

The Geography of NGO Activism against Multinational Corporations

Sophie Hatte and Pamina Koenig

Abstract

To what extent do Non-Governmental Organizations (NGOs) monitor global value chains? While NGOs regularly denounce the behavior of multinational corporations throughout the world, their motivations for choosing campaign targets remain largely unknown. Using a new dataset on activists' campaigns toward multinational firms, we estimate a triadic gravity equation for campaigns, involving the NGO, firm, and action countries. Our results point to a strong proximity bias in NGO activity: Distance, national borders, and lack of a common language all contribute to impede the intensity of campaigns. We estimate the distance elasticity of campaigns to be -0.2 and further document that NGOs strongly bias their actions toward home firms or foreign firms with home actions. A domestic firm is 3.45 times more likely to be attacked than a foreign one. Foreign firms headquartered in common language countries draw 1.63 times more campaigns. Overall, campaigns seem to be designed so as to include at least one element of proximity drawing the attention of consumers. This pattern questions the role of NGOs in the monitoring of multinational production operated in remote, unfamiliar locations.

JEL classification: F23, F61, L31

Keywords: NGO, multinational firms, gravity equation, global value chains

1. Introduction

The emergence of global value chains (GVCs) opens the question of how to supervise the different production stages for individual goods, which are being increasingly scattered across countries. The monitoring of multinational activity is at the center of advocacy Non-Governmental Organizations' (NGOs) activity.¹

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¹ Government regulation may also overtake this task, as in the recent French corporate duty of vigilance law adopted in February 2017, which requires multinational firms subcontracting part of their production to prevent overall risks relative to human rights and the environment.

They closely follow worldwide sales and production of multinational corporations, regularly reporting misconduct and damages to health or the environment that are caused by the firms' behavior.

To what extent do NGOs succeed in monitoring global value chains? While NGOs' duty is associated to important policy challenges, there is little academic work analyzing the behavior of these agents whose activity nevertheless evolves in parallel and close connection to the production and sales decisions of firms. The main reason behind this contrast lies in the lack of systematic, large-scale data documenting the identity, characteristics, and actions of advocacy NGOs. In this paper we have for the first time the opportunity to provide orders of magnitude on how advocacy NGOs operate their campaigns directed at international production and trade. We use unique and comprehensive data on NGOs' campaigns toward multinational corporations² to study the determinants that drive target choices by activists. While we do observe the individual choices of NGOs, we lack information on the individual characteristics of these NGOs and firms and thus analyze activists' campaigns and their determinants at the country level: Three different locations summarize a given campaign, the respective countries of the NGO and the firm, and the country in which the harmful action is reported to have taken place, which we name the action country.

Activists are motivated by the expected change on their cause: We thus expect campaigns to be directed at firms and countries associated to large deteriorations. An alternative hypothesis is that NGOs select visible and thus vulnerable targets, which are likely to draw attention and pressure from the audience.

Our hypothesis is that campaigns are shaped in order to provide consumers with information they care about or identify with: We investigate whether NGOs' targeting behavior is biased toward home-related firms and locations. Our variables of interest are the bilateral links between country pairs, measuring the target's capacity to attract the attention of the audience on the misbehaving firm or to identify the damaged country. Our estimating equation for the number of campaigns is closely related to the gravity equation used to investigate the determinants of trade flows. We estimate a triadic version of the gravity equation. Triadic data allow us to identify independently the importance of bilateral proximity to each of the two elements of the campaign: the location of the firm and the location of the problem.

Our results point to a strong proximity bias in NGO activity: We estimate the distance elasticity of campaigns to be -0.2 and further document that NGOs strongly bias their actions toward home firms or foreign firms with home actions. A domestic firm is 3.45 times more likely to be attacked than a foreign one. Foreign firms headquartered in common language countries draw 1.63 times more campaigns. Overall, campaigns seem to be designed so as to include at least one element of proximity drawing the attention of consumers: The home bias on firms and action countries are substitutable. Both participate in increasing the number of campaigns. Distance, national borders, and lack of a common language all contribute to impede the intensity of campaigns.

Our paper contributes to both the international trade literature and the literature on the economics of NGOs. We contribute to the trade literature by showing that flows of campaigns, closely linked to multinational corporations' activity, exhibit a preference for proximity regarding both the choice of target firm and the location of the action. Moreover, we apply to NGOs' campaigns the triadic gravity setting recently introduced by [Arkolakis et al. \(2017\)](#) and [Head and Mayer \(2015a\)](#). The paper also contributes to the emerging empirical literature on the economics of NGOs. Given the absence of quantitative information on campaigns against corporations, investigations on NGOs' activities use either indirect campaigns reporting through newspaper articles ([Lenox and Easley 2009](#)), or rely on small samples as in the case studies by [O'Rourke \(2005\)](#), [Spar and La Mure \(2003\)](#), and [Hendry \(2006\)](#). [Harrison and Scorse \(2010\)](#) focus on one sector, the garment and textile industry in Indonesia, and use differences in the evolution of wages compared to other sectors to identify the effect of campaigns targeting subcontractors of Nike,

² The replication dataset for this paper is available at <https://www.parisschoolofeconomics.eu/en/research/data-production-and-diffusion/ngo-campaign-data/>.

Reebok, and Adidas on local wages.³ Two papers use quantitative information on NGO campaigns: [Couttenier and Hatte \(2016\)](#) and [Couttenier et al. \(2016\)](#) study NGOs' communication strategies on a dataset that record campaigns toward the very large firms only. The availability of detailed campaign data opens up a better knowledge of global value chain monitoring by civil society. Although NGOs are quite active in following and influencing practices linked to international production, the international trade literature only recently modeled their presence next to trading firms ([Krautheim and Verdier 2016](#)).

The paper is structured as follows. In section 2, we describe the NGO campaigns dataset and display several facts related to the internationalization of campaigns. In particular, we document the percentage of NGOs that target home and foreign firms, and the proportion of foreign campaigns that involve a domestic action. Section 3 develops the estimable equation. Section 4 shows the results of the triadic gravity estimations, and Section 5 concludes.

2. Data and Facts

This section describes the data and shows descriptive statistics in relation to the geographical distribution of campaigns.

NGO Campaign Data

Data collection on the volume and set of activities of NGOs is arduous: first, because the range of actions they pursue is very wide. A second reason relates to the absence of mandatory reporting of their activity to tax authorities. In this context, the Sigwatch NGO campaign data offer a unique opportunity to study the activity of these organizations. The European consultancy firm named Sigwatch provides international corporations with daily processed information on how NGOs perceive them, including the names and numbers of NGOs following their issue.⁴

Our paper uses the raw data, which provide information about *campaign events*. A campaign is defined by Sigwatch as a series of events over time, usually designed to achieve a specific objective of the NGO or coalition of NGOs. Campaigns can last weeks, months, or even years. A campaign event is an action by the NGO that contains either a new target for pressure, or a new criticism or allegation, a report or significant public protest, or a new country. Campaign events are the campaign's most significant moments, those that are likely to get media or political attention.

The database is built by identifying countries' NGOs, and then collecting online data from activists' websites regarding their campaigning activity. New NGOs are added when they are discovered to be active. Researchers check and validate the online search in 18 different languages.⁵ At this stage, reported campaign events correspond to a firm being targeted at a given date; however, it may include several NGOs, in case they formed a coalition on a given topic. It sometimes contains several action countries. It may also involve more than one targeted firm for a given issue.⁶ We reshape the campaign events into single observations that can be identified through the following elements: a date, a firm's name, an NGO's name, a cause, and a country corresponding to the location of the reported damage. For readability, in the rest of the paper we use the word "campaign" to address one of our observations.

³ In a related paper focusing on the environment, [Binder and Neumayer \(2005\)](#) investigate the impact of pressure groups on pollution levels in a large number of countries. They measure the pressure of advocacy by the number of environmental NGOs per capita.

⁴ Covalence EthicalQuote is the other existing database listing NGOs' campaigns regarding multinational firms, and available to researchers: see for example [Couttenier and Hatte \(2016\)](#). However, contrary to the Sigwatch database, it concentrates on the largest firms.

⁵ Albanian, Bulgarian, Chinese, Danish, Dutch, English, French, German, Italian, Japanese, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Spanish, and Swedish.

⁶ An example of criticism toward several firms in a bundle: Henkel (Germany), Neste Oil (Finish producer of biodiesel), Nestle (Switzerland), and Unilever (UK) were denounced in September 2015 by Rainforest Rescue (a German NGO) to produce unhealthy levels of particulates by burning rainforests.

Firm variables include the name of the target, the name of the parent firm whenever different, the headquarters country, and an international identification number if available. Information on sectors is provided by a variable summarizing the main activity of the firm, which we code into 27 sectors, mostly 2-digit International Standard Industrial Classification of All Economic Activities (ISIC) rev 3.1 classification, with the exception of five sectors that were detailed enough to be coded at the 4-digit level. NGOs are described through their name and headquarters country. Information is provided on the cause of the campaign through three lists of keywords created by Sigwatch. These keywords do not allow us to identify whether the cause relates to the sales or to the manufacturing of a product: they only provide more details regarding the problem raised.⁷ Blames toward firms can also be identified in the data through a variable detailing the country in which the harmful action is reported to have taken place. We name this third country the action country.

Let us discuss the inherent limitations of the dataset, and the restrictions we made to the raw data. Selection of NGOs, campaigns, or firms might be at stake. Sigwatch's entry point in building its database is NGOs: this means that when Sigwatch monitors a country, it starts by listing all the existing campaigning NGOs, and further expands this list as they discover new ones. Despite this process, it might be that some activists haven't been detected, and that part of web publications of activists haven't been retained as campaign events by Sigwatch's team. Also, although NGOs are tracked in many countries, the data are limited to 103 origin countries of NGOs, and some languages are not included (Arabic, Hindi, and Korean, for example). Turning to selection on targeted firms, there certainly is some, since we don't observe the universe of firms that have done harm to human or environmental resources. Nonetheless, all firms that are cited at least once by NGOs are part of the data, covering 7168 firms from 137 countries. The raw database is not restricted to or designed for Sigwatch's clients: reported campaign events are used to process indicators of NGO targeting at the sectoral, country, or issue level. Some of the selection issues might create endogeneity problems. We discuss estimation issues associated with selection in section 4.

Finally, to each event entered in the raw data corresponds a "tone" coded by Sigwatch into one of the following: -2, -1, 0, 1, 2. Positive numbers indicate that NGOs praised the firm, and negative numbers designate criticism toward the firm's action. Reported campaigns are predominantly negative toward the target firm: 80 percent of the campaigns are either -1 or -2, and around 12 percent are positive and 7 percent are neutral. The motivation of positive campaigns possibly relies on different mechanisms than the ones we emphasize in this paper. Therefore, we leave aside the neutral and positive news, and work on negative reports towards firms. Robustness [table 3](#) provides results on the whole sample (see section 4). Let us now introduce a set of facts illustrating key features on the geographical distribution of the campaigns.

Descriptive Facts on the Geography of Campaigns

The recent increase in the internationalization of production, documented in a large literature ([Grossman and Rossi-Hansberg 2006](#); [Johnson 2014](#)), has resulted in the production process of goods often being split in different stages and countries. These globalized value chains have certainly increased the average distance between the location of consumption and the one of production; however, activists, while supervising globalized production processes and consumption patterns, may still choose objects for their campaigns that share elements of proximity with their audience. Firms headquartered in foreign countries, for example, may be widely known in the NGO's home country because they employ domestic workers or because they have a large local market share. Do descriptive facts support the proximity argument?

- *Fact 1. Internationalization is intense for NGOs: 49 percent of US NGOs target abroad. In comparison, 18 percent of US firms export.*

⁷ Examples of these keywords are: "GMO in food," "Coal, oil & gas and climate change."

Column 3 in [table 1](#) shows the percentage of activists in each country that target foreign firms (in at least one of their campaigns during the sample period 2010–2015). For all countries but the United States and Russia, more than half of NGOs have chosen a foreign target for one of their campaigns. This number is very different from the facts reported on the internationalization of firms: [Bernard et al. \(2012\)](#) present evidence showing that 18 percent of US manufacturing firms export. [Table 1](#) shows in comparison that 49 percent of US NGOs select a foreign target for their campaign. Column 4 zooms in on the NGOs that target abroad: These publish between 62 percent and 65 percent of their campaigns on foreign firms, in the case of Germany, France and the United Kingdom. The highest percentage of campaigns involving foreign firms can be found for Austria (85 percent), Bulgaria, India, and China (83 percent), and the lowest for Russia (41 percent) and Finland (46 percent), and 52 percent for the United States. These numbers depict a relatively intense internationalization of NGOs' campaigns: Targeting abroad does not seem rare.

- *Fact 2: 75 percent of campaigns targeting foreign firms involve a domestic action.*

The last column in [table 1](#) suggests that choosing foreign targets does not mean that NGOs choose objects of campaigns that are unknown to their audience. For each campaign focusing on a foreign firm, we use a dummy variable to identify the cases where the country in which the action has taken place is the activist's (and hence the audience's) home country. We then compute, for each country, the percentage of NGOs' denunciations involving foreign firms, which relate to damage done at home. The outcome is strikingly high: In three-quarters of the cases at a minimum, the home country of the audience is the same as the action country, whenever a foreign firm is the object of the campaign.⁸ These facts imply that assuming proximity to the audience as the main element of the activist's objective function may be relevant: It appears as if campaigns needed at least one element of proximity to be successful to the audience. Examples in the data illustrate activists that chase cases in which either the firm or the action is domestic. For a given action country, it is common to have NGOs from different origins each reporting on a home firm acting abroad: Greenpeace India, for instance, reports in 2012 that GVK, a large Indian conglomerate, is pursuing its Alpha Coal investment project in Australia without having clearly stated the risks for the environment. Still in Australia, a German activist, Campact, writes to ask Deutsche Bank not to invest in the "Mega Coal Mining Project" that is threatening the Great Barrier Reef in 2014.

The following two facts show how campaigns are distributed across sectors. NGOs gather agents that share intrinsic common values and pursue social objectives: [Besley and Ghatak \(2005\)](#) define non-profits as organizations with a *mission*, whose success is valued over and above any monetary income. Can we expect a specific pattern across sectors? Since no systematic data are available on the specialization of NGOs, the literature contains very few descriptions of the object of these missions: [O'Rourke \(2003\)](#) suggests that the absence or lack of enforcement of regulations on labor and environmental resources explains the emergence of activists. [Baron \(2003\)](#), [Daubanes and Rochet \(2016\)](#), and [Baron and Diermeier \(2007\)](#) model NGOs' interactions with firms and depict activists as motivated by social or ethical concerns.

- *Fact 3: Sectors whose production process is intensive in resource utilization are generally highly targeted.*

If advocacy NGOs care in particular about preserving labor and natural resources, the typology of campaigns that we observe in the data should logically display high movement in sectors harming those resources: activities exploiting natural resources (extraction of raw materials, etc.), labor-intensive sectors

⁸ Examples include: Action on Sugar, a British NGO, criticizes the German Lidl Group for Breakfast biscuits sold in the UK containing excessive sugar. In 2011 World Wildlife Fund (WWF) Italy complains about Solvay, a Belgian chemical firm, for asking and obtaining the renewal of a salt extraction right in Val di Cecina, threatening the area's drinking water supply.

Table 1. Targeting Abroad by NGOs

(1) Country	(2) Percent of NGOs	(3) Percent of activists targeting abroad	(4) Percent of NGOs' foreign campaigns	(5) Percent of NGOs' foreign campaigns with home action
ARG	2	79	67.5	83.2
AUS	2.2	61	63.9	81.2
AUT	.4	60	85.4	68.6
BEL	1.2	95	78	82.8
BGR	.4	87	83.3	87.2
BRA	2	60	54.4	84
CAN	5.8	55	57.7	87
CHE	1.6	59	73.8	73.5
CHL	2.9	61	47.4	88.4
CHN	.6	70	83.5	75
COL	.7	78	65	87.5
DEU	3.9	76	64.7	76.7
DNK	.9	83	79	75.4
ECU	.7	87	77.9	75
ESP	2.7	62	56.5	76.4
FIN	.9	53	46.7	69.7
FRA	3.1	56	62.6	84.3
GBR	8.7	78	65.4	71.4
GTM	.6	74	62.8	63.7
IDN	.8	85	78.1	75
IND	1	85	83.8	76.9
ITA	1.8	63	62.5	83.2
JPN	.8	82	61.3	85.9
MEX	2.6	63	64.2	91.8
NGA	.9	69	77.6	73
NLD	2.2	86	72.6	74.5
NOR	1	71	74.8	74.1
NZL	.5	71	63.4	91.9
PER	2.2	62	53.4	93.8
PHL	.8	85	74.5	82.2
POL	.8	75	75	70.4
PRY	.5	89	81.7	96.9
ROM	1	71	81.1	84.7
RUS	1.3	40	41.3	82.5
SWE	1.3	84	65.5	73.5
UKR	.9	79	75.2	89.1
USA	28.6	49	52.3	81.7
ZAF	.7	76	78.3	69.3
World	100	64	64.2	79.7

Source: Authors' calculations based on Sigwatch data.

Note: Only countries with more than 15 NGOs appear in the table, representing 91 percent of world NGOs. "Percent of NGOs" corresponds to the share of each country in the world total number of active NGOs. "Percent of activists targeting abroad" refers to the share of NGOs that target at least once a foreign firm. "Percent of NGOs' foreign campaigns" computes the share of each NGO's campaigns that targets foreign firms, among those that target abroad. "Percent of foreign campaigns with home action" measures the share of each NGO's foreign campaigns that refer to an action in the home country.

(electronics, clothing, yarn, etc.), and sectors whose final good might hurt consumers' health or the environment (food, chemical products, etc.). Table S1.2 in the supplementary online appendix (available with this article at *The World Bank Economic Review* website) illustrates the number of campaigns per sector in our dataset, which recodes the original sector variable into the 2-digit ISIC rev 3.1 classification. Sectors whose production process is intensive in resource utilization are highly targeted. Examples include oil,

gas, and nuclear energy, whose extraction is accused of harming the environment (“Extraction, manufacturing and distribution of energy”), or “Mining of metal ores,” in which targeted firms are gold mining companies and metal mining corporations. The same insight seems to be driving sectors whose final good violates health standards, which are also at the center of NGOs’ attention: campaigns in “Manufacturing of food products and beverages” denounce firms whose product is considered harmful for consumers’ health (Coca-Cola accused of selling sugar-intensive beverages, Nestle blamed for introducing instant formulas to families).

The numbers shown in table S1.2, however, do not automatically reflect environmental and social harm by sector, because part of the campaigns are not directed toward firms whose practices activists want changed. [Baron and Diermeier \(2007\)](#) document this characteristic of activists’ behavior, and disentangle direct campaigns, denouncing firms that have done the damage, and indirect campaigns, which target an element of the value chain of the harmful firm, be it upstream or downstream from the ultimate target. When the unethical behavior originates from a subcontractor of a large multinational, activists tend to target the former: as an example, when in 2013, Rainforest Action Network pressures Heinz (H.J. Heinz Company) to stop sourcing palm oil from its suppliers in Indonesia, the growing of palm oil is the real object of the campaign; however, the pressure is set on the multinational outsourcing inputs abroad.

Upstream or downstream choices of targets reveal an important pattern regarding the behavior of activists: They suggest that the proximity argument plays a large role in defining the campaign, and that consumers are more receptive to news that relates to something they know. To change the behavior of palm oil growers in Indonesia, NGOs whose audience is in developed countries pressure their home firms, which subcontract with Indonesian farmers. The home firm has more chances to be known by a vast audience and by the media, mainly because its home sales are higher. A former CEO of Greenpeace Belgium acknowledges⁹ that “[the NGO] is always trying to find companies whose brands resonate to people’s ears and even ‘hearts.’ [The NGO] goes after the well-known customer of a unknown provider to change the latter’s behavior, or the subsidiary of a financial corporation.”

- *Fact 4: NGOs tend to target large and visible brands. 10 percent of world brands are in the food and beverage sector, which attracts 9 percent of campaigns. Less than 0.1 percent of brands relate to recycling activities, which are targeted in 0.24 percent of the campaigns.*

Besides the identification of the audience with firms they know, selecting notorious firms may also reflect the willingness of activists to choose firms of important size. First, the NGO wishes to select the firms whose change in behavior will have the widest impact. Large firms in absolute use a more important share of local resources, and produce and sell more than small and medium-size firms. The harm done by their production process or by their product is thus likely to be more important. Second, in a dynamic setting we could assume that selecting a large firm is optimal, as she will implicitly represent a model for the rest of the industry, if it complies with the activist’s request.

The existing models on NGO-firm interaction all include these mechanisms in modeling optimal campaigns by activists. The utility of a campaign is usually described as containing gains and costs, modeled as a function of the bilateral proximity between the audience (the donors) and the selected target firm. In [Eesley and Lenox \(2011\)](#), large and more visible firms are more likely to be targeted by activists, because the utility of the activist increases “not only from direct changes in firm behavior, but also from the ability to attract attention to causes of concern and to raise funds.” [Krautheim and Verdier \(2016\)](#) model the emergence of NGOs in parallel to the offshoring decision of firms in an international setting: The optimal target fits the description of the “well-known brand with large market-size,” as it implies a lower marginal

⁹ Paris School of Economics holds tri-annual seminars on the Economics of NGOs, gathering academics and NGO professionals. Michel Genet participated in the January 2015 edition.

fund-raising cost for the NGO. Consumers can be more easily convinced to donate when the campaign goes against a firm they know well.

3. Empirical Model

This section outlines the country-level equation for campaigns. Campaigns are aggregated at the triadic NGO-firm-action country level, where our explanatory variables are observed.¹⁰

Microfoundations

We assume that the aggregate gravity equation emanates from microfounded choices by NGOs selecting bundles of target firms and action countries. Let us briefly imagine the microfoundations in terms of NGO behavior that could have led to the aggregated estimable equation. In line with the World Bank's definition of advocacy NGOs (Carmen 1995), the purpose of activists is to "defend or promote a specific cause." In academic terms, the NGO is an entity that is mission-oriented, following Besley and Ghatak (2005). This means that there is an objective beyond monetary income, whose success is valued in the first place: The mission of NGOs is focused on preserving a human or natural resource (human rights, gender equality, the environment, etc.). To defend its cause, the activist denounces firms that have acted unethically, and formulates a campaign in which pressure is put on the firm with the objective of having her change her behavior. The NGO is pictured as supplying its audience, that is, consumers, investors, workers, and so on, with additional information on firms' products. The audience learns about the production process of the good or about the impact of the product on the environment and health, which they could not do without the NGO's intervention.¹¹

Which are the determinants of the choice of target, that is, what reasons make a firm the optimal choice for the NGO? Since NGOs care about the magnitude of the expected change on the protected resources, it is reasonable to expect that NGOs' choices of campaigns are driven by the size of the damage caused by the firm. An alternative but not exclusive view supports the idea that NGOs are led by the visibility of the firm, named "vulnerability" by Baron (2016), which represents how susceptible the firm is to social pressure or to a campaign.¹² If firm vulnerability is a determinant of firm targeting, we should observe that campaigns target firms that are likely to receive a large amount of pressure. With individual-level data, firm size would be a straightforward candidate to represent the attention-capturing capacity of the target firm: Consumers react to a campaign to generate changes in the firm's behavior on a product they know. The measure of absolute firm size, however, raises some issues in the case of firms that are large, but unknown from the audience (the largest private car-maker in China is named Geely and remains anonymous to most Western consumers).¹³ The ideal variable, which is currently not available for the set of firms and markets we are working with, would be the firm's market or investment share in the NGO's country, assuming that the NGO's audience is local. Consumers are receptive when they know the brand, which happens when local sales (alternatively local employment) are high.

The same argument applies to country-level variables: We assume that the audience is receptive to a campaign when they are familiar with the target firm, or when they identify with the cause or country

¹⁰ An analysis at the disaggregated level is left for future research, since it is subordinated to availability of firm-level bilateral data regarding investment and sales in foreign countries.

¹¹ Note that credence goods need the intervention of institutions or other agents to solve the asymmetry of information, while for experience goods, the quality is known after consumption: see Bagwell and Staiger (1989) and Cagé and Rouzet (2015).

¹² Firm vulnerability corresponds to "the ease of damaging a firm's reputation, brand equity, or employee morale" (Baron 2016, 6).

¹³ See, for instance: Joel Ruet, "Le chinois Geely rachète Volvo: un cas d'école," *Le Monde* (Paris, France), Feb. 02, 2010. http://www.lemonde.fr/idees/article/2010/02/01/le-chinois-geely-rachete-volvo-un-cas-d-ecole-par-joel-ruet_1299441_3232.html#xD4bGW6sCFdQDxkr.99.

that is being hurt. We measure the intensity of the audience's interest for the firm and action countries by the proximity between the two pairs of countries involved in the campaign: the proximity between the NGO and the firm countries and the proximity between the NGO and the action countries. Naturally, proximity to both countries may also increase the number of campaigns because at shorter distances, it is easier for NGOs to hear about the firms acting unethically. In section 4, we propose a way to separate the cost channel from the audience channel, which we wish to identify.

Gravity for Campaigns

Gravity equations started as an empirical tool to estimate the determinants of trade flows, introduced in economics by [Tinbergen \(1962\)](#) to investigate the effects of Commonwealth preferences on trade. Since then it has become the main empirical tool to estimate the efficacy of various trade policies in promoting trade.¹⁴ Theoretical micro-foundations for the gravity equation evolved in parallel to these empirical developments, leading trade theorists to establish the generality of gravity predictions. Mostly interesting for our case, other types of bilateral flows and interactions have been analyzed with gravity modeling tools: [Head, Mayer, and Ries \(2009\)](#), for example, model gravity on service offshoring; [Anderson \(2011\)](#) develops a gravity model for migrations; and [Head and Ries \(2008\)](#) and [De Sousa and Lochard \(2011\)](#) estimate bilateral FDI flows with a gravity equation.

In the case of campaigns, the gravity equation relates the demand for facts and information to the supply of damageable actions. NC_{ijk} is the number of campaigns originating in NGO country i , targeting firms with headquarters in country j and damages or actions in country k . We estimate the following gravity equation for triadic campaigns:

$$\ln(NC_{ijk}) = \beta_1 \ln X_{ij} + \beta_2 \ln X_{ik} + \beta_3 \ln X_{jk} + \beta_4 \ln Z_i + \beta_5 \ln Z_j + \beta_6 \ln Z_k + u_{ijk} \quad (1)$$

Our principal variables of interest are the bilateral links between the NGO country i and respectively the country j of the firm (X_{ij}) and the country k of the action (X_{ik}), capturing how well the audience knows the target and the action countries. They include geographical, cultural, and historical proximity variables, with the underlying assumption that the stronger the links between a pair of countries, the higher the propensity of the audience to donate. u_{ijk} is an unobservable component of the common attributes of a campaign that varies with the triad.

Bilateral observables between the NGO and the firm country (see supplementary online appendix S2 for a description of the variables) include geographical distance $dist_{ij}$: Shorter routes are expected to increase the number of campaigns between i and j , reflecting the higher probability that the audience is familiar with the firms' products. A similar role is attributed to historical and cultural proximity $colony_{ij}$ and $lang_{ij}$: Sharing a colonial past increases the awareness and knowledge of citizens about the foreign country. So acts the number of migrants $migration_{ij}$, measuring proximity by the interconnectedness of the people. The migration variable is computed as the number of people born in j that reside in i .

One of our visibility variables could not be obtained as a bilateral observable, hence we use the unilateral counterpart: the unilateral variable $brands_j$ captures firm visibility; it contains the number of brands per target country in the world top 500. It is the country-specific measure of "how well" the domestic audience of the NGO is familiar to the target and reacts to the news. We expect the number of campaigns to be higher, the more important is the brand reputation of a country's firms. Note that choosing a large firm may be an equilibrium solution for the NGO for two other but minor reasons. First, the NGO's objective function surely contains a part of intrinsic satisfaction related to its watchdog activity: The NGO prefers to face an important target firm, hence to be confronted with a multinational. Examples include Baby

¹⁴ Examples include policy decisions such as regional agreements ([Baier and Bergstrand 2007](#); [Limão 2016](#)); or currency unions ([Rose 2000](#)). With the same method, the literature also analyzed the effect of long-run determinants of trade flows: geographical proximity ([Disdier and Head 2008](#)), cultural proximity ([Felbermayr and Toubal 2010](#)), common language ([Melitz and Toubal 2014](#)).

Milk Action, which proudly states on its website: “We are holding some of the world’s most powerful corporations to account,”¹⁵ and Food and Water Watch, which argues: “We are taking on some of the biggest corporations in the world—like Exxon-Mobil and Monsanto.”¹⁶ Second, besides the “David and Goliath” effect, reasons for favoring large companies include the magnitude of expected change on the cause: A change in behavior by a firm selling or producing a large number of items tends to correct the problem on a broader scale. The leading company is also expected to be an example for the rest of the industry.

Bilateral X_{ik} variables measure the intensity of bilateral links between the audience country and the action country, and thus the identification of the audience to the cause that is denounced in the campaign. At the country level, everything equal, we expect the number of campaigns to be higher, the shorter is $dist_{ik}$. Similarly, we expect that action countries that share(d) a colonial link with the home country ($colony_{ik}$), that host a number of foreign-borns from k ($migration_{ik}$), or that share the same language ($lang_{ik}$) to be more likely chosen as targets. X_{jk} variables also appear among the set of bilateral determinants; however, they relate to firms’ choices: They capture the effects of proximity on the firm’s decision to sell or produce in foreign countries.

Unilateral country-level variables Z_i , Z_j , and Z_k capture the general level of campaigning activity that is expected from and towards each country. Our preferred estimations are run with fixed effects for countries i , j , and k , which take into account all potential determinants of the level of outward and inward campaigning. The unilateral variables are thus captured by these fixed effects. We explain more about the use of the fixed effects and the link with theory in section 4. Nevertheless, as usual in gravity estimations, we run basic estimates based on unilateral country-level variables. These estimations use the following separate country variables for i , j , and k : We expect the number of outward campaigns to be influenced by the size and the income of countries: The more the source country is populated, the more there will be NGOs standing up for a cause. Rich countries with more regulated markets are likely to host more NGOs than developing countries. We include the size of the source country (pop_i) and its revenue ($GDPcap_i$). Variables relative to the target country capture the number of target firms located in country j . We include the country size (pop_j) and revenue ($GDPcap_j$). A larger country will host more producers and hence more possibilities to be a target. Income is expected to affect positively the number of campaigns, as richer countries tend to host a larger number of firms having international production and selling activities. Variables Z_k relative to the action country represent the characteristics of countries hosting the actions giving rise to reports from activists. We include (pop_k) and ($GDPcap_k$), the size of the action country and thus a measure of the overall activity. Countries hosting resources used in production and preserved by activists (workforce, natural resources) are more likely to receive a large number of campaigns. We include the share of the country’s revenue coming from natural resources (oil, natural gas, coal, minerals, forests: $share\ nat.res./GDP_k$).

Finally, the two home dummies separate the campaigns targeting domestic firms from the ones involving a foreign country. $Home_{ij}$ is set to 1 whenever the target firm is headquartered in the same country as the NGO, and $home_{ik}$ turns on for damages reported in the NGO country.

4. Triadic Gravity

Our paper is, to our knowledge, the first gravity estimation on NGO campaigns. The parallel between the number of campaigns and the now mature gravity literature in trade is of particular importance since it provides us with the best practices to estimate the effect of bilateral frictions on the number of campaigns. The presence of multiple countries in the decision to select a target for each campaign

¹⁵ Baby Milk Action. “Donate.” <http://www.babymilkaction.org/donate>.

¹⁶ Food and Water Watch. “About Monthly Giving.” <https://www.foodandwaterwatch.org/about/monthly-giving>.

implies that our triadic gravity equation features both pairs of bilateral links in the role of frictions to the flow of campaigns. Modeling triadic gravity is relatively new; currently two papers in the literature estimate gravity equations involving three countries. [Arkolakis et al. \(2017\)](#) develop a trade model with multinational production. Their model calibration requires estimating a gravity equation on the sales of firms that may outsource production and sell in a third country. [Head and Mayer \(2015b\)](#) analyze the impact of bilateral frictions affecting firms' choices on detailed data from the car manufacturing industry disentangling the headquarters, production, and sales locations of firms.

We investigate the local bias of advocacy campaigns and estimate the determinants of campaigns following the triadic gravity equation (1). In the past two decades, the use of gravity equations underwent two important steps, which have generated best-practice recommendations regarding its estimation. The first one relates to the theory-consistent estimation of the gravity equation. The widely used estimation tool in international economics acquired recognized micro-foundations with [Eaton and Kortum \(2002\)](#) and [Anderson and Van Wincoop \(2003\)](#), which argued that estimation methods should necessarily take into account the structure of the model. In particular, the presence of respectively i , and j -specific multilateral resistance terms affecting trade flows and reflecting the position of the country in terms of frictions with respect to all its partners. The issue is of central importance in estimations of trade in goods: Theory-consistent estimations of gravity equations are now expected to either control for these terms or provide adequate measures of them. In our regressions, we use fixed effects for countries i , j , and k , to control for all the characteristics of countries that impact the number of outward and inward campaigns.

The second estimation issue relates to the number of zero flows in the data. It has become standard practice in the trade literature to keep the zeros in bilateral regressions through the use of Poisson Pseudo Maximum Likelihood (PPML). This econometric estimator was promoted by [Silva and Tenreyro \(2006\)](#) to account for heteroskedasticity. Its use of the level of trade flow (rather than the log) as a left-hand side variable also permits us to keep the zeros in regressions. Since the raw campaign data report positive numbers, we generate the zeros by sector, and then estimate the triadic gravity equation using PPML.¹⁷ Zeros are generated according to the following rule: We define a potential target as a pair 'target country—action country' (hence jk) that has been targeted at least once in this industry. The intuition being that, if the pair has been targeted by an NGO, in a frictionless world in which NGOs report on important and severe damage, all other NGOs in the same sector could have also reported on that pair. Within each sector, the set of available alternatives for all NGO countries becomes the set of jk pairs.

Estimation results are presented in [table 2](#). Robustness checks include estimations without countries' fixed effects (not reported), estimations on the sample including positive campaigns ([table 3](#)), and regressions using the Eaton Kortum Tobit (EK Tobit) estimator (presented in [table 4](#)). For comparison with traditional gravity estimations on trade, we also estimate a dyadic gravity equation of campaigns, and report the results in supplementary online appendix S3.

Before presenting regression results, we illustrate the effects of proximity by two illustrative cases. [Figure 1](#) reports the number of campaigns between pairs of NGO and target firm countries (weighted by population size), graphed on bilateral distance between them. The number of campaigns decreases with distance to the target country: It stands here as a proxy for all the bilateral links between countries. [Figure 2](#) reports the total number of campaigns received by countries in which firms are headquartered. The number of campaigns is graphed on (unilateral) visibility of target firms, measured through the number of brands hosted in the country. Here too visibility increases the flow of campaigns. This result echoes the hypothesis in [Baron \(2016\)](#) according to which campaigns react to firm reputation and brand equity.

Estimations in the next sections are designed to analyze whether these facts are confirmed when taking other controls into account.

¹⁷ This procedure yields a dataset with a very large proportion of zeroes. However, [Silva and Tenreyro \(2011\)](#) show that the performance of PML estimators such as Poisson is not undermined in the presence of a large proportion of zeroes.

Table 2. Triadic Regressions: Campaigns from i Directed at Firms in j with Action in k

Method	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dep. var.	OLS ln NC_{ijk}	Poisson NC_{ijk}	Poisson NC_{ijk}	Poisson NC_{ijk}	OLS FE_i	OLS FE_j	OLS FE_k
ln distance $_{ij}$	-0.066*** (0.018)	-0.078 (0.059)	-0.155*** (0.055)	-0.201*** (0.047)			
Colonial history $_{ij}$	0.086* (0.047)	-0.150 (0.105)	-0.048 (0.106)	0.039 (0.107)			
Language $_{ij}$	0.001 (0.040)	0.406*** (0.106)	0.441*** (0.102)	0.489*** (0.095)			
ln Migration $_{ij}$	0.012 (0.008)	0.024 (0.016)	0.043*** (0.015)				
Home campaign $_{ij}$	0.673*** (0.068)	1.170*** (0.147)	0.988*** (0.141)	1.240*** (0.137)			
ln distance $_{ik}$	-0.102*** (0.019)	-0.268*** (0.066)	-0.491*** (0.052)	-0.591*** (0.043)			
Colonial history $_{ik}$	0.088* (0.048)	0.065 (0.096)	0.324*** (0.091)	0.427*** (0.092)			
Language $_{ik}$	0.191*** (0.039)	0.521*** (0.094)	0.584*** (0.082)	0.675*** (0.076)			
ln Migration $_{ik}$	-0.028*** (0.008)	-0.086*** (0.016)	0.082*** (0.013)				
Home campaign $_{ik}$	1.503*** (0.071)	3.238*** (0.149)	2.555*** (0.119)	3.066*** (0.107)			
ln distance $_{jk}$	-0.134*** (0.017)	-0.249*** (0.053)	-0.227*** (0.049)	-0.330*** (0.047)			
Colonial history $_{jk}$	0.140*** (0.051)	0.297** (0.127)	0.301*** (0.117)	0.422*** (0.111)			
Language $_{jk}$	-0.056 (0.039)	0.028 (0.113)	-0.007 (0.108)	0.078 (0.103)			
ln Migration $_{jk}$	0.016** (0.006)	0.045*** (0.014)	0.092*** (0.014)				
Home action $_{jk}$	0.488*** (0.070)	1.023*** (0.177)	0.830*** (0.180)	1.373*** (0.153)			
ln pop $_i$					0.476*** (0.084)		
ln GDPcap $_i$					0.767*** (0.082)		
ln pop $_j$						0.464*** (0.083)	
ln GDPcap $_j$						0.406*** (0.112)	
ln (1 + Brands $_j$)						0.234*** (0.109)	
ln pop $_k$							0.487*** (0.062)
ln GDPcap $_k$							0.137** (0.056)
ln share Nat. Res. /GDP $_k$							0.085 (0.052)
Observations	6302	6302	154433	163240	97	87	142
Country i FE + country j FE + country k FE	yes	yes	yes	yes	n/a	n/a	n/a
Zeros	no	no	yes	yes	n/a	n/a	n/a

Source: Authors' calculations based on the data source. Campaign data come from Sigwatch. Country-level unilateral (GDP per capita and population) and bilateral (colonial history, distance, and language) variables come from the CEPII. Migration data come from the World Bank. The number of brands is provided by BrandFinance. The natural resources variable come from the World Development Indicators (WDI).

Note: NC_{ijk} is the number of campaigns from NGOs in i targeting firms in j for action in k . Data are pooled over 2010–2015. Standard errors in parentheses. Language is the common official language. Migrations $_{ij}$ are from j to i . The following countries are dropped because of missing data for GDP: In column (5), six countries: Greenland, Myanmar, New Caledonia, Palestine, Western Sahara and Serbia (the latter three are also missing population data). In column (6), eight countries: Cayman Islands, Faeroe Islands, Greenland, Myanmar, New Caledonia, Andorra, British Virgin Islands, and Serbia (the latter three are missing population data). In column (7), twelve countries: Cayman Islands, Faeroe Islands, Greenland, Myanmar, New Caledonia, Somalia, Syrian Arab Republic, French Guiana, Netherlands Antilles, Palestine, Western Sahara, and Serbia (missing population data for the last five). Moreover, 42 countries are excluded from regression in column (6) because of missing data on the number of brands. The absence of data on the share of natural resources over GDP leaves three countries on the side in column (7). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 3. Robustness—Triadic Regressions on Negative and Positive Campaigns

Method	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dep. var.	OLS ln NC_{ijk}	Poisson NC_{ijk}	Poisson NC_{ijk}	Poisson NC_{ijk}	OLS FE_i	OLS FE_j	OLS FE_k
ln distance _{ij}	-0.068*** (0.018)	-0.062 (0.054)	-0.127** (0.053)	-0.187*** (0.045)			
Colonial history _{ij}	0.057 (0.046)	-0.127 (0.104)	-0.042 (0.106)	0.063 (0.107)			
Language _{ij}	0.035 (0.039)	0.423*** (0.104)	0.472*** (0.102)	0.533*** (0.095)			
ln Migration _{ij}	0.018** (0.007)	0.032** (0.016)	0.055*** (0.016)				
Home campaign _{ij}	0.698*** (0.066)	1.211*** (0.143)	1.037*** (0.139)	1.367*** (0.134)			
ln distance _{ik}	-0.131*** (0.019)	-0.306*** (0.061)	-0.518*** (0.050)	-0.597*** (0.042)			
Colonial history _{ik}	0.147*** (0.047)	0.108 (0.093)	0.349*** (0.091)	0.427*** (0.093)			
Language _{ik}	0.161*** (0.038)	0.500*** (0.088)	0.580*** (0.082)	0.661*** (0.075)			
ln Migration _{ik}	-0.039*** (0.007)	-0.099*** (0.016)	0.067*** (0.013)				
Home campaign _{ik}	1.598*** (0.070)	3.323*** (0.148)	2.623*** (0.118)	3.048*** (0.103)			
ln distance _{jk}	-0.141*** (0.017)	-0.266*** (0.050)	-0.247*** (0.047)	-0.342*** (0.044)			
Colonial history _{jk}	0.131*** (0.050)	0.299** (0.122)	0.305*** (0.114)	0.418*** (0.109)			
Language _{jk}	-0.065* (0.038)	0.032 (0.111)	-0.007 (0.108)	0.070 (0.103)			
ln Migration _{jk}	0.021*** (0.006)	0.047*** (0.014)	0.087*** (0.014)				
Home action _{jk}	0.446*** (0.068)	0.950*** (0.164)	0.761*** (0.172)	1.272*** (0.147)			
ln pop _i					0.459*** (0.089)		
ln GDPcap _i					0.780*** (0.089)		
ln pop _j						0.453*** (0.080)	
ln GDPcap _j						0.408*** (0.115)	
ln (1 + Brands _j)						0.288*** (0.107)	
ln pop _k							0.516*** (0.059)
ln GDPcap _k							0.151*** (0.057)
ln share Nat. Res. /GDP _k							0.061 (0.051)
Observations	6901	6937	170207	179843	101	87	145
Country <i>i</i> FE + country <i>j</i> FE + country <i>k</i> FE	yes	yes	yes	yes	n/a	n/a	n/a
Zeros	no	no	yes	yes	n/a	n/a	n/a

Source: Authors' calculations based on the data source. Campaign data come from Sigwatch. Country-level unilateral (GDP per capita and population) and bilateral (colonial history, distance, and language) variables come from the CEPII. Migration data come from the World Bank. The number of brands is provided by BrandFinance. The natural resources variable come from the World Development Indicators (WDI).

Note: NC_{ijk} is the number of campaigns from NGOs in *i* targeting firms in *j* for action in *k*. Data are pooled over 2010–2015. Standard errors in parentheses. Language is the common official language. Migrations_{ij} are from *j* to *i*. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4. Robustness—Triadic Regressions, PPML, and EK Tobit

Method	(1)	(2)
Dep. var.	Poisson NC_{ijk}	EK Tobit $\ln NC_{ijk}$
$\ln distance_{ij}$	-0.201*** (0.047)	-0.144*** (0.013)
Colonial history $_{ij}$	0.039 (0.107)	0.235*** (0.038)
Language $_{ij}$	0.489*** (0.095)	0.120*** (0.031)
Home campaign $_{ij}$	1.240*** (0.137)	1.431*** (0.046)
$\ln distance_{ik}$	-0.591*** (0.043)	-0.297*** (0.013)
Colonial history $_{ik}$	0.427*** (0.092)	0.341*** (0.040)
Language $_{ik}$	0.675*** (0.076)	0.357*** (0.030)
Home campaign $_{ik}$	3.066*** (0.107)	2.440*** (0.048)
$\ln distance_{jk}$	-0.330*** (0.047)	-0.154*** (0.013)
Colonial history $_{jk}$	0.422*** (0.111)	0.172*** (0.041)
Language $_{jk}$	0.078 (0.103)	0.008 (0.031)
Home action $_{jk}$	1.373*** (0.153)	1.163*** (0.046)
Observations	163240	163240
Country i FE + country j FE + country k FE	yes	yes
Zeros	yes	yes

Source: Authors' calculations based on the data source. Campaign data come from Sigwatch. Colonial history, distance, and language come from the CEPII.

Note: NC_{ijk} is the number of campaigns from NGOs in i targeting firms in j for action in k . Data are pooled over 2010–2015. Standard errors in parentheses. Language is the common official language. Migrations $_{ij}$ are from j to i . * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

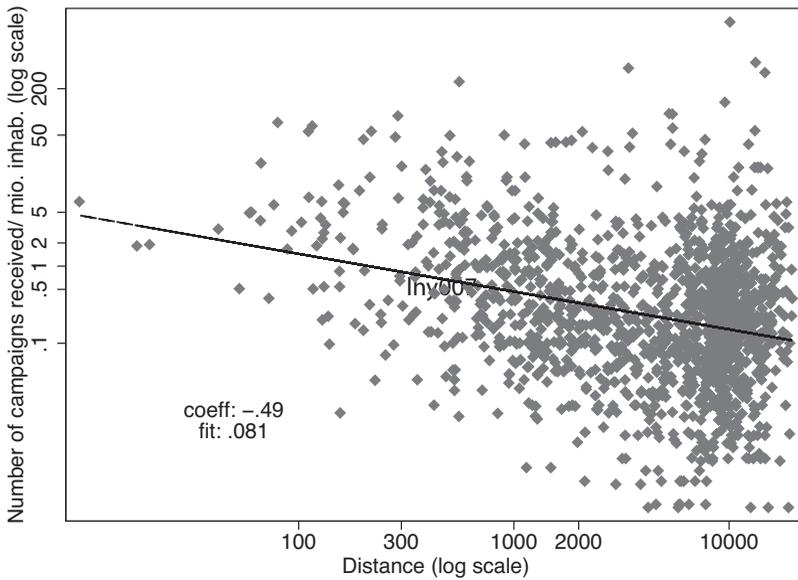
Results

Table 2 displays the estimation results. Unilateral country characteristics are controlled for by country fixed effects in columns 1 to 4, as required by theory-consistent gravity. To zoom in on the monadic determinants of campaigns while still using the fixed effects for the three countries, we use the two-step approach following Eaton and Kortum (2002). The fixed effects are estimated in a Poisson specification in column 4, and then used as dependent variables in columns 5, 6, and 7. Columns further differ by the inclusion of zero campaign flows (columns 3 and 4) and by the use of an OLS (column 1) or Poisson estimator (columns 2, 3, and 4). Finally, the fixed-effects estimation on the sample including the zeroes is performed with (column 3) and without (column 4) the migration variable.

Results show clear evidence that gravity-type patterns can be found in international campaigns of activism toward multinational firms. The main findings from the triadic estimations relate to the following items: (i) proximity variables to the firm country, (ii) proximity variables to the action country, (iii) unilateral variables, and (iv) substitution among the firm and the action country variables.

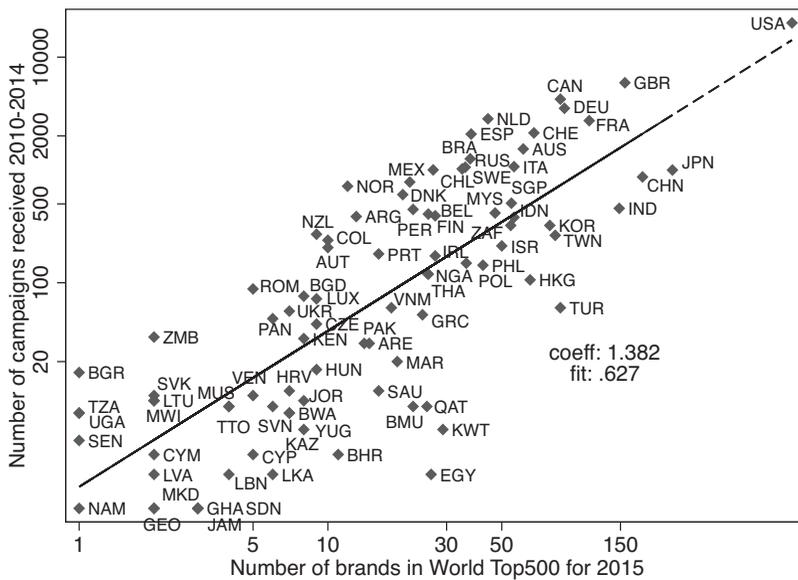
First, the role of ij bilateral determinants. In table 2, the ij proximity variables ($distance_{ij}$, $colony_{ij}$, $language_{ij}$, and $migration_{ij}$) represent the effect of each of these links between the NGO and the firm

Figure 1. Number of Campaigns and Distance



Source: Authors' calculations based on the data source. Campaign data come from Sigwatch. The distance variable comes from the CEPIL.
 Note: Each point represents the total number of inward bilateral campaigns, as a function of distance separating the countries of NGOs and firms.

Figure 2. Number of Campaigns and Number of Brands



Source: Authors' calculations based on the data source. Campaign data come from Sigwatch. The number of brands is provided by BrandFinance.
 Note: Each point represents the total of inward campaigns, as a function of the number of brands located in the country.

countries, controlling for size effects, and for the ik connexions between the NGO and the action countries. The estimation of ij distance effects in columns 1 to 4 thus arises from variation in the choices of firm countries, for given NGO and action countries. An activist focused on natural resources is for instance pictured as choosing between denouncing a harmful behavior of Total S.A. in Angola versus Chevron in Angola, or Lukoil in Azerbaidjan versus BP in Azerbaidjan. Results show a significant and negative ij distance coefficient equal to $-.2$ in column 4, which indicates that for a given action country, two NGOs from different nationalities will each prefer attacking a firm headquartered in a country close to home, everything equal: the farther away potential target firm countries are, the less firms in these countries will be chosen to illustrate a campaign on a given unethical act. A 10 percent lower distance between the audience and the firm country increases the number of campaigns by 2 percent. As an example, let's imagine NGOs respectively from Germany and from France, both focusing on unethical corporate behavior. The distance elasticity of $-.2$ on target firms tells us that the number of campaigns against Spanish firms by French NGOs will be 11 percent higher than the one of German NGOs against Spanish firms (the distances of France and Germany to Spain are respectively 950 and 1600 km), everything else equal. This represents a 60 percent increase in distance, which is the standard-deviation increase in distance in our sample. Alternatively, the coefficient on distance means that in order to double the number of campaigns, distance would have to decrease by 97 percent, everything else equal: This corresponds for example to France targeting firms from Belgium (508 km) instead of firms from New Caledonia (16,000 km). Let's draw a comparison of our distance coefficient with existing studies in the gravity literature. The $-.2$ distance elasticity of the number of campaigns is substantially smaller than the commonly estimated effect of distance on trade ($-.9$, Disdier and Head 2008). It is much larger than recent evidence of the impact of distance on patent citations ($-.03$ in Li 2014). The $-.2$ distance elasticity of the number of campaigns is comparable in magnitude to the effect of distance on FDI flows ($-.2$ in Blyde and Molina 2015) or equity flows ($-.4$, Coeurdacier and Martin 2009).

Note that the effect of proximity variables on the choice of target is not stable for all variables. In particular, shared colonial past does not add any impact once language and distance are taken into account. However, in regressions available upon request, colonial history taken in isolation has a positive and very significant effect. This suggests that both colonial past and language are determinants of cultural proximity, but are hard to disentangle from each other. Language affects the number of bilateral campaigns in the following way: The $.489$ coefficient in column 4 means that for a given distance to the action, and a given distance to the firm country, an NGO will report $(\exp(.489)=1.63)$ about 60 percent more on firms in countries sharing its home language. France is approximately 1700 kilometers away from Morocco and from Lithuania. Controlling for the common colonial history and for the different migrations flows between pairs of countries, speaking the same language (as France and Morocco) yields a 60 percent higher number of campaigns from French NGOs directed at Moroccan firms compared to the number of French campaigns targeting Lithuanian companies. Benchmarking the effect of language with the one of distance¹⁸ shows that sharing a common language has the same impact on bilateral campaigns as decreasing distance by 91 percent.¹⁹

These numbers explain the campaigning patterns when target firms are headquartered in a foreign country. What about home campaigns? The intensity of home campaigning is provided by the coefficient on the $home_{ij}$ dummy. Everything equal, among others for the same distance, activists target $\exp(1.240) = 3.45$ times more their domestic firms. Anecdotal evidence of self-targeting in the data include, for example, attacks by Greenpeace Canada and Greenpeace Belgium for rainforest destruction in Indonesia. While the former targets the White Paper Co., one of Asia Pulp and Paper's major Canadian customer, the latter points to the Delhaize Group, a Belgian supermarket operator, for problematic palm oil suppliers. So far,

¹⁸ As explained in the next subsection, our robustness estimations performed with EK Tobit do not change the sign or the significance of estimated coefficients, but report lower effects for language and distance.

¹⁹ With countries i and j sharing the same language, and i and k not, $dist_{ij}/dist_{ik} = \exp(0.489/ - 0.201) = 0.087$.

being a domestic firm appears to be the major bilateral determinant of the target choice, with language and distance to the firm country affecting NGOs' choice, however in a lesser extent: Indeed, the ranking indicates that a home firm multiplies the number of campaigns by 3.45, a foreign firm in a language-sharing country expands the number of campaigns by 1.63, which is equivalent, for a foreign firm with everything else equal, to raising distance by 91 percent (1.3 standard deviations away from the sample mean).

An important advantage of the triadic setting is to allow separate estimations of proximity variables to each component of the campaign target: the firm or the action country. In particular, we are able to assess whether the estimated home bias on selecting firms' countries remains when controlling for the location of the action. ij and ik proximity variables might be correlated positively, because gravity drives both activists to denounce firms originating from close-by countries, and to be interested in actions taking place in the immediate surroundings of its audience. If this is the case, then the coefficients on ij proximity might be biased upward if estimated without ik variables. Coefficients in [table 2](#) can be compared to those estimated in the dyadic setting shown in supplementary online appendix S3. The ratios (table unreported) reveal that the distance elasticity is divided by more than 2, decreasing in absolute value from .553 to .201. Colonial history loses significance in the triadic case. The language dummy remains significant and is divided by 1.19. This shows that the triadic setup is critically important in assessing the impact of proximity variables on campaigns.

Our second focus in [table 2](#) is on the ik bilateral coefficients. Triadic gravity allows us to quantify the effect of distance to the action country, when controlling for the target firm's country characteristics. The elasticity to $distance_{ik}$ appears significant throughout the estimations. For given attributes of the firm, NGOs' choice of action to criticize is influenced by proximity: the number of campaigns is approximately 5 percent lower (coefficients taken from columns 5 and 6) when distance to the action country increases by 10 percent. This implies that NGOs based in France for example release around 11 percent less campaigns on damages made in China rather than in India.²⁰ Results display a clear home bias relative to the location where the damage takes place: everything else equal, domestic actions generate $\exp(3.066)=21$ times more campaigns. Also, both language and colonial history exhibit positive effects on campaigns.

Third, the role of unilateral variables, shown in columns 5 to 7, in which the dependent variables are the fixed effects obtained in column 4. Some countries are not included in the estimation because of missing data on their population or GDP. Campaigns originate in populated, but mainly rich, countries. Campaigns target firms headquartered in large and rich countries, and even more so, the more the country is the home of popular brands. Note that the $brands_j$ variable captures the worldwide visibility of firms, and thus represents a unilateral measure of whether the audience is familiar with the target firm. In contrast, the bilateral measures of proximity measure whether the firm country is known in this particular home country. An interesting pattern emerges relative to the choice of the action country. We show in the dyadic gravity results displayed in the supplementary online appendix, that in general, campaigns are proportionally more numerous in sectors whose production process or whose main final goods' characteristics are known for harming resources. Countries featuring resource-intensive industries (hence industries using natural resources and/or an important workforce) should therefore draw an important share of activists' reports. We use the natural resources variable from the World Development Indicators (WDI) to investigate the effect of the presence of natural resources on the attraction of campaigns. It captures for action country k , the presence of oil, natural gas, coal, minerals, and forests. Its effect is positive although not significant, hence for a given action country's size and income level, a larger rent sourced from producing (from) natural resources tends to attract more campaigns from activists.

Fourth and last, the fact that the two distance coefficients ij and ik are negative indicates that both determinants are substituted in the NGO's choice of target bundle. To increase the number of bilateral

²⁰ France is 8742 km away from China and 7073 from India.

campaigns by 5 percent, one must either choose a 10 percent closer action country everything equals, or target a firm in a country whose distance is 25 percent shorter. At the sample mean, bilateral campaigns increase by 5 percent when the action country is 800 km closer to NGOs country (than the average action country) or the target country is 2000 km closer to NGOs country (than the average target country).

Robustness

Three robustness issues are investigated. We first reiterate our main estimation without fixed effects for countries, hence keeping the unilateral variables in the regression (table available upon request). This allows to check that country-specific variables behave as described in the fixed-effects estimation. Unilateral variables measure size, income, and availability of resources. They all exhibit positive and significant coefficients. The second robustness issue highlights that our results are stable even when reintroducing the positive campaigns from the raw dataset, marginally increasing the number of observations at the country level. In [table 3](#), all coefficients maintain their sign and significance (or absence of). Proximity effects slightly decrease ($distance_{ij}$, $language_{ik}$) or increase ($language_{ij}$, $home_{ij}$, $distance_{ik}$).

Last, we address endogeneity concerns that could be caused by the selection of NGOs and campaigns. PPML allows us to estimate the gravity equation while keeping the zeros; however, it does not tackle the fact that zeros might not be randomly distributed across countries. We may obtain biased coefficients if proximity variables are correlated with unobserved characteristics of campaigns and NGOs. NGOs that campaign at large distances or to very remote countries are very likely to have different and unobserved characteristics that are thus correlated with our gravity determinants. [Head and Mayer \(2014\)](#) compare different estimating methods to solve the endogeneity of zeros, and recommend to use the “EK Tobit estimator” to take care of selection. This estimator generalizes the Tobit: Namely, the minimum number of campaigns under which zeros are observed can be defined by target-pairs jk . [Table 4](#) displays the preferred specification obtained with the “EK Tobit” estimator. Results do not change in an important way: All the signs and significance levels but one ($colony_{ij}$ gains significance) are maintained. The coefficients from the two estimations are not statistically different for 7 out of 12 estimates. Nevertheless, the magnitude of some coefficients does vary. The home bias in campaigning remains: It is reinforced for the ij pair (from 3.45 to $\exp(1.431)=4.18$), and it decreases for the ik pair (from 21 to $\exp(2.440)=11$). For foreign targets and action countries, the impact of bilateral distance ij decreases from -0.201 to -0.144 , and the coefficient for bilateral distance ik changes from -0.591 to -0.297 . The language variables also exhibit lower but still significant and positive effects: Sharing the same language as the foreign country multiplies the number of campaigns toward firms in this country by $\exp(.120)=1.12$ (instead of 1.63). Speaking the same language as the action country increases by $\exp(.357)=1.42$ the number of campaigns (previously 1.96 with PPML), everything else equal.

Further potential selection issues may arise given the limits of the dataset described in section 2. Incomplete coverage of languages in which campaigns are published is one of them. If Arab-, Hindi-, and Korean-speaking NGOs behave differently from the NGOs that are in the database, then our results might not apply to those specific NGOs. Estimation of [table 2](#) without NGOs headquartered in Algeria, Egypt, Ethiopia, India, Morocco, and South Korea (not reported) shows coefficients that do not differ substantially in sign, significance, or magnitude from our estimation on the whole sample. Also, selection of the most dynamic NGOs in developing countries, which publish in English or French, might generate an endogeneity issue. If only the profitable activists are observed in remote countries, coefficients on origin countries' variables will be biased. This issue is solved by the used of origin and destination fixed effects, which replace unilateral variables in our preferred specification.

Higher Audience or Lower Cost?

In estimating the motivations of the NGO for choosing the optimal target, we highlight the role of proximity variables between countries, and interpret their effect as reflecting the audience's attention to facts

they feel familiar with. However, gravity results may also arise from cost considerations: A reduced cost to obtain the information would also increase the number of bilateral campaigns. Would it be possible to eliminate the cost explanation to understand whether audience-related explanations are in effect?

One way to proceed is to make an assumption on where the cost-related reasons play a larger role. Let us assume that the choice of the action country is more influenced by cost-minimizing variables: The NGO must communicate with a local agent in country k or send an agent to gather information about the activity of firms in countries k . Hence the distance between the NGO country i and the action country k contains more cost-related elements than the distance between i and j . The proportion is reversed for the target country: Let us assume that audience-related reasons drive in majority the decision to select a given firm. The fact that both distance coefficients are negative and significant suggests that both audience and cost determinants of the targets' choice are active. An NGO seeks the optimal set of countries that will both maximize the attention of the audience and minimize the cost to obtain the information. For a given action country, we thus conclude that there is an audience effect in the campaign's target choice: NGOs select firms in close and familiar countries, one of the reasons being that campaigns must focus on targets visible to the audience.

5. Conclusion

This paper uses rich data on NGO campaigning against multinational corporations, for a large number of sectors and firms, to quantify the variables that affect activists' choice of a target countries. The gravity model, inspired by the trade literature, and extended to our triadic setting, proves very adapted to evaluate the determinants of campaigns. Our main results show that NGOs' campaigns are biased toward home-related targets. Historical, cultural, and geographical proximity to both the headquarters of firms and the country of the actions are factors that generate a higher number of campaigns, suggesting that campaigns are likely to be designed so as to include at least one element drawing the attention of consumers.

How to organize international governance of global value chains is still an open question: The role of regulators should be to avoid behaviors of firms that create negative externalities in countries where goods are sold and produced. In this context, the home bias of NGOs' supervision of companies implies that activists probably do not monitor exclusively the firms that have done the largest damage, since they overweight events that are related to the audience's concerns. Could NGOs be substituted for governments in regulating global value chains? Our paper provides a first element of response, which could be pursued by future work concentrating on measuring the harm caused to resources.

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