al., 2020).

B.2 Full disclosure of results

²⁷Evidence for most cases of cross-border bribery, anyway, does not originate in the country where the bribe is paid but in that where the firm is headquartered (Escresa and Picci, 2017).

²⁸I have manually extended this data source following the same procedure adopted by the authors. With my extension the database consists of 1640 cases of anti-bribery prosecution involving 636 different parent firms from 59 nationalities active in 147 countries. Total time coverage goes from 1977 to 2018.

Table B.1: Firm-level data. Home countries

| | Signatories | Non-signatories |
|----|--------------------|-------------------------------------|
| 1 | Austria | United Arab Emirates |
| 2 | Australia | Bosnia and Herzegovina |
| 3 | Belgium | China, P.R.: Mainland |
| 4 | Bulgaria | Colombia |
| 5 | Brazil | Costa Rica |
| 6 | Canada | Curacao |
| 7 | Switzerland | Egypt |
| 8 | Chile | Guinea-Bissau |
| 9 | Czech Republic | Hong Kong |
| 10 | Germany | Croatia |
| 11 | Denmark | Israel |
| 12 | Estonia | India |
| 13 | Spain | Kuwait |
| 14 | Finland | Kazakhstan |
| 15 | France | Lithuania |
| 16 | United Kingdom | Malaysia |
| 17 | Greece | Peru |
| 18 | Hungary | Philippines |
| 19 | Ireland | Qatar |
| 20 | Iceland | Romania |
| 21 | Italy | Russian Federation |
| 22 | Japan | Saudi Arabia |
| 23 | Korea, Republic of | Singapore |
| 24 | Luxembourg | Thailand |
| 25 | Mexico | Taiwan Province of China |
| 26 | Netherlands | Uruguay |
| 27 | Norway | Venezuela, Republica Bolivariana de |
| 28 | New Zealand | South Africa |
| 29 | Poland | |
| 30 | Portugal | |
| 31 | Sweden | |
| 32 | Slovenia | |
| 33 | Slovak Republic | |
| 34 | Turkey | |
| 35 | United States | |

Table B.2: Firm-level data. Summary statistics

| Statistic | N | Mean | St. Dev. | Min | Pctl(25) | Pctl(75) | Max |
|---------------------------|---------|--------|----------|--------|----------|----------|---------|
| Subsidiary | 406,454 | 0.026 | 0.158 | 0 | 0 | 0 | 1 |
| OECD Signatory | 406,454 | 0.944 | 0.231 | 0 | 1 | П | 1 |
| Host PACI | 329,397 | 5.171 | 2.317 | 0.000 | 4.032 | 6.821 | 8.901 |
| Host PACI (2012) | 332,972 | 5.030 | 2.261 | 0.000 | 3.872 | 6.548 | 8.755 |
| Host CCE | 402,585 | 2.677 | 1.076 | 1.082 | 1.833 | 3.570 | 4.825 |
| Host V-Dem | 402,585 | 0.203 | 1.550 | -2.838 | -0.952 | 1.614 | 3.363 |
| Home GDP (log) | 403,731 | 25.594 | 1.540 | 18.750 | 24.109 | 26.271 | 27.859 |
| Home GDP Growth (%) | 403,731 | 1.987 | 1.408 | -6.272 | 1.193 | 2.163 | 10.647 |
| Home Judiciary Indep. | 406,244 | 0.895 | 0.133 | 0.167 | 0.886 | 0.965 | 0.988 |
| Host GDP (log) | 383,261 | 23.196 | 1.717 | 19.414 | 21.822 | 24.229 | 27.859 |
| Host GDP per capita | 383,261 | 1.430 | 1.445 | 0.028 | 0.328 | 2.334 | 6.829 |
| Host FDI (GDP %) | 383,261 | 6.533 | 17.617 | -4.258 | 1.752 | 5.698 | 172.716 |
| Host Trade (GDP %) | 383,261 | 0.876 | 0.533 | 0.265 | 0.567 | 1.038 | 4.299 |
| Host Judiciary Indep. | 398,714 | 0.558 | 0.281 | 0.018 | 0.331 | 0.842 | 0.988 |
| Host Democracy | 390,986 | 0.703 | 0.457 | 0.000 | 0.000 | 1.000 | 1.000 |
| Host POLCON III | 383,244 | 0.311 | 0.198 | 0.000 | 0.127 | 0.468 | 0.692 |
| Dyad Distance (km) | 386,206 | 0.656 | 0.422 | 0.006 | 0.261 | 0.948 | 1.995 |
| Dyad Common Language | 386,206 | 0.113 | 0.316 | 0.000 | 0.000 | 0.000 | 1.000 |
| Dyad Colonial Relation | 386,206 | 0.051 | 0.219 | 0.000 | 0.000 | 0.000 | 1.000 |
| Dyad BIT | 406,454 | 0.376 | 0.484 | 0 | 0 | 1 | 1 |
| Firm Age (log) | 400,154 | 3.312 | 0.948 | 0.000 | 2.639 | 4.060 | 5.897 |
| Firm Assets (log) | 379,363 | 13.875 | 2.115 | 4.025 | 12.380 | 15.328 | 20.181 |
| Firm Host Countries (log) | 406,454 | 0.678 | 0.721 | 0.000 | 0.000 | 1.099 | 3.714 |
| | | | | | | | |

 $\begin{tabular}{l} Table B.3: Firm-level data. The effect of the OECD Convention on probability of subsidiary incorporation. Multilevel logit models (full disclosure) \\ \end{tabular}$

| | | Dep | pendent varia | ble: | |
|------------------------|-----------|--------------------|---------------|----------------|--------------|
| | | | Subsidiary | | |
| | (1) | (2) | (3) | (4) | (5) |
| OECD Signatory × | -0.033*** | -0.038*** | -0.023^* | -0.031** | -0.034** |
| $Host PACI^2$ | (0.012) | (0.013) | (0.013) | (0.013) | (0.013) |
| OECD Signatory × | 0.197** | 0.225** | 0.163^{*} | 0.206** | 0.220** |
| Host PACI | (0.090) | (0.092) | (0.090) | (0.096) | (0.096) |
| OECD Signatory | -0.016 | -0.034 | -0.213 | -0.267 | -0.282 |
| | (0.165) | (0.192) | (0.246) | (0.205) | (0.205) |
| Host PACI ² | -0.041 | 0.013 | 0.003 | 0.011 | 0.013 |
| | (0.033) | (0.029) | (0.026) | (0.027) | (0.028) |
| Host PACI | -0.097 | -0.007 | 0.023 | -0.008 | -0.036 |
| 11050 11101 | (0.286) | (0.242) | (0.221) | (0.230) | (0.231) |
| Host GDP (log) | (0.200) | 0.592^{***} | 0.652*** | 0.674*** | 0.680*** |
| nost GD1 (log) | | | (0.115) | (0.120) | (0.120) |
| Host GDP | | $(0.128) \\ 0.002$ | -0.042 | -0.023 | -0.056 |
| | | | | | |
| per capita | | (0.180) | (0.162) | (0.169) | (0.172) |
| Host FDI | | 0.010 | 0.010 | 0.009 | 0.010 |
| (GDP %) | | (0.009) | (0.008) | (0.009) | (0.009) |
| Host Trade | | -0.225 | -0.186 | -0.172 | -0.155 |
| (GDP %) | | (0.335) | (0.303) | (0.315) | (0.316) |
| Host Judiciary | | 3.699*** | 3.537*** | 3.653*** | 3.695*** |
| Indep. | | (1.150) | (1.035) | (1.079) | (1.085) |
| Host POLCON III | | 0.530 | 0.099 | 0.156 | 0.200 |
| | | (0.962) | (0.865) | (0.902) | (0.905) |
| Host Democracy | | -0.129 | -0.001 | -0.016 | -0.022 |
| | | (0.461) | (0.416) | (0.434) | (0.435) |
| Home GDP (log) | | 0.063** | 0.138*** | 0.055^{*} | 0.057^{*} |
| (0) | | (0.027) | (0.045) | (0.030) | (0.030) |
| Home GDP | | -0.013 | -0.028 | -0.005 | -0.006 |
| Growth (%) | | (0.019) | (0.026) | (0.021) | (0.021) |
| Home Judiciary | | -0.182 | -0.256 | -0.393 | -0.391 |
| Indep. | | (0.241) | (0.380) | (0.261) | (0.260) |
| Dyad BIT | | (0.241) | 0.087 | 0.201) 0.079 | 0.082 |
| Dyau DII | | | (0.068) | (0.073) | (0.032) |
| Drad Common | | | | 0.751*** | , |
| Dyad Common | | | 0.693*** | | 0.742*** |
| Language | | | (0.092) | (0.100) | (0.101) |
| Dyad Colonial | | | 0.725*** | 0.737*** | 0.732*** |
| Relation | | | (0.116) | (0.126) | (0.127) |
| Dyad Distance | | | -1.229*** | -1.102*** | -1.105**** |
| | | | (0.094) | (0.095) | (0.095) |
| Firm Assets (log) | | | | 0.005 | 0.005 |
| | | | | (0.008) | (0.008) |
| Firm Age (log) | | | | 0.017 | 0.013 |
| | | | | (0.014) | (0.015) |
| Firm Host | | | | 1.286*** | 1.287*** |
| Countries (log) | | | | (0.020) | (0.020) |
| Constant | -3.364*** | -5.602*** | -5.513*** | -6.079*** | -6.026*** |
| | (0.605) | (0.642) | (0.606) | (0.610) | (0.612) |
| Random intercepts | √ | √ | √ | ✓ | √ |
| Industry intercepts | | | | | \checkmark |
| N. of host countries | 84 | 83 | 83 | 83 | 83 |

| Continued | | | | | | | |
|-----------------------------------|------------|-------------|-------------|------------|-------------|--|--|
| N. of home countries | 61 | 60 | 60 | 57 | 56 | | |
| Observations | 320,913 | $315,\!657$ | $315,\!657$ | 289,732 | $285,\!295$ | | |
| Akaike Inf. Crit. | 62,550.060 | 62,272.990 | 61,961.250 | 50,267.110 | 49,604.410 | | |
| Note: *p<0.1; **p<0.05; ***p<0.01 | | | | | | | |

B.3 Robustness tests

Results for all tests are reported in table B.4. In model 1 I replicate the full specification of model 5 in table 1 excluding the squared measure of *Host PACI* and its interaction with *OECD Signatory* to show that the effect of the OECD Convention on *Subsidiary* is not conditional on a linear measure of corruption. No term involved in the interaction is found to be statistically significant. I then replicate model 5 of table 1 using more traditional, perception-based indexes of corruption. First, I use the "Executive bribery and corrupt exchanges" measure from V-Dem (Coppedge et al., 2020). The measure is a Bayesian-based index that relies on both objective and survey information, and is generally considered an improvement of traditional perception-based indexes. Next, I employ the World Bank's CCE, rescaled so as to range from 0 to 5. In both cases, lower values indicate higher levels of corruption. Results obtained remain substantively the same.

Next, I consider the possibility that the main measure of corruption I adopt restricts the sample excessively and introduces a source of selection. Computing the 2005 version of *Host PACI* reduces the number of host countries in the analysis because it relies on fewer observations of the dataset from Escresa and Picci (2017). To test whether results hold with an extended sample of host countries, I replicate model 5 of table B.3 using the version of the index computed and published by Escresa and Picci (2017), which employs information until 2012 and includes more host countries²⁹. Results obtained when using this version of the index are substantively the same as the ones discussed before.

As a further test I consider the hypothesis that results might be driven by some outlier countries. China figures as a very likely candidate: the country has not ratified the Convention and it is generally considered a rather corrupt bureaucracy. Yet, it is involved in the world economy as both a major importer and exporter of investments. I therefore replicate the analysis excluding observations relative to firms from this country or investing in it. Results do not change significantly with this exclusion. Next, in two countries the Convention has entered into force within the time window of the cross-section (2006-2011): Israel and South Africa. Thus, their firms might have been subject to anti-bribery policies even though *OECD Signatory* assigns them a value of 0. I therefore replicate the analysis excluding them. Results, again, do not change significantly.

²⁹The choice is appropriate, since corruption is a very sticky phenomenon with little time variation. Correlation between the two versions of the index indeed equals 0.98.

Table B.4: Firm-level data. Robustness tests of multilevel logit models

| | Dependent variable: | | | | | |
|---|---------------------|--|--|---|--|---|
| | | | Бер | Subsidiary | | |
| | First degree | V-Dem | CCE | PACI (2012) | No China | No Israel No South Africa |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| OECD Signatory × Host PACI ² OECD Signatory × Host PACI OECD Signatory × Host V-Dem Bribery ² OECD Signatory × Host V-Dem Bribery OECD Signatory × OECD Signatory × | -0.007 (0.034) | -0.075** (0.032) 0.133* (0.071) | -0.213*** | | -0.029** (0.012) 0.168* (0.089) | -0.024* (0.014) 0.168* (0.096) |
| Host CCE ² OECD Signatory × Host CCE OECD Signatory × Host PACI ² (2012) OECD Signatory × Host PACI (2012) OECD Signatory × Host PACI (2012) OECD Signatory | -0.067 (0.191) | 0.021 (0.181) | (0.082) 1.360** (0.543) -2.023** (0.847) | $\begin{array}{c} -0.048^{***} \\ (0.014) \\ 0.277^{***} \\ (0.097) \\ -0.260 \\ (0.193) \end{array}$ | -0.188 (0.196) 0.016 (0.026) | -0.197 (0.225) 0.012 (0.027) |
| Host PACI | 0.039 (0.106) | | | | (0.020) -0.069 (0.221) | (0.027) -0.101 (0.230) |
| Host V-Dem Bribery ² | (0.200) | 0.133** (0.062) | | | (====) | (0.200) |
| Host V-Dem Bribery | | -0.089 (0.159) | | | | |
| Host CCE^2 | | , | 0.154 (0.148) | | | |
| Host CCE | | | -0.660 (1.012) | | | |
| Host $PACI^2$ (2012) | | | | 0.020 (0.028) | | |
| Host PACI (2012) | | | | -0.057 (0.234) | | |
| Host GDP (log) | 0.723*** (0.107) | 0.751*** (0.087) | 0.737*** (0.088) | 0.627*** (0.115) | 0.678*** (0.121) | 0.687*** (0.113) |
| Host GDP per capita | -0.065 (0.173) | -0.173 (0.165) | -0.185 (0.187) | 0.218 (0.225) | -0.044 (0.167) | $-0.14\overset{'}{5}$ (0.169) |
| Host FDI (GDP %) | 0.010 (0.009) | 0.013* (0.008) | 0.014* (0.008) | 0.006 (0.009) | 0.011 (0.008) | 0.012 (0.008) |
| Host Trade (GDP $\%$) | -0.105 (0.311) | -0.148 (0.281) | -0.168 (0.292) | -0.366 (0.315) | -0.210 (0.304) | -0.217 (0.298) |
| Host Judiciary Indep. | 3.640*** (1.084) | 3.205*** (1.066) | 2.453* (1.374) | 2.930*** (1.084) | 3.685*** (1.036) | 4.367*** (1.115) |
| Host POLCON III | 0.248 (0.904) | 0.455 (0.820) | 0.422 (0.829) | 0.028 (0.892) | 0.201 (0.865) | 0.366 (0.850) |
| Host Democracy | 0.015 (0.431) | 0.005 (0.397) | 0.068 (0.413) | 0.038 (0.412) | -0.050 (0.418) | -0.382 (0.460) |
| Home GDP (log) | 0.058* (0.031) | 0.048 (0.035) | 0.048 (0.035) | 0.052* (0.030) | 0.080** (0.032) | 0.074^{**} (0.029) |
| Home GDP Growth (%) | -0.005 (0.021) | (0.033) -0.002 (0.022) | (0.033) -0.002 (0.022) | -0.002 (0.020) | (0.032) -0.001 (0.023) | -0.003 (0.021) |
| Home Judiciary Indep. | -0.398 (0.263) | -0.372 (0.293) | -0.382 (0.292) | -0.328 (0.257) | -0.253 (0.271) | -0.333 (0.289) |
| Dyad BIT | 0.065 (0.073) | 0.078 (0.070) | 0.064 (0.070) | 0.092 (0.072) | 0.189*** (0.049) | 0.166*** (0.049) |
| Dyad Common | 0.748*** | 0.791*** | 0.787*** | 0.707*** | 0.651*** | 0.657*** |
| Language | (0.101) | (0.098) | (0.098) | (0.100) | (0.045) | (0.045) |
| Dyad Colonial | 0.734*** | 0.759*** | 0.759*** | 0.761*** | 0.304*** | 0.292*** |
| Relation Dyad Distance | (0.127) $-1.126***$ | (0.120) $-1.241***$ | (0.120) $-1.237***$ | (0.123) $-1.061***$ | (0.052) $-1.129***$ | (0.052) $-1.069***$ |
| Dyau Distance | (0.096) | (0.090) | (0.090) | (0.093) | -1.129 (0.059) | -1.069 (0.058) |
| Firm Assets (log) | 0.005 | 0.008 | 0.008 | 0.006 | 0.005 | 0.005 |
| | (0.008) | (0.007) | (0.007) | (0.008) | (0.008) | (0.008) |

| Continued | | | | | | |
|----------------------|------------|----------------|----------------|------------|----------------|----------------|
| Firm Age (log) | 0.013 | 0.010 | 0.010 | 0.009 | 0.012 | 0.011 |
| - (-/ | (0.015) | (0.014) | (0.014) | (0.014) | (0.014) | (0.015) |
| Firm Host | 1.287*** | 1.274*** | 1.274*** | 1.277*** | 1.271*** | 1.270*** |
| Countries (log) | (0.020) | (0.019) | (0.019) | (0.019) | (0.020) | (0.020) |
| Constant | -6.105*** | -6.193*** | -5.361*** | -5.984*** | -5.854*** | -5.655*** |
| | (0.589) | (0.258) | (1.642) | (0.628) | (0.585) | (0.619) |
| Random intercepts | Yes | Yes | Yes | Yes | Yes | Yes |
| N. of host countries | 83 | 99 | 99 | 85 | 82 | 81 |
| N. of home countries | 56 | 56 | 56 | 56 | 55 | 54 |
| Observations | 285,295 | 340,554 | 340,554 | 291,945 | 280,767 | 275,705 |
| Akaike Inf. Crit. | 49,607.020 | $55,\!424.820$ | $55,\!423.580$ | 53,329.030 | $49,\!350.190$ | $49,\!272.190$ |

Note:

*p<0.1; **p<0.05; ***p<0.01

B.4 Sector-specific analysis

Table B.5: Firm-level data. Industries with at least one case of bribery between 1997 and 2005

| = | | | |
|---|--------|------|--|
| _ | NAICS3 | NACE | NAICS3 label |
| | 111 | A1 | Crop Production |
| | 112 | A1 | Animal Production and Aquaculture |
| | 113 | A2 | Forestry and Logging |
| | 115 | A1 | Support Activities for Agriculture and Forestry |
| | 211 | B6 | Oil and Gas Extraction |
| | 212 | B7 | Mining (except Oil and Gas) |
| | 213 | B9 | Support Activities for Mining |
| | 221 | D35 | Utilities |
| | 236 | F41 | Construction of Buildings |
| | 237 | F42 | Heavy and Civil Engineering Construction |
| | 238 | F43 | Specialty Trade Contractors |
| | 311 | C10 | Food Manufacturing |
| | 312 | C11 | Beverage and Tobacco Product Manufacturing |
| | 315 | C14 | Apparel Manufacturing |
| | 323 | C18 | Printing and Related Support Activities |
| | 324 | C19 | Petroleum and Coal Products Manufacturing |
| | 325 | C20 | Chemical Manufacturing |
| | 326 | C22 | Plastics and Rubber Products Manufacturing |
| | 331 | C24 | Primary Metal Manufacturing |
| | 332 | C25 | Fabricated Metal Product Manufacturing |
| | 333 | C28 | Machinery Manufacturing |
| | 334 | C26 | Computer and Electronic Product Manufacturing |
| | 335 | C27 | Electrical Equipment; Appliance; and Component Manufacturing |
| | 336 | C29 | Transportation Equipment Manufacturing |
| | 337 | C31 | Furniture and Related Product Manufacturing |
| | 339 | C32 | Miscellaneous Manufacturing |
| | 423 | G46 | Merchant Wholesalers; Durable Goods |
| | 424 | G46 | Merchant Wholesalers; Nondurable Goods |
| | 425 | G46 | Wholesale Electronic Markets and Agents and Brokers |
| | 441 | G45 | Motor Vehicle and Parts Dealers |
| | 442 | G46 | Furniture and Home Furnishings Stores |
| | 443 | G46 | Electronics and Appliance Stores |
| | 444 | G46 | Building Material and Garden Equipment and Supplies Dealers |
| | 445 | G47 | Food and Beverage Stores |
| | 446 | G46 | Health and Personal Care Stores |
| | 447 | G46 | Gasoline Stations |
| | 448 | G47 | Clothing and Clothing Accessories Stores |
| | 451 | G47 | Sporting Goods; Hobby; Musical Instrument; and Book Stores |
| | 452 | G47 | General Merchandise Stores |
| | 453 | G47 | Miscellaneous Store Retailers |
| | 454 | G47 | Nonstore Retailers |
| | 483 | H50 | Water Transportation |
| | 491 | H53 | Postal Service |
| | | | |

| Continued | | |
|-----------|-----|--|
| 492 | H53 | Couriers and Messengers |
| 511 | J58 | Publishing Industries (except Internet) |
| 517 | J61 | Telecommunications |
| 518 | J63 | Data Processing; Hosting; and Related Services |
| 519 | J62 | Other Information Services |
| 522 | K64 | Credit Intermediation and Related Activities |
| 523 | K64 | Securities; Commodity Contracts; |
| | | and Other Financial Investments and Related Activities |
| 525 | K64 | Funds; Trusts; and Other Financial Vehicles |
| 531 | L68 | Real Estate |
| 551 | M70 | Management of Companies and Enterprises |
| 561 | N82 | Administrative and Support Services |
| 611 | P85 | Educational Services |
| 621 | Q86 | Ambulatory Health Care Services |
| 713 | R92 | Amusement; Gambling; and Recreation Industries |
| 721 | I55 | Accommodation |
| 921 | O84 | Executive; Legislative; and Other General Government Support |
| 924 | O84 | Administration of Environmental Quality Programs |

 $\begin{tabular}{l} Table B.6: Firm-level data. Market-specific effects of the OECD Convention on probability of subsidiary incorporation. Multilevel logit models \end{tabular}$

| | | Dependent | variable: | | |
|------------------------|-----------|---------------------|-----------|---------------------|--|
| | | Subsid | v | | |
| | Te | est | Placebo | | |
| | (1) | (2) | (3) | (4) | |
| DECD Signatory × | -0.040*** | -0.043*** | -0.006 | 0.005 | |
| Host PACI ² | (0.014) | (0.015) | (0.027) | (0.029) | |
| OECD Signatory × | 0.248** | 0.299*** | 0.003 | -0.123 | |
| Host PACI | (0.099) | (0.106) | (0.192) | (0.206) | |
| DECD Signatory | -0.023 | -0.397^{*} | 0.106 | 0.250 | |
| - | (0.181) | (0.222) | (0.331) | (0.387) | |
| Host PACI ² | -0.034 | 0.021 | -0.072 | -0.014 | |
| | (0.032) | (0.027) | (0.046) | (0.041) | |
| Host PACI | -0.134 | -0.095 | 0.089 | $0.192^{'}$ | |
| | (0.281) | (0.226) | (0.378) | (0.319) | |
| Host GDP (log) | , | 0.667*** | ` / | 0.718*** | |
| (3/ | | (0.115) | | (0.152) | |
| Host GDP per capita | | -0.049 | | 0.008 | |
| r | | (0.164) | | (0.218) | |
| Host FDI (GDP %) | | 0.009 | | 0.010 | |
| | | (0.008) | | (0.010) | |
| Host Trade (GDP %) | | -0.160 | | -0.126 | |
| 1950 11440 (021 70) | | (0.303) | | (0.430) | |
| Host Judiciary Indep. | | 3.655*** | | 3.005** | |
| rest outreaty indep. | | (1.036) | | (1.370) | |
| Host POLCON III | | 0.147 | | 0.447 | |
| 1050 1 020010 111 | | (0.865) | | (1.128) | |
| Host Democracy | | -0.040 | | 0.527 | |
| lost Democracy | | (0.416) | | (0.559) | |
| Home GDP (log) | | 0.063** | | 0.034 | |
| Home GD1 (log) | | (0.030) | | (0.034) | |
| Home GDP | | -0.005 | | 0.009 | |
| Growth (%) | | (0.021) | | (0.039) | |
| Home Judiciary Indep. | | -0.379 | | 0.023 | |
| Tome Judiciary Indep. | | (0.271) | | (0.325) | |
| O d DIT | | , | | 0.327** | |
| Dyad BIT | | 0.046 | | | |
| Oyad Common | | (0.077) 0.686*** | | (0.133) 0.762*** | |
| v | | | | | |
| Language | | (0.105) | | (0.143) | |
| Oyad Colonial | | 0.667*** | | 0.700*** | |
| Relation | | (0.132) | | (0.177) | |
| Oyad Distance | | -1.138*** | | -0.697** | |
| | | (0.100) | | (0.137) | |

| Continued | | | | |
|----------------------|--------------|--------------|------------|--------------|
| Firm Assets (log) | | 0.007 | | 0.0005 |
| | | (0.009) | | (0.021) |
| Firm Age (log) | | 0.010 | | 0.040 |
| | | (0.016) | | (0.037) |
| Firm Host | | 1.288*** | | 1.243*** |
| Countries (log) | | (0.022) | | (0.051) |
| Constant | -3.339*** | -5.885*** | -3.355*** | -6.463*** |
| | (0.602) | (0.592) | (0.751) | (0.782) |
| Random intercepts | \checkmark | \checkmark | ✓ | ✓ |
| Industry intercepts | \checkmark | ✓ | ✓ | \checkmark |
| N. of host countries | 84 | 83 | 84 | 83 |
| N. of home countries | 57 | 52 | 40 | 38 |
| Observations | 262,075 | 236,609 | 54,097 | 48,686 |
| Log Likelihood | -25,757.560 | -20,778.850 | -5,159.393 | -4,114.255 |
| Akaike Inf. Crit. | 51,535.120 | 41,611.710 | 10,338.780 | 8,282.511 |

Note:

*p<0.1; **p<0.05; ***p<0.01

C Dyadic country-level analysis

C.1 Descriptive statistics

Table C.1: Dyadic country-level data. Home countries

| | Signatories | Non-signatories |
|----|--------------------|-------------------------------------|
| 1 | United States | Dominican Republic |
| 2 | Canada | Trinidad and Tobago |
| 3 | Mexico | Honduras |
| 4 | Brazil | El Salvador |
| 5 | Chile | Venezuela, Republica Bolivariana de |
| 6 | Argentina | Ecuador |
| 7 | United Kingdom | Bolivia |
| 8 | Netherlands | Paraguay |
| 9 | Belgium | Albania |
| 10 | Luxembourg | North Macedonia, Republic of |
| 11 | France | Croatia |
| 12 | Switzerland | Bosnia and Herzegovina |
| 13 | | Moldova |
| | Spain | |
| 14 | Portugal | Romania |
| 15 | Poland | Ukraine |
| 16 | Hungary | Belarus |
| 17 | Czech Republic | Armenia, Republic of |
| 18 | Slovak Republic | Georgia |
| 19 | Italy | Azerbaijan, Republic of |
| 20 | Slovenia | Cabo Verde |
| 21 | Greece | Nigeria |
| 22 | Bulgaria | $_{ m Uganda}$ |
| 23 | Finland | Tanzania |
| 24 | Sweden | Ethiopia |
| 25 | Norway | Mozambique |
| 26 | Denmark | Zambia |
| 27 | Iceland | Malawi |
| 28 | Turkey | Namibia |
| 29 | Korea, Republic of | Botswana |
| 30 | Japan | Eswatini, Kingdom of |
| 31 | Japan | Swaziland |
| 32 | Australia | Madagascar |
| 33 | New Zealand | Morocco |
| 34 | | Algeria |
| 35 | | Tunisia |
| 36 | | Egypt |
| 37 | | Syrian Arab Republic |
| 38 | | Lebanon |
| 39 | | Jordan |
| 40 | | Saudi Arabia |
| 41 | | Yemen, Republic of |
| 42 | | Qatar |
| 43 | | United Arab Emirates |
| | | |

| Continued | |
|-----------|----------------------------------|
| 45 | Kyrgyz Republic |
| 46 | Kazakhstan |
| 47 | China, P.R.: Mainland |
| 48 | India |
| 49 | Pakistan |
| 50 | Bangladesh |
| 51 | Myanmar |
| 52 | Thailand |
| 53 | Cambodia |
| 54 | Lao People's Democratic Republic |
| 55 | Malaysia |
| 56 | Singapore |
| 57 | Philippines |
| 58 | Indonesia |
| 59 | Papua New Guinea |
| 60 | Fiji |

Table C.2: Dyadic country-level data. Summary statistics

| Statistic | Z | Mean | S+ Dev | Min | $P_{c+1}(95)$ | $P_{c+1}(75)$ | May |
|-----------------------|--------|--------|----------|---------|---------------|---------------|----------|
| Causin | 1.1 | MEGAIL | Dr. Dev. | TATTAT | 1 001(20) | (01)100 T | MA |
| Dyad FDI (log) | 8,678 | 3.179 | 2.591 | 0.000 | 0.675 | 5.163 | 11.466 |
| Dyad FDI (binary) | 43,005 | 0.253 | 0.435 | 0 | 0 | П | \vdash |
| OECD Convention | 43,005 | 0.259 | 0.438 | 0 | 0 | П | П |
| Host PACI | 37,169 | 4.167 | 2.419 | 0.000 | 2.259 | 5.911 | 9.059 |
| Host FDI (GDP %) | 40,745 | 3.559 | 8.186 | -32.347 | 0.832 | 4.057 | 172.716 |
| Host GDP per capita | 41,238 | 17.742 | 14.803 | 0.249 | 4.568 | 28.515 | 74.164 |
| Host Trade (GDP %) | 41,566 | 80.474 | 53.026 | 0.309 | 50.629 | 95.135 | 437.387 |
| Host POLCON III | 40,760 | 0.347 | 0.204 | 0.000 | 0.173 | 0.507 | 0.720 |
| Host Democracy | 42,263 | 0.714 | 0.452 | 0.000 | 0.000 | 1.000 | 1.000 |
| Host GDP (log) | 41,269 | 25.871 | 1.907 | 18.809 | 24.508 | 27.189 | 30.188 |
| Host Judiciary Indep. | 42,935 | 0.632 | 0.297 | 0.016 | 0.383 | 0.949 | 0.989 |
| Home GDP per capita | 42,783 | 16.154 | 12.413 | 0.399 | 5.761 | 26.609 | 74.164 |
| Home GDP growth (%) | 42,805 | 3.135 | 4.269 | -30.694 | 1.560 | 4.876 | 90.468 |
| Home GDP (log) | 42,783 | 26.029 | 1.812 | 20.205 | 24.810 | 27.202 | 30.188 |
| Home Judiciary Indep. | 43,005 | 0.640 | 0.278 | 0.074 | 0.397 | 0.947 | 0.989 |
| Dyad BIT | 43,005 | 0.257 | 0.437 | 0 | 0 | 1 | 1 |

C.2 Full disclosure of results

Table C.3: Dyadic country-level data. Twoway Fixed-Effect Models (full disclosure)

| | | Dependent | variable: | |
|---------------------------|----------|-------------|-------------|----------|
| | | Dyad FI | OI (log) | |
| | (1) | (2) | (3) | (4) |
| OECD Convention × | -0.019** | -0.019** | -0.018* | -0.018* |
| $Host PACI^2$ | (0.008) | (0.010) | (0.010) | (0.010) |
| OECD Convention × | 0.057 | 0.071 | 0.067 | 0.067 |
| Host PACi | (0.065) | (0.082) | (0.082) | (0.082) |
| OECD Convention | 0.831*** | 0.837*** | 0.786*** | 0.783*** |
| | (0.175) | (0.217) | (0.234) | (0.233) |
| Lag Host FDI (GDP %) | , | 0.0001 | 0.0002 | -0.0001 |
| , | | (0.003) | (0.003) | (0.003) |
| Lag Host GDP per capita | | $0.032^{'}$ | $0.031^{'}$ | 0.032 |
| | | (0.021) | (0.021) | (0.022) |
| Lag Host Trade (GDP %) | | 0.001 | $0.001^{'}$ | 0.001 |
| , | | (0.002) | (0.002) | (0.002) |
| Lag Host POLCON III | | -0.015 | -0.012 | -0.011 |
| | | (0.217) | (0.218) | (0.218) |
| Lag Host Democracy | | -0.265 | -0.268 | -0.273 |
| v | | (0.186) | (0.187) | (0.187) |
| Lag Host GDP (log) | | $0.175^{'}$ | 0.194 | 0.197 |
| (18) | | (0.285) | (0.283) | (0.283) |
| Lag Host Judiciary Indep. | | $0.777^{'}$ | $0.767^{'}$ | 0.776 |
| S | | (0.820) | (0.829) | (0.827) |
| Home GDP per capita | | (0.0_0) | 0.024 | 0.025 |
| | | | (0.028) | (0.028) |
| Home GDP Growth (%) | | | 0.017^* | 0.017* |
| 2101110 021 01011011 (70) | | | (0.009) | (0.009) |
| Home Judiciary Indep. | | | 1.241 | 1.224 |
| rome statelary indep. | | | (0.958) | (0.957) |
| Dyad BIT | | | (0.000) | 0.078 |
| 2) wa 211 | | | | (0.079) |
| Dyad FE | √ | √ | √ | √ |
| Year FE | V | V | V | √ |
| Observations | 7,744 | 6,456 | 6,453 | 6,453 |
| $ m R^2$ | 0.015 | 0.020 | 0.022 | 0.023 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table C.4: Dyadic country-level data. Multilevel models

| | | Dependen | t variable: | |
|----------------------------|----------------|----------------|---------------|---------------------------------------|
| | | Dyac | l FDI | |
| | (1) | (2) | (3) | (4) |
| OECD Convention × | -0.018*** | -0.043*** | -0.026*** | -0.026*** |
| $Host PACI^2$ | (0.006) | (0.009) | (0.007) | (0.007) |
| OECD Convention × | 0.055 | 0.103 | 0.099* | 0.095* |
| Host PACI | (0.047) | (0.069) | (0.052) | (0.051) |
| OECD Convention | 1.122*** | 1.600*** | -0.294** | -0.293** |
| | (0.188) | (0.258) | (0.138) | (0.145) |
| Host PACI ² | -0.034^{***} | 0.036*** | 0.026*** | 0.024*** |
| | (0.007) | (0.007) | (0.009) | (0.008) |
| Host PACI | -0.030 | -0.207^{***} | -0.153^{**} | -0.144^{**} |
| | (0.060) | (0.057) | (0.066) | (0.063) |
| Host FDI (GDP %) | (0.000) | 0.014*** | 0.003 | 0.004 |
| | | (0.004) | (0.003) | (0.003) |
| Host GDP per capita | | 0.016*** | 0.019*** | 0.017*** |
| riost GDT per capita | | (0.004) | (0.005) | (0.004) |
| Host Trade (GDP %) | | 0.006*** | 0.005*** | 0.005^{***} |
| 11030 11ade (GD1 70) | | (0.001) | (0.001) | (0.001) |
| Host POLCON III | | -0.054 | 0.055 | 0.001) 0.094 |
| HOST I OLCON III | | | | |
| Heat Dames and an | | (0.207) | (0.166) | (0.164) -0.004 |
| Host Democracy | | 0.099 | -0.057 | |
| H + GDD (L) | | (0.100) | (0.107) | (0.104) |
| Host GDP (log) | | 0.533*** | 0.508*** | 0.554*** |
| | | (0.027) | (0.036) | (0.034) |
| Host Judiciary Indep. | | 0.604** | 0.755** | 0.521* |
| | | (0.240) | (0.295) | (0.280) |
| Home GDP per capita | | | 0.173*** | 0.170^{***} |
| | | | (0.010) | (0.010) |
| Home GDP Growth (%) | | | -0.045** | -0.052*** |
| | | | (0.018) | (0.019) |
| Home Judiciary Indep. | | | -2.023*** | -1.880*** |
| | | | (0.433) | (0.448) |
| Dyad BIT | | | | -0.087 |
| | | | | (0.058) |
| Dyad Common Language | | | | 0.669*** |
| ţ | | | | (0.153) |
| Dyad Colonial Relation | | | | 1.153*** |
| | | | | (0.190) |
| Dyad distance | | | | -0.008*** |
| _ <i>j</i> | | | | (0.001) |
| Constant | 2.995*** | -13.031*** | -13.825*** | -14.516*** |
| Comstant | (0.154) | (0.786) | (1.074) | (1.016) |
| TT TT . | | | 1 | · · · · · · · · · · · · · · · · · · · |
| Home-Host, year intercepts | ✓ | \checkmark | √ | \checkmark |
| Dyad intercepts | √ | 0.455 | √ 0.4₹0 | √ 0.450 |
| Observations | 7,744 | 6,456 | 6,453 | 6,453 |
| Log Likelihood | -13,689.720 | -12,854.560 | -11,292.330 | -11,217.850 |
| Akaike Inf. Crit. | 27,399.440 | 25,741.110 | 22,624.660 | 22,483.700 |

Note: *p<0.1; **p<0.05; ***p<0.01

Table C.5: Dyadic country-level data. Heckman selection models

| | | Dependent | nt variable: | |
|--------------------------|----------|-------------------|-------------------|-------------------|
| | | Dyad I | FDI (log) | |
| | (1) | (2) | (3) | (4) |
| Selection model | | | | |
| OECD Convention × | -0.01*** | -0.02*** | -0.02*** | -0.02*** |
| $Host PACI^2$ | (0.00) | (0.00) | (0.00) | (0.00) |
| OECD Convention \times | 0.01 | 0.05^{*} | 0.06** | 0.05^{*} |
| Host PACI | (0.02) | (0.03) | (0.03) | (0.03) |
| OECD Convention | 1.15*** | 1.14*** | 0.60*** | 0.61*** |
| II - DA GT ² | (0.04) | (0.05) | (0.05) | (0.05) |
| Host PACI ² | -0.00 | 0.01*** | 0.02*** | 0.02*** |
| II + DACI | (0.00) | (0.00) | (0.00) | (0.00) |
| Host PACI | 0.01 | -0.05^{***} | -0.08*** | -0.11^{***} |
| Heat EDI (CDD 07) | (0.01) | (0.02) | (0.02) | (0.02) |
| Host FDI (GDP %) | | 0.00 | 0.00 | 0.00 |
| Host GDP per capita | | (0.00) $-0.01***$ | (0.00) $-0.01***$ | (0.00) $-0.00***$ |
| nost GD1 per capita | | (0.00) | (0.00) | -0.00 (0.00) |
| Host Trade (GDP %) | | 0.00) | 0.00) | 0.00) |
| Host Hade (GDI 70) | | (0.00) | (0.00) | (0.00) |
| Host POLCON III | | -0.02 | -0.05 | -0.04 |
| 11050 1 OLOON 111 | | (0.06) | (0.07) | (0.07) |
| Host Democracy | | -0.04 | -0.01 | -0.04 |
| 11050 Beiliotracy | | (0.03) | (0.03) | (0.03) |
| Host GDP (log) | | 0.09*** | 0.13*** | 0.13*** |
| 11000 021 (108) | | (0.01) | (0.01) | (0.01) |
| Host Judiciary Indep. | | 0.43*** | 0.33*** | 0.27*** |
| v - | | (0.07) | (0.08) | (0.08) |
| Home GDP per capita | | , , | 0.02*** | 0.02*** |
| | | | (0.00) | (0.00) |
| Home GDP Growth (%) | | | 0.03*** | 0.03*** |
| | | | (0.00) | (0.00) |
| Home Judiciary Indep. | | | 1.16*** | 1.21*** |
| | | | (0.05) | (0.05) |
| Dyad Common Language | | | | -0.22*** |
| | | | | (0.03) |
| Dyad Colonial Relation | | | | 0.59*** |
| D 1 D.T. | | | | (0.04) |
| Dyad BIT | | | | 0.35*** |
| | 1 00*** | 0.01*** | F =0+++ | (0.02) |
| Constant | -1.03*** | -3.61^{***} | -5.72*** | -5.83*** |
| | (0.02) | (0.23) | (0.25) | (0.25) |
| | | | | |
| Outcome model | | | | |
| OECD Convention × | -0.75 | -0.03 | -0.07*** | -0.07*** |
| Host PACI ² | (0.98) | (0.05) | (0.01) | (0.01) |
| OECD Convention × | 0.78 | 0.10 | 0.30*** | 0.29*** |
| Host PACI | (1.86) | (0.16) | (0.08) | (0.07) |
| OECD Convention | 72.80 | 1.46 | -0.17 | -0.18 |
| | (91.09) | (2.92) | (0.38) | (0.32) |
| Host PACI ² | -0.20 | 0.01 | 0.05*** | 0.04*** |
| | (0.21) | (0.03) | (0.01) | (0.01) |

| Host PACI | 0.95 | -0.11 | -0.32*** | -0.24*** |
|-------------------------|-----------------------|----------------------|-----------------------|-----------------------|
| Host FDI (GDP %) | (1.33) | (0.15) $0.01***$ | $(0.07) \\ 0.01***$ | (0.07) 0.01^{***} |
| Host FDI (GDF 70) | | | | (0.00) |
| Host CDP per capita | | $(0.00) \\ 0.00$ | (0.00) $0.01***$ | 0.00) |
| Host GDP per capita | | | | |
| II+ T 1- (CDD 07) | | $(0.03) \\ 0.00$ | (0.01) 0.01^{***} | (0.00) 0.01^{***} |
| Host Trade (GDP %) | | | | |
| II+ DOLCON III | | (0.00) | (0.00) | (0.00) |
| Host POLCON III | | 0.14 | 0.23 | 0.22 |
| II+ D | | (0.23) $-0.33**$ | (0.19) | (0.18) |
| Host Democracy | | | -0.05 | 0.06 |
| II + CDD (1) | | (0.14) | (0.09) | (0.09) |
| Host GDP (log) | | 0.44* | 0.62*** | 0.61*** |
| TT 4 T 12 T 1 | | (0.24) | (0.08) | (0.07) |
| Host Judiciary Indep. | | 0.85 | 0.68** | 0.63** |
| H GDD | | (1.16) | (0.30) | (0.25) |
| Home GDP per capita | | | 0.21*** | 0.20*** |
| H GDD G (1 (64) | | | (0.01) | (0.01) |
| Home GDP Growth (%) | | | -0.05** | -0.04** |
| | | | (0.02) | (0.02) |
| Home Judiciary Indep. | | | -1.91** | -2.00*** |
| D 10 | | | (0.86) | (0.72) |
| Dyad Common Language | | | | 0.47*** |
| | | | | (0.14) |
| Dyad Colonial Relation | | | | 1.58*** |
| D 1.D. | | | | (0.30) |
| Dyad BIT | | | | -0.07 |
| | | | | (0.19) |
| Constant | -132.00 | -10.12 | -18.37^{***} | -17.83^{***} |
| | (172.12) | (12.35) | (4.36) | (3.59) |
| Inverse Mills Ratio | 87.72 | 0.72 | 0.99 | 0.72 |
| | (111.24) | (3.59) | (0.89) | (0.73) |
| Sigma | 75.29 | $2.52^{'}$ | $2.10^{'}$ | 1.96 |
| Rho | 1.17 | 0.29 | 0.47 | 0.37 |
| R^2 | 0.11 | 0.14 | 0.46 | 0.49 |
| Total observations | 35297 | $\frac{0.14}{27825}$ | 27643 | 27643 |
| Censored observations | $\frac{35297}{27553}$ | 21369 | 21190 | 21190 |
| Observed observations | 27333 7744 | 6456 | 6453 | 6453 |
| Obsci ved obsci varions | 1144 | 0400 | 0400 | 0400 |

Note:

*p<0.1; **p<0.05; ***p<0.01