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It's economic size, stupid! How global advocacy mirrors state power

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Abstract

Numerous empirical studies suggest that global interest communities are heavily biased in favor of wealthier countries. This research note critically reviews these works suggesting that they (i) lack a *benchmark* to assess the biased nature of global interest communities and (ii) conflate the concepts of "wealth" (based on GDP per capita) and "economic power" (based on GDP) into one analytical category. As a corrective to these problems, we compare variation in global interest group mobilization across countries to the size of these countries' national economies. Relying on an original dataset mapping interest groups communities at the World Trade Organization (1997–2012) and the United Nations Climate Summits (1997–2011), we show that (i) global interest representation almost perfectly reflects differences in countries' relative economic power and (ii) contrary to the conventional wisdom, wealthier countries are, relative to their economic size, actually underrepresented in global interest communities.

Keywords: economic power, global governance, interest groups, wealth.

1. Introduction

As global governance systems have become increasingly relevant in contemporary policymaking, the number and scope of organized interests that mobilize beyond national borders has also risen dramatically. The nesting of states within increasingly influential and accessible sets of global governance systems has created obvious incentives for various kinds of organized interests to mobilize on a transnational basis (Beckfield 2003; Barnett & Finnemore 2004; Tallberg *et al.* 2014). While many have welcomed these developments as crucial steps to make global governance more representative of and accessible to all the world's citizens (Boli & Thomas 1997; Barnett & Finnemore 2004), others have started to express concerns about the possibility that the steady growth of transnational advocacy may turn out to widen representational inequalities between the so-called global "North" and the "South," ultimately making global politics even more skewed in favor of the interests of wealthier countries (Zürn 2014).

Given the importance of this question, a large number of studies have subjected to empirical scrutiny whether, and to what extent, country-level variables capturing countries' wealth relate to their representation in global governance. The results of these empirical investigations all suggest that a country's domestic wealth and a country's number of interest groups active in global governance are strongly correlated (Beckfield 2003; Ron *et al.* 2005; Smith & Weist 2005; Lee 2010; Rasmussen & Alexandrova 2012; Stroup & Murdie 2012; Bailer *et al.* 2013; Nordang Uhre 2014; Carroll & Rasmussen 2017). These studies provide *prima facie* support for the view that global interest populations are biased in favor of wealthier countries, hence suggesting that the existence of a North–South divide in these global interest communities.

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But can these empirical strategies provide unequivocal support to the view that global interest communities are *biased* in favor of wealthier countries? While these works provide a useful starting point for any attempt to empirically address this question in a systematic way, they also suffer from two interrelated problems that limit their ability to provide conclusive evidence in favor of the argument that global interest communities are indeed biased toward wealthy countries. In particular, we argue these works (i) lack a clear *benchmark* against which an assessment of the biased nature of global interest populations can be carried out and (ii) conflate the concepts of "wealth," referring to a country's level of development (or GNI per capita), and "economic power" (usually measured through GDP), as *one* analytical category. This makes it impossible to disentangle the relative importance of these two factors in determining cross-national differences in patterns of representation in global interest communities.

How much does wealth matter in shaping countries' interest representation in global governance compared with mere economic size? Are global interest communities biased in favor of wealthier countries or do they reflect the distribution of countries' relative economic power? Empirical research on global interest communities should be able to address these questions for a number of important reasons. First, wealth and economic size do not necessarily go hand in hand. While many countries have economies that are at the same time large and wealthy (or vice versa), in other cases large economic size is accompanied by low levels of domestic development (or vice versa). This is particularly true nowadays, as the rise of new emerging economies is making it more important to understand what role can be played in global governance by powerful economic actors that are not simultaneously highly developed domestically. Second, the respective mechanisms linking economic size and wealth to global interest representation are potentially very different. While both factors plausibly affect the extent to which groups can obtain resources from the direct environment in which they operate, they imply fundamentally different views as to which types of resources matter more. Perhaps most importantly, different answers to these questions would yield hugely different normative implications. For instance, the observation that global interest representation reflects differences in countries' relative economic power, rather than displaying systematic biases favoring wealthier countries, would weaken the normative case for strategies of democratization of global governance aimed at increasing input legitimacy via greater stakeholder involvement from "Southern," poorer countries. Since these strategies are based on the underlying assumption that poorer countries are underrepresented in global interest communities (Agné *et al.* 2015), ascertaining empirically that this key assumption does not hold would, at least indirectly, call into question their desirability and push the debate on how to make global governance more democratically legitimate in different directions.

In this research note, we offer some suggestions on how to address these problems and deliver some stylized facts by relying on an original data set drawn from a large-scale project that maps all interest group participation at two international venues: the World Trade Organization's Ministerial Conferences (between 1997 and 2012) and the United Nations Climate Summits (between 1997 and 2011). More specifically, we suggest that a corrective to the above problems can be provided by creating a relative measure of density that places patterns of national non-state actors active in global governance in relation to the size of countries' national economies (see Gray & Lowery 2000b and Carroll & Rasmussen 2017 for a similar approach applied to national and European interest group communities).

Our results indicate that a country's economic size is the single most important factor affecting its representation in global interest communities. In short, these findings suggest that claims about the existence of a bias in global interest communities favoring more developed countries may be overstated. Our analysis shows that, contrary to the conventional wisdom, a country's level of development actually has a dampening effect on this bias, namely it *reduces* this gap in favor of developing nations, albeit producing only a small correction.

2. Analyzing bias in global interest communities

Is there a bias in global interest communities favoring more developed countries at the expense of poorer ones? Is the growth of transnational non-state actor populations telling of ever-growing patterns of inequality and exclusion along socioeconomic lines in global governance? Understandably, these questions have received a great deal of attention. Underlying these analyses is a normative concern about the possibility that patterns of political exclusion due to socioeconomic factors that have been found to play such an important role at the domestic level

may equally play out at the global level, effectively hindering any possibility to democratize global governance via greater stakeholder involvement (Agné *et al.* 2015), and even furthering dynamics of domination over developing countries (Boswell & Chase-Dunn 2000; Chase-Dunn *et al.* 2000). While increasing "input" legitimacy *per se* is not sufficient to ensure that global governance becomes more responsive to the needs and interests of poorer countries, there can hardly be greater output legitimacy if poorer countries' relevant constituencies are systematically excluded or underrepresented in global governance (Hanegraaff & Poletti 2018). Understanding whether global interest communities are characterized by systematic biases favoring wealthier countries is therefore of paramount importance in guiding ongoing normative debates about how to increase the legitimacy of global governance. Despite the importance of this empirical question, we believe existing scholarly work on this issue cannot provide conclusive answers as a result of two interrelated problems that we now turn to discuss.

2.1. What is bias?

A large number of studies have subjected to empirical scrutiny whether, and to what extent, country-level variables capturing various facets of a country's wealth relate to their representation in global governance. The results of these investigations all suggest that a country's domestic wealth and a country's number of interest groups active in global governance are strongly correlated (Beckfield 2003; Ron *et al.* 2005; Smith & Weist 2005; Lee 2010; Rasmussen & Alexandrova 2012; Stroup & Murdie 2012; Bailer *et al.* 2013; Nordang Uhre 2014; Carroll & Rasmussen 2017).

But can these empirical strategies tell us something meaningful about whether these global interest communities are *biased* in favor of more developed countries? While modeling cross-national differences in global interest representation by regressing counts of organized interests on independent variables that capture domestic wealth is a useful starting point, these analyses do not address the fundamental underlying question of how an unbiased interest system *should* look like (Lowery *et al.* 2015). The lack of clear and accepted standards to assess bias is widely acknowledged to be a major problem in the study of national non-state actor populations (Lowery & Gray 2004; Lowery *et al.* 2015; Carroll & Rasmussen 2017; Rasmussen & Carroll 2014).

The study interest group communities, at both national and international levels, have understandably devoted much attention to subjecting to empirical scrutiny Schattschneider's (1960) famous assertion of pervasive bias in interest representation. Yet, the vast share of existing studies of bias does not include a benchmark for judging whether a given distribution of interests involved in policymaking is biased. As Lowery & Gray (2004, pp. 7–8) put it, "While different enumerations of the size and diversity of interest communities are useful for a number of purposes […] without a standard – some assessment of what an unbiased interest system might look like – they can tell us little about bias in interest representation." Thus, while comparisons of distributions of interest group communities based on raw numbers may provide a useful starting point, they must be compared to some reference to give these indicators a meaning (Gray & Lowery 2000a, p. 86). The same problem characterizes the study of global populations of non-state actors, including investigations of the relationship between countries' wealth and their representation within these communities. These studies too do not explicitly define how an unbiased global interest community should look like. In other words, while we know that countries' wealth affects global interest representation, we cannot establish whether this is a major source of *bias* in these global communities of non-state actors.

2.2. Economic power or level of development?

In addition, existing works do not relate in systematic ways to the concept of economic power, either empirically or theoretically. That is, they tend to conflate economic power with a country's level of development. This is an important oversight. First, while countries' economic power (usually measured through GDP) and level of development (usually measured through GNI per capita) may overlap, their correlation is not overly strong (in our study: $r = 0.38$; $P = 0.000$). For instance, India and China are economically powerful countries, that is, among the countries with the highest GDP, but rank low when it comes to levels of domestic development, that is, countries with relatively low GNI per capita. In contrast, countries such as Luxembourg and Ireland are among the most domestically developed countries in the world, yet play a peripheral role in global politics in terms of economic

power. It is therefore important to try and disentangle the relative weight of economic power and wealth as predictors of the mobilization of different countries' non-state actors at the global level.

Second, theoretically, the *mechanisms* linking economic power and wealth to global interest representation are critically different. On the one hand, several studies of transnational interest group communities argue that the number of organized societal actors in a geographical area roughly resembles the size of the economy of that area (e.g. Messer *et al.* 2011; Hanegraaff *et al.* 2015; Berkhout *et al.* 2018; Carroll & Rasmussen 2017). This line of argument suggests that there should be a strong correlation between the GDP of a state and the number of interest groups active within and outside these states.

Other studies, on the other hand, focus on the level of development of an economy, considering it more telling of the existence of the educational and communication infrastructures that are critical for strong associational networks and spaces for information sharing to arise and support a solid national voluntary sector (e.g. Beckfield 2003; Bischoff 2003; Smith 2005; Smith & Weist 2005; Coates *et al.* 2007; Lee 2010; Rasmussen & Alexandrova 2012; Bailer *et al.* 2013; Nordang Uhre 2014). Accordingly, these studies tend to disregard GDP and rather focus on measures that are more directly telling of a country's level of economic *development* such as the Gross National Income per capita. While both sets of arguments share the assumption that organized interests' capacity to be active is a function of their capacity to obtain resources from the direct environment in which they operate, they have fundamentally different views as to which *types* of resources matter more.

This distinction has crucial implications for the analysis of how differences in countries' wealth affect their representation in global interest communities. For one, this discussion suggests that the analytical categories of economic size and level of development need to be considered as conceptually distinct, because they can both plausibly affect patterns of global interest representation in a systematic way. Moreover, and perhaps more importantly, it underscores the importance of gauging the relative contribution of these two different factors in determining cross-national differences in global interest representation. Different observations about the relative weight of "wealth" and "economic size" would yield hugely different normative implications. The observation that relative economic size weighs little compared to wealth would corroborate claims that global interest communities are indeed characterized by a North–South divide, thus suggesting the normative desirability of reforms aimed at increasing stakeholder involvement from "Southern," poorer countries in global governance. Differently, the observation that "economic size" largely drives cross-national differences in global interest representation would weaken the normative case for such reforms and portray a picture more closely in line with traditional International Relations approaches, conceiving of global governance as an institutional architecture where (economically) powerful actors, including emerging Southern economies, can effectively make their voice heard. This latter observation would rather suggest reforms of global governance that can accommodate the demands of these emerging economies.

However, existing empirical studies on the links between wealth and global interest representation look into countries' GNI without also explicitly factoring in economic size in one way or another. As a result, it is impossible to assess whether, and if so to what extent, correlations between a country's level of development and global representation are driven by the country's economic size.

We suggest that the two problems discussed so far can be simultaneously *corrected* by using countries' economic size as benchmark against which one can effectively assess empirically whether and how global interest communities are biased in favor of more developed countries. We thus construct our notion of proportional representation by assuming – as a benchmark – a linear relationship between a country's economic size and its representation in global governance. Different strands of research in political science suggest that this is a plausible assumption, including the literature on interest group communities that we directly address in this paper. For instance, population ecology studies of interest group communities argue that the number of organized societal actors in a geographical area roughly resembles the size of the economy of that area (Lowery & Gray 1995; Gray & Lowery 1996, 2000a, 2000b). Gray and Lowery (1996) developed this argument based on the US context, in which they found that the number of groups active at the federal governmental level from a certain state is highly correlated with the size of the economy of the state in question. This mechanism has since been confirmed outside the US as well, such as in the EU (Carroll & Rasmussen 2017), and within many countries worldwide (see Berkhout *et al.* 2017 for an overview of these studies).

But this choice is also in line with established approaches in the broad international relations literature, which widely uses the size of countries' domestic economies (measured as GDP) as a proxy of their power in international economic relations and global governance (Gilpin 1981; Drezner 2008). If it is true that the ability to project power is a function of a country's economic size, then, by extension, it is also plausible to expect that a country's representation in global interest communities should closely reflect its relative economic power. Albeit postulating different causal mechanisms, both perspectives suggest that countries' economic size can be usefully looked into to derive baseline expectations as to what an unbiased global interest community would look like. In addition to allowing us to connect to established approaches in different fields of political science, this choice enables us to address our substantive- and normative-oriented interest in understanding whether biases in global governance pit wealthy and poor countries against each other, or rather reflect cleavages structured along economic power lines.

It is important to stress that GDP is certainly not the only benchmark one could plausibly think of to assess bias in mobilization patterns of non-state actors in global politics. Other factors could also be considered to define what an unbiased global interest community should look like. In our case, our aim is to see whether the inclusion of non-state actors alleviates or strengthens current power constellations in global politics, which tend to be structured around economic power. Hence, we use the economic power of countries as a benchmark to analyze which organizations are active in global politics, but recognize that other benchmarks are possible depending on the question at hand.[1]

In sum, we create a relative measure of representation that places the number of groups from particular sets of countries in relation to the economic size of a country. To give an example, Sweden has a GDP twice that of Finland; hence, we would normally expect around twice as many organizations stemming from Sweden as from Finland to become active globally. Any deviation above or below the levels expected on the basis of a country's economic size thus represent examples of over- and underrepresentation, respectively, and warrants further analysis, for example, whether the differences we observe are caused by a country's level of development or not. As such, we investigate whether a country punches above or below its economic weight, so to speak, after which we analyze why some countries are better represented by NSAs in global politics, while others are less represented than we would expect considering the economic power of the country.

3. Research design

We illustrate the usefulness of our proposed empirical strategy to assess whether global interest communities are biased in favor of wealthier countries by relying on an original data set drawn from a large-scale project that maps all interest group participation at two international venues: the World Trade Organization's Ministerial Conferences (between 1997 and 2012), and the United Nations Climate Summits (between 1997 and 2011). About the first, the interest population of the *WTO* contains 1,962 different organizations that were eligible and/or attended at least one of the eight Ministerial Conferences. The second data source is constructed through the mapping of the *UN Climate Summits'* interest group population. This dataset includes 6,655 organizations, which all attended one or more of the Climate Summits since 1995. All these organizations were coded based on their websites. This gives us a comprehensive insight into the type of organizations interested in WTO policies, the region or the countries where they come from, their respective areas of interest, how they are organized, and so on. To make sure that one-off participation spikes by organizations that attended the conferences in their home countries do not affect our results, we exclude these organizations from the data set (e.g. a Kenyan NGO attending the Climate Summit in Nairobi).[2]

To construct our *dependent variable* we rely on two measures. First, we rely on a specific variable, namely the geographical area of interest that the organization is defending. Based on the website of the organization we coded whether or not non-state actors defend the interests of constituents or businesses located in one country (i.e. national interests) or in more than one country (i.e. multilateral interests). More specifically, coders could pick one out of three options: national representation (e.g. Brazil), regional representation (e.g. Asia), or global representation (more than two continents). We thus focus on the geographical objective of groups, not necessarily on where these groups are located. This choice allows us to focus on the geographical location of the interests that these organizations defend. To illustrate this, it is well known that many NGOs represent a developing country

(e.g. Tanzania), while residing in a developed country (e.g. the United States). In such cases, we would code these organizations as defending the interests of Tanzania and include them as such in the database. This applies to around 10 percent of the cases. Combined, this provides us a list of almost all countries in the world and the number of groups indicating that they represent the interests of these countries at either the WTO or the climate summits. In total, we rely on data from 3022 national non-state actors active at the UN Climate Summits, and 1212 national organizations active at the WTO conferences (see Table A1 for an overview of all countries). Note that a set of organizations could not be tied to any specific country, as they indicated to represent a certain region. For instance, some NSAs declare that they represent the "entire developing world." These organizations constitute roughly 7 percent of the entire population. As our focus is on cross-national differences in patterns of global interest representation, we could not include these as part of our country-level analysis. Yet, we did a robustness check where we included these organizations, albeit in a more descriptive fashion, to confirm that this would not change our results.[3]

As a second step, our dependent variable included a benchmark, namely GDP per country. As in the case of the number of groups, we calculated each country's share of the global economy. Finally, we compared the percentage of non-state actors active in global governance each country has with its stake in the global economy. To illustrate, 11.06 percent of non-state actors active at the WTO and climate conferences were from Canada, while Canada's stake in the world economy is 2.47 percent, meaning they have an overrepresentation of 8.59 percent (see last row in Table A8); Spain, by contrast, has an underrepresentation of 0.75 percent (2.14 percent of the NSAs come from this country at the UNFCCC, while they have a 2.89 percent stake in the world economy (see row 17, Table A8). In Table A1, a full list of all countries is provided, including the relative number of groups active in global governance, and the average over- or underrepresentation at the conferences.

We have one *independent* variable, namely a country's level of development – or wealth, as it is often referred to. This is measured in two ways: first, by a country's *GNI per capita*. The data is retrieved from the World Bank statistical division. To make sure our findings are robust we also include a country's level of development at a more aggregate level. We hereby make a distinction between four income groups, as defined by the World Bank. As of 1 July 2016, and calculated using the World Bank Atlas method, low-income economies (or least developed countries – LDCs) are defined as those with a GNI per capita of $1,025 or less in 2015; lower middle-income economies are those with a GNI per capita between $1,026 and $4,035; upper middle-income economies are those with a GNI per capita between $4,036 and $12,475; and high-income economies are those with a GNI per capita of $12,476 or more.

We also add several *control* variables. First, we control for the democracy of a country. Since it is usually easier to create organizations that represent societal interests in democratic political systems (Rohrschneider & Dalton 2002), it is plausible to expect democratic countries to be better represented in global interest communities. Second, we control for population size (Carroll & Rasmussen 2017). More citizens mean that there are more potential members for non-state actors, which should translate into greater representation in global interest communities. Yet, this effect could be mediated by the structure of the political system and/or the economy of the country in which the citizens live. We therefore also control for the size of a country's government (Mahoney & Beckstrand 2011). A larger government is likely to devote greater resources to sponsor non-state actors' activities, which should also translate into greater interest representation at the global level. Fourth, we control for the Gini index, since in more equalitarian societies relatively more people are able to become members of various kinds of organized associations. Fifth, we control for countries' inflows of foreign aid, since this is often used to fund the creation and activities of non-state actors, which should have a positive effect on the number of such groups active in global governance (Smith & Weist 2005) (See Table A9 for a summary table of all the variables used in the paper).

4. Empirical illustration

In our empirical analyses, we first provide descriptive evidence highlighting how the various countries are represented at the global level by non-state actors. Next, we compare this to the GDP of these countries to see whether certain counties are overrepresented, proportionally represented, or underrepresented. Finally, we present data on how the level of development in a country and global representation are connected in a statistical analysis.

Figure 1 Distribution of number of non-state actors per country.

We start with a general overview of the distribution of representation of non-state actors by country. As said, in Table A1 the total number of groups per country is listed alphabetically. In Figure 1, the number of groups per country is ranked from low to high. What is immediately clear is that the distribution is highly skewed. A few countries have many groups active at the conferences, whereas most countries have only a few. The United States has the most organizations active at both venues (800), followed by Canada (648), Germany (192), Japan (171), India (147), and Argentina (139).

Then, we compare this distribution across a country's level of development. In other words, we present the relationship between a country's level of development and the activity of non-state actors *without* a benchmark. To this end, in Figure 2 we divided all groups into four categories of development: high-income, middle-high, middle-low, and low-income countries. We then compared this to the average number of groups active from these countries. The results, again, reveal a very skewed distribution. High-income countries, on average, have 37 organizations at the conferences, whereas low-income countries have just over four-and-half. Middle-low income countries (6.71 organizations per country) and middle-high income countries (7.95) are just slightly better represented in global governance than the low-income countries, but do not come close to the average number of groups that high-income countries supply to the global level.

Considering earlier studies, these numbers seem to confirm that the governance of global interest communities is severely biased in favor of developed countries (e.g. Chase-Dunn *et al.* 2000; Smith & Weist 2005; Tallberg & Uhlin 2012; Beckfield 2003; Nordang Uhre 2014; Zürn 2014). Yet, as said, the distribution we present here cannot illuminate whether or not the differences we observe are disproportional or simply a function of the size of a country's economy.

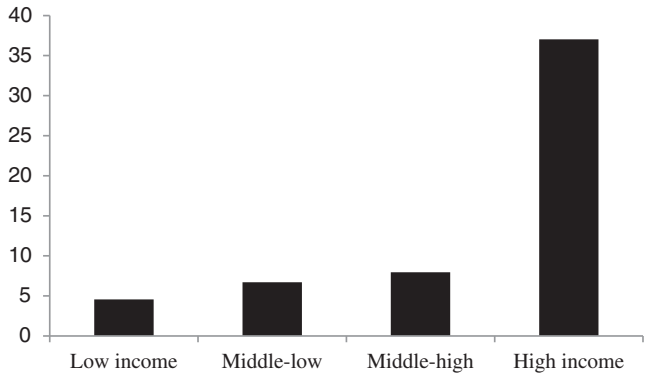

Figure 2 Average number of attendees per country across four income groups.

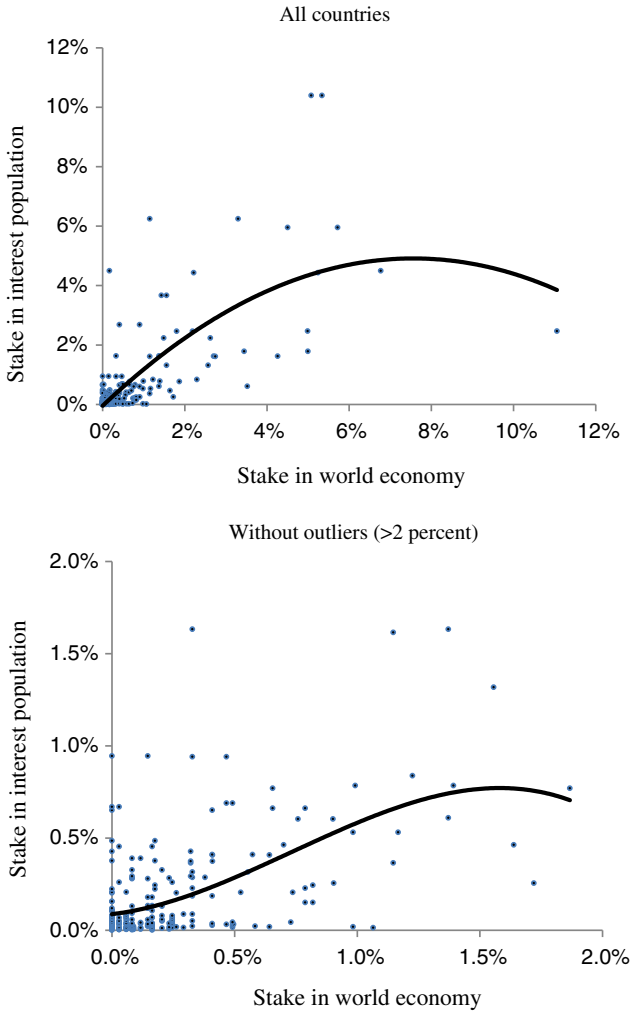

Figure 3 Scatterplot and polynomial trend line between density of interest group population and stake in world economy per country ($r = 0.91$; $P = 0.00$).

In Figures 3 and 4, we present our dependent variable, whereby we have added a benchmark to assess the number of groups mobilized per country. More specifically, we compare the number of groups active from a country with the size of the economy of that country, which allows us to see which countries have more (or fewer) groups active in global governance compared with what we would expect based on the size of the domestic economy. Figure 3 provides a simple bivariate distribution, with a linear trend-line, and a correlation test (y-axis indicates the share of organizations from a country; x-axis represents the share in the world economy of a country). Two things stand out. First, the correlation is very strong ($r = 0.91$, $P = 0.000$). This means that variance across countries' GDP (i.e. the size of countries' economies) explains over 80 percent ($r^2 = 0.82$) of the variance in the number of groups active from these countries, indicating a very strong relation between a country's GDP and the number of groups from that country active in global governance. This clearly validates our choice to include countries' GDP as a benchmark for how many groups we *should* expect to be active in global governance. In fact, almost all variation across countries in terms of the number of groups active at the two conferences is explained by this one single variable: GDP.[4]

The second thing that stands out is that most observations are clustered at the bottom of the y- and x-axes. This means that most countries have a very low stake in the world economy and also have a low proportion of the overall number of groups active in global governance. Moreover, at the end of both axes, we see that there are some outliers. To visualize these differences more clearly, Figure 4 plots the difference between the stake in the economy and the stake in the non-state actor community for each country. Here we can observe that to a

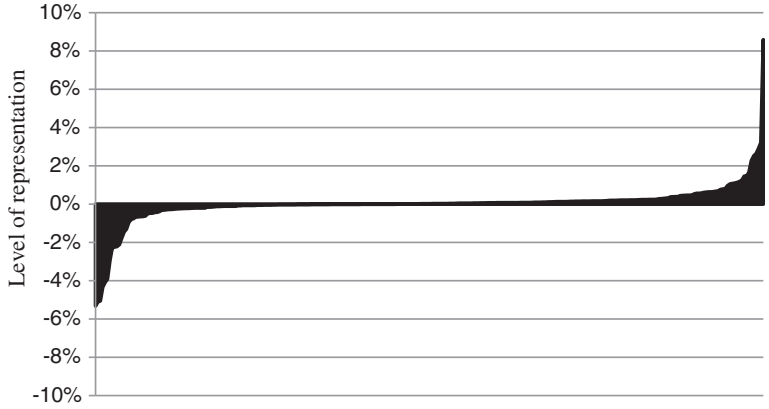

Figure 4 Under and overrepresentation of countries by stake in world economy.

large extent most organizations fall between the plus one and minus one category. This means that they have an over- or underrepresentation of less than 1 percent. Yet, at both ends of the axes, we see two peaks: one going down and one going up. These are the countries with significant over- and underrepresentation at both conferences.

Importantly, patterns of over- or underrepresentation do not seem to be neatly related to differences in countries' level of development. For instance, looking at Table A8, we see both developed and developing countries at the top (countries which are underrepresented the most) *and* at the bottom (countries which are overrepresented the most). In other words, several developing countries do better than we would expect based on their economic weight, while several developed countries do much worse. To give some notable examples, for the countries which are most overrepresented (see the final few rows of Table A8), we see Canada and Norway, both highly developed, but also India, the Philippines, and South Africa, which range from low to medium levels of development. The same goes for countries that score below their economic weight (see the first few rows in Table A8). Here we see China and Mexico, as developing countries, but also Japan, the United Kingdom, and the United States, which we would not expect to be underrepresented given their developed status. In short, the descriptive evidence indicates that there is much variation across the wealth of countries and how well they are represented at the conferences.

Finally, we explore the relationship between wealth and global advocacy by means of a *statistical* analysis. The dependent variable in the analysis is the level of over- or underrepresentation at the conferences (see Figure 4; Table A1). Key in the analysis is the relation between a country's level of development and patterns of over- or underrepresentation in global interest communities. The results (see Table 1) indicate a small and negative, but statistically significant, relationship between a country's level of development and the attendance of groups at the conferences. This confirms our descriptive analysis, showing that a country's level of development is not an important source of bias in global governance.

In Model II, we present the same analysis but now with the four income groups as the independent variable, rather than using countries' GNI per capita. The results are in line with the former analysis: High-income countries are somewhat less well represented at the two global conferences than low-income countries. To visualize these trends, we plotted the predicted probabilities (see Figure 5), which allow us to observe two things. First, there is a negative relation between GNI per capita and the proportion of non-state actors active at these conferences (figure on left). Second, the same applies to the four income groups (figure on right): the highest income groups are more often underrepresented, while the lowest income groups are more often overrepresented. Overall, these findings confirm that global governance is not biased toward more developed countries. If anything, the reverse is true. Countries such as India, Argentina, and Kenya, which all have a lower GNI per capita than for instance the U.S., the U.K., or Spain, are better represented than the latter countries if one considers their economic weight.

To make sure our results are robust, we performed several additional analyses. First, rather than using GDP as a benchmark, we used GDP as an *independent variable* to explain the number of groups active at the

Table 1 Predicting over-and underrepresentation in global governance (OLS regression, with robust standard errors)

	Model 1	Model 2
Constant	2.242*** (0.686)	0.521 (0.472)
Independent variables		
GNI_capita	−0.169** (0.067)	
Level of development		
Low income countries		Ref.
Middle-high income countries		0.094
		(0.199)
Middle-low income countries		0.513** (0.221)
Low income countries		0.574** (0.326)
Control variables		
Polity IV	0.024** (0.126)	0.020* (0.104)
Population	−0.125*** (0.028)	−0.120*** (0.027)
Government size	−0.007 (0.007)	−0.007 (0.007)
Gini index	−0.014* (0.007)	−0.011 (0.007)
Development aid	−0.024 (0.016)	−0.023 (0.019)
Diagnostics		
R^2	0.09	0.10
N	280	280

Significance levels: *$P < 0.1$; **$P < 0.05$; ***$P < 0.01$. OLS regression coefficients with standard errors in parentheses.

conferences. This allows us to see what the additional explanatory value of GDP is for variation in NSA representation compared to other variables (such as population size, GNI per capita, etc.). The results confirm our main assertion: GDP is by far the strongest predictor of representation in global governance. That is, once we add GDP to the statistical model, the explanatory value (r^2) increases from 0.23 to 0.84. Second, rather than an OLS regression, we carried out a negative binomial regression using density of participation of a country as the dependent variable. The results remain the same (see Table A2). Third, we checked whether the results are the same for both *venues* (see Tables). More specifically, Table A3 presents the outcomes for the WTO and the UN climate conferences separately, showing that the results hold across the two institutional venues. This suggests that the mechanisms underlying patterns of mobilization at the WTO and UN climate conferences are similar. We also added

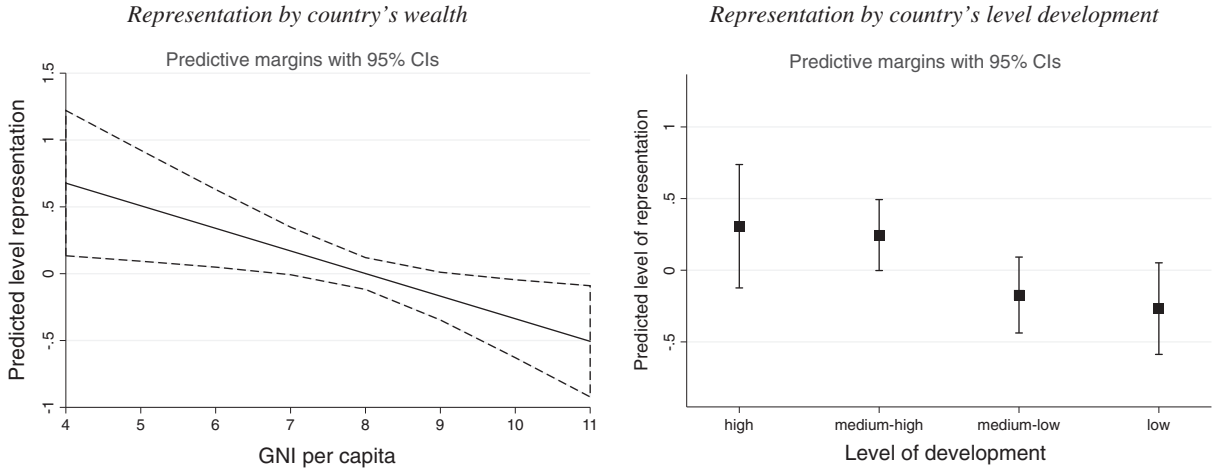

Figure 5 Predicted probabilities number of groups active by wealth of a country (IMF GNI/capita, left) and by four income groups (World Bank indicators, right).

specific control variables for both venues highlighting the *stake* a country has in the negotiations. For the WTO we rely on trade dependency, that is, the combination of exports and imports as a percentage of GDP. For the climate conferences, we added CO_2 emission per capita of a country. In both instances, the addition of these variables does not affect any of the other outcomes. Fourth, in line with robustness check 1, we assessed the added value of GDP by including it in the statistical model, but now considering the two venues separately. Again, GDP appears to be by far the strongest predictor of countries' representation in global governance. For the WTO, the r^2 increases from 0.24 to 0.78. For the climate conferences, the r^2 increases from 0.26 to 0.91. Finally, due to our coding strategy we needed to exclude some organizations, namely those indicating to representing regions (see research design). While this concerns only a small proportion of the organizations (less than 5 percent), to make sure this did not affect our results we ran an analysis at a higher level of abstraction: rather than focusing on representational bias per country, we looked at representational bias by *development regions* in the world (high-, middle-high-, middle-low-, and low-income countries). To do so, we plotted the average level of under- and overrepresentation by the four income groups. The results are highly similar to the ones obtained in the main analyses: the higher the level of development, the lower the level of representation in global governance considering the economic weight of these regions (see Table A6). Combined, these findings all confirm that economic size is a very good predictor of biases in global governance, while level of development is not. If anything, a country's level of development has a dampening effect on bias, namely that it *reduces* the gap between economically strong and weak countries.

5. Conclusion

In this research, note we identified two limitations of the existing empirical literature seeking to assess empirically whether global interest communities are biased in favor of wealthier countries, suggested a corrective to these problems, and offered some stylized facts showing the usefulness of our proposed empirical strategy. We noted that existing empirical studies cannot conclusively show whether global interest communities are biased in favor of wealthier countries because they lack a benchmark to define bias, and because they are not designed to disentangle the relative importance of *economic power* and *level of development* in shaping patterns of global interest representation. As a corrective to these two problems, we proposed to develop an empirical assessment by (i) constructing a measure of proportional representation that assumes a linear relationship between a country's economic size and its representation in global interest communities and (ii) by assessing to what extent a country's wealth affects pattern of over- or underrepresentation. This strategy simultaneously allowed us to create a benchmark to define bias, and to gauge to what extent patterns of global interest representation are driven by countries' economic power or wealth.

Our findings underscore two important contributions of our proposed empirical strategy. *First*, our results show that economic power is by far the most important predictor of cross-national differences in patterns of global interest representation. The overall explanatory power of GDP is so high ($r = 0.91$; $P = 0.000$) that there is hardly any variation left to explain in the number of attendees active in global governance. *Second*, and in contrast to what existing empirical studies suggest, we find that a country's level of development has a small and negative effect on participation in global governance. So, contrary to the conventional wisdom, more developed nations are, proportional to their economic size, not overrepresented in global interest communities. If anything, they are slightly underrepresented. While we are aware that these results cannot be generalized too far, the fact they are consistently robust across two global governance venues (see Tables) that display significant variation in a number of different dimensions (e.g. functional scope, constellations of actors' interests, decision-making procedures, and access opportunities) suggest that it is worth investing energy into assessing empirically how far our argument can travel across other international institutional venues.

It is important to keep in mind that these results do *not* suggest that there is no inequality in global governance. Actually, our results suggest that global interest communities are quite unequal. However, the sources of inequality do not seem to lie in countries' wealth, but rather in their economic size. Cross-national differences in patterns of representation in global interest communities quite closely resemble differences in relative economic power in global politics, a finding that is in line with population ecology studies of interest group communities (Gray & Lowery 2000b), traditional international relations approaches conceiving of countries' power in global

governance as a function of the size their domestic market (Drezner 2008), and other important studies investigating patterns of interest representation in the EU (Carroll & Rasmussen 2017). So, rather than being structurally biased toward Western, developed states, global interest communities seem to be dominated by economically powerful countries, such as the U.S., China, and India.

What are the broader implications of our findings? In our view, our analysis has important implications for both the trajectory of future research on the politics of global interest representation and the normative debate on how to make global governance more democratically legitimate. On the first issue, we see our findings speaking directly to, and having the most important implications for, the literature that investigates the representation-influence nexus in global governance.

In particular, our analysis begs the obvious question whether patterns of global interest representation structured along economic power lines that we document are having an impact on decision-making processes and outcomes too. On the one hand, the existing literature suggests that this is not the case, highlighting that access to key policymakers in global governance remains biased in favor of groups from wealthier countries (Schroeder *et al.* 2012), which makes it plausible that groups from developed, richer, nations have disproportionate influence on global negotiation outcomes despite the fact that they may not be overrepresented within global interest communities. On the other hand, our findings and qualitative evidence point in the opposite direction. For one, the capacity to provide inputs by poorer but economically powerful countries should represent a necessary, albeit not necessarily sufficient, first step to make global governance more responsive to their needs (Hanegraaff & Poletti 2018). Consistently with this line of reasoning, qualitative interviews conducted with negotiators of UN climate conferences show that developed countries were critical about the involvement of civil society at these conferences, while negotiators from developing countries, particularly emerging economies such as India, South Africa, and Argentina, supported it and saw it as an opportunity to increase their influence (Hanegraaff 2015).

In order to assess empirically in a more reliable way which of these contending views hold, future studies on cross-national differences in NSAs' influence within global governance could borrow from our proposed research strategy by (i) defining notions of proportional influence that incorporate countries' relative economic power as a benchmark and then (ii) assessing to what extent patterns of influence below of above the expected levels are affected by countries' wealth. Would results showing that NSAs' from wealthier countries enjoy disproportionate influence in global governance hold when relative economic power is explicitly taking into account as a benchmark? This may well be the case, but our analysis sheds light on the importance of developing clear *ex ante* expectations about how an unbiased pattern of relative influence of NSAs from different countries would look before engaging in this type of empirical assessment.

But our findings have also direct implications for the debate on how to make global governance more democratically legitimate, as they potentially cast a shadow on the desirability of strategies of democratization of global governance aimed at increasing input legitimacy via greater stakeholder involvement from "Southern," poorer countries. By showing that global interest representation largely reflects differences in countries' relative economic power, rather than displaying systematic biases favoring wealthier countries, our findings underscore the need to reorient these debates by acknowledging that the so-called North–South divide no longer represents the only the critical dimension of conflict that needs to be addressed in order to increase democratic legitimacy within global governance. Our analysis suggests that future efforts to make global governance more democratically legitimate will require accommodating not only the interests of the poorest, but also those of the economically most economically powerful. For instance, if the problem of democratic legitimacy is not the inability of organizations from particular sets of countries to attend international conferences, but rather the inability to gain access to key policymakers, reforms should concentrate on increasing access opportunities for the stakeholders that are currently lacking such opportunities, rather than on further increasing chances of participation. This is particularly important in light of the observation that there may be a trade-off between expanding stakeholder chances to attend the conferences and ensuring that stakeholders can effectively make their voice heard in these contexts. As Hanegraaff *et al.* (2019) highlight, the abundance of non-state actor attendees active at global negotiation conferences makes it problematic for novices to find their way to negotiators or other key stakeholders, increasing the probability for newcomers to refrain from attending subsequent conference. Over time, this has led to a very small set of insider organizations, which have access to decision-making procedures, and a far larger group of outsiders, which lack the opportunity to meaningfully channel their demands at these conferences.

A final note on our choice of *benchmark* to assess biases in global governance is given as follows. As argued above, this choice allowed us both to connect to established approaches in different subfields of political science research and, more substantively, to address our normative-oriented interest in contrasting claims about the existence of a North–South divide in global interest communities with arguments that point toward the potential importance of cleavages structured along economic power lines. Such a substantive interest stems from the consideration that the rise of large emerging economies that still lag behind Northern countries in terms of domestic levels of socioeconomic development makes it all the more important to try and gauge the relative importance of "wealth" and "economic power" in shaping political processes at the global level.

However, we do not wish to claim that the benchmark we proposed the one and only valid benchmark for the analysis of bias in global interest communities. For instance, one could adopt the "one voice, one vote" principle and look at the number of citizens in a country. To illustrate this point we provide an example of over- and underrepresentation with population size as a benchmark. The results indicate, first, that population size is not a very strong predictor of representation ($r = 0.27$; $P = 0.00$). Moreover, it drastically changes the picture with regard to which countries are overrepresented at the conferences. In this case, a country's level of development does matter a lot (see Table A7). This further validates our argument that, depending on one's definition of bias, the interpretation of whether global governance is "fair" or "skewed" toward certain countries will differ, sometimes drastically. Or, one could take a more normative stance and develop benchmarks that compare initial ideas (or ideals) of what a "fair distribution" of interest groups would look like with actual distributions. Irrespective of the choice one makes, with this research note we wanted to stress our conviction that progressive research on biases in interest representation can only be developed when scholars have "in their minds at least implicit images of the unknown state of an unbiased interest system" (Lowery *et al.* 2015, p. 1213).

Endnotes

1 To illustrate this point, in Table A7 we offer an example of what a pattern of over- and underrepresentation would look like using population size as benchmark for countries' representation in global governance.

2 It is important to note that including these organizations does not change the results of the analysis.

3 We provide a robustness check in which we aggregated interests to the level of development categories a country belongs to (e.g. if an NSA represents the U.S., it also represents the developed world; if an NSA represents Kenya, it is also defending the interests of the developing world, etc.). This procedure allowed us to include organizations, which indicate to represent regions (such as developing or LDCs) or multiple countries (such as Kenya and Tanzania). The results confirm the main analysis (see Table A6).

4 While not directly related to the main message of the paper, the trend lines are in line with predictions of the population ecology literature on which the paper strongly builds (Gray & Lowery 2000a). That is, we see that there is a curvilinear relation between economic size and the number of organizations active at the conferences. In other words, the larger a country becomes, the less steep the growth rate of organizations. This suggests the existence of some sort of a saturation point, where the growth in GDP of a country is not matched with an equal growth of the interest community (see Hanegraaff 2015 for a similar argument).

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Table A1 Predicting NSA density by country – *GDP* as independent variable (OLS regression, with robust standard errors)

	Model 1	Model 2
Constant	−1.131** (2.139)	0.694 (0.624)
Independent variables		
GNI_capita	0.644*** (0.132)	0.001 (0.062)
GDP		0.790*** (0.024)
Control variables		
Polity IV	0.049** (0.021)	0.029*** (0.007)
Population	0.337*** (0.055)	−0.028 (0.027)
Government size	−0.004 (0.014)	−0.006* (0.006)
Gini index	0.002 (0.014)	−0.010 (0.006)
Development aid	0.082** (0.032)	0.002 (0.015)
Diagnostics		
R^2	0.23	0.84
N	280	280

Significance levels: *$P < 0.1$; **$P < 0.05$; ***$P < 0.01$.
OLS regression coefficients with standard errors in parentheses.

Table A2 Predicting NSA density by country – GDP as independent variable (*negative binomial regression* analysis)

	Model 1	Model 2
Constant	−0.439 (0.968)	1.749* (0.975)
Independent variables		
GNI_capita	0.373*** (0.099)	0.121 (0.099)
GDP		0.289*** (0.077)
Control variables		
Polity IV	0.122*** (0.018)	0.115*** (0.016)
Population	0.379*** (0.086)	0.124** (0.018)
Government size	−0.020* (0.009)	−0.020* (0.010)
Gini index	−0.018* (0.010)	−0.020* (0.009)
Development aid	0.018 (0.025)	−0.021 (0.024)
Diagnostics		
Wald chi^2	182.34	212.66
Prob. > chi^2	0.00	0.00
N	280	280

Significance levels: *$P < 0.1$; **$P < 0.05$; ***$P < 0.01$. OLS regression coefficients with standard errors in parentheses.

Table A3 Predicting over-and underrepresentation with *STAKE* in negotiations as independent variable (OLS regression, with robust standard errors)

	WTO	UNFCCC
Constant	2.355 (1.156)	2.495*** (0.869)
Independent variables		
GNI_capita	−0.205* (0.115)	−0.212** (0.101)
Control variables		
Polity IV	0.030* (0.018)	0.026* (0.013)
Population	−0.133*** (0.048)	−0.109*** (0.031)
Government size	−0.006 (0.012)	−0.007 (0.009)
Gini index	−0.014 (0.012)	−0.013 (0.008)
Development aid	−0.027 (0.028)	−0.024 (0.019)
Trade dependency	0.217 (0.255)	
CO_2 Emission per capita		0.015 (0.015)
Diagnostics		
R^2	0.09	0.12
N	140	140

Significance levels: *$P < 0.1$; **$P < 0.05$; ***$P < 0.01$. OLS regression coefficients with standard errors in parentheses.

Table A4 Predicting NSA density by country at *WTO* – GDP as independent variable (OLS regression, with robust standard errors)

	Model 1	Model 2
Constant	4.901** (1.954)	0.703 (1.099)
Independent variables		
GNI_capita	0.703*** (0.194)	0.001 (0.111)
GDP		0.772*** (0.042)
Control variables		
Polity IV	0.041 (0.030)	0.033** (0.016)
Population	0.278*** (0.818)	−0.040 (0.047)
Government size	−0.004 (0.013)	−0.006 (0.011)
Gini index	0.008 (0.027)	−0.009 (0.011)
Development aid	−0.075 (0.047)	−0.004 (0.026)
Trade dependency	−1.035** (0.431)	0.067 (0.238)
Diagnostics		
R^2	0.24	0.78
N	140	140

Significance levels: *$P < 0.1$; **$P < 0.05$; ***$P < 0.01$. OLS regression coefficients with standard errors in parentheses.

Table A5 Predicting NSA density by country at *UNFCCC* – GDP as independent variable (OLS regression, with robust standard errors)

	Model 1	Model 2
Constant	−3.880*	1.229
	(2.097)	(0.740)
Independent variables		
GNI_capita	0.440* (0.245)	−0.082 (0.086)
GDP		0.901*** (0.025)
Control variables		
Polity IV	0.069** (0.033)	0.035*** (0.011)
Population	0.351*** (0.076)	−0.018 (0.028)
Government size	−0.005 (0.022)	−0.007 (0.007)
Gini index	0.005 (0.020)	−0.010 (0.007)
Development aid	0.071 (0.046)	−0.005 (0.016)
CO_2 Emission per capita	0.053 (0.037)	0.022* (0.012)
Diagnostics		
R^2	0.26	0.91
N	140	140

Significance levels: *$P < 0.1$; **$P < 0.05$; ***$P < 0.01$. OLS regression coefficients with standard errors in parentheses.

Table A6 Under- and overrepresentation by four income groups

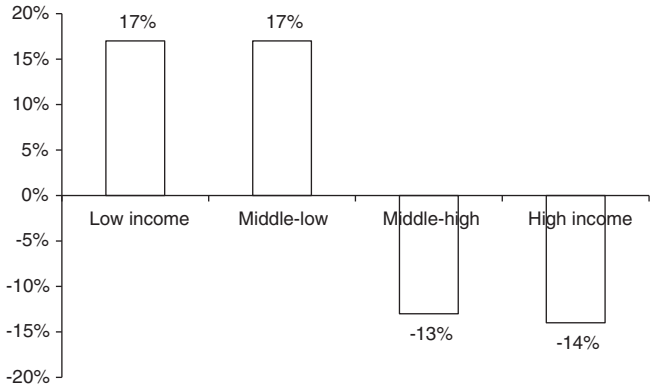
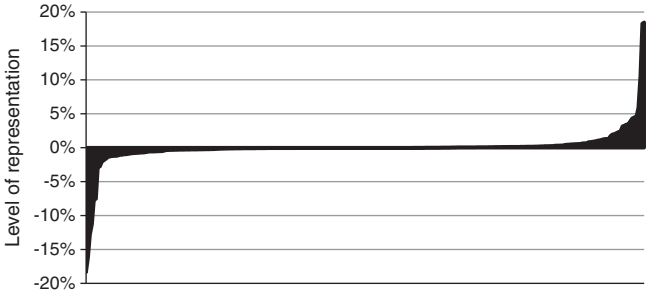


Table A7 Representation with population as yardstick ($r = 0.27$; $P = 0.00$)



Rank	Conference	Conference	Representational bias
1	United States	COP	18.48%
2	United States	MC	18.30%
3	Canada	MC	10.58%
4	United Kingdom	COP	5.87%
5	Canada	COP	4.51%
6	Germany	COP	4.48%
7	France	MC	4.33%
8	Australia	COP	3.95%
9	Norway	MC	3.45%
10	Japan	COP	3.42%
11	Germany	MC	3.27%
12	Japan	MC	3.16%
-			
271	Bangladesh	COP	−1.26%
272	Mexico	COP	−1.30%
271	Pakistan	MC	−1.41%
272	Nigeria	MC	−1.64%
273	Russia	MC	−1.85%
274	Pakistan	COP	−2.05%
275	Indonesia	MC	−2.77%
276	Indonesia	COP	−2.80%
279	India	MC	−11.26%
280	India	COP	−12.82%
281	China	COP	−16.21%
282	China	MC	−18.36%

Table A8 Summary statistics over- and underrepresentation at COP (Last column = dependent variable)

Country	Conference	Density	Representational bias
Japan	MC	62	−5.32%
China	MC	14	−5.10%
Japan	COP	183	−5.06%
United Kingdom	MC	2	−4.33%
United States	MC	277	−4.09%
United States	COP	784	−3.91%
China	COP	113	−2.95%
Mexico	COP	14	−2.27%
Italy	COP	49	−2.24%
France	COP	76	−2.21%
Italy	MC	19	−2.11%
Mexico	MC	11	−1.78%
Germany	MC	55	−1.45%
Russia	MC	4	−1.31%
Sudan	MC	0	−0.95%
Sudan	COP	5	−0.80%
Spain	COP	51	−0.75%
Saudi Arabia	MC	0	−0.67%
Brazil	MC	22	−0.66%
Poland	MC	0	−0.65%
Saudi Arabia	COP	1	−0.64%
Turkey	MC	4	−0.61%
Greece	MC	0	−0.49%
Turkey	COP	16	−0.47%
Republic of Korea	MC	14	−0.47%
Hong Kong	MC	0	−0.43%
Iran	COP	1	−0.42%
United Arab Emirates	MC	0	−0.38%
Greece	COP	6	−0.31%
Venezuela	MC	1	−0.31%
Iran	MC	2	−0.29%
Brazil	COP	75	−0.28%
Venezuela	COP	4	−0.27%
Russia	COP	47	−0.26%
Israel	MC	1	−0.25%
Poland	COP	14	−0.24%
Germany	COP	196	−0.24%
Egypt	COP	1	−0.23%
Algeria	MC	0	−0.22%
Indonesia	COP	16	−0.22%
Singapore	MC	1	−0.21%
Romania	MC	0	−0.21%
Hungary	MC	0	−0.20%
United Arab Emirates	COP	6	−0.20%
Czech Republic	MC	1	−0.20%
Indonesia	MC	6	−0.20%
Portugal	MC	1	−0.20%
Kuwait	MC	0	−0.16%
Kuwait	COP	0	−0.16%
Romania	COP	2	−0.15%

(*Continues*)

Table A8 Continued

Country	Conference	Density	Representational bias
Portugal	COP	5	−0.13%
Israel	COP	7	−0.12%
Viet Nam	MC	0	−0.12%
Sweden	MC	8	−0.12%
Slovenia	COP	0	−0.11%
Slovenia	MC	0	−0.11%
Hong Kong	COP	11	−0.11%
Qatar	COP	0	−0.11%
Libya	COP	0	−0.11%
Libya	MC	0	−0.11%
Angola	MC	0	−0.08%
Slovak	MC	0	−0.08%
Pakistan	COP	6	−0.07%
Syria	COP	0	−0.07%
Syria	MC	0	−0.07%
Oman	MC	0	−0.07%
Oman	COP	0	−0.07%
Bulgaria	MC	0	−0.06%
Ireland	COP	11	−0.05%
Lithuania	MC	0	−0.05%
Lebanon	MC	0	−0.05%
Czech Republic	COP	8	−0.05%
Algeria	COP	6	−0.05%
Morocco	MC	1	−0.05%
Colombia	COP	11	−0.04%
Uzbekistan	MC	0	−0.04%
Belarus	COP	1	−0.04%
Panama	MC	0	−0.04%
Myanmar	MC	0	−0.04%
Yemen	COP	0	−0.04%
Yemen	MC	0	−0.04%
Latvia	MC	0	−0.04%
Croatia	COP	2	−0.03%
Ukraine	COP	5	−0.03%
Ethiopia	MC	0	−0.03%
Bahrain	COP	0	−0.03%
Turkmenistan	MC	0	−0.03%
Turkmenistan	COP	0	−0.03%
Estonia	MC	0	−0.03%
Jamaica	COP	0	−0.02%
Jamaica	MC	0	−0.02%
Angola	COP	2	−0.02%
Lebanon	COP	1	−0.02%
Botswana	MC	0	−0.02%
Benin	COP	2	−0.02%
Gabon	MC	0	−0.02%
Gabon	COP	0	−0.02%
Azerbaijan	COP	1	−0.02%
Republic of the Congo	MC	0	−0.02%
Albania	MC	0	−0.02%

(*Continues*)

Table A8 Continued

Country	Conference	Density	Representational bias
Ukraine	MC	2	−0.02%
Egypt	MC	3	−0.01%
Equatorial Guinea	COP	0	−0.01%
Equatorial Guinea	MC	0	−0.01%
Mozambique	MC	0	−0.01%
Macedonia	COP	0	−0.01%
Macedonia	MC	0	−0.01%
Madagascar	COP	0	−0.01%
Dominican Republic	COP	2	−0.01%
Armenia	MC	0	−0.01%
Papua New Guinea	MC	0	−0.01%
Tunisia	COP	2	−0.01%
Croatia	MC	1	−0.01%
Haiti	COP	0	−0.01%
Cote D'ivoire	COP	1	−0.01%
Laos	MC	0	−0.01%
Moldova	MC	0	−0.01%
Austria	MC	8	−0.01%
Rwanda	MC	0	−0.01%
Bulgaria	COP	2	−0.01%
Myanmar	COP	1	−0.01%
Mongolia	COP	0	−0.01%
Mongolia	MC	0	−0.01%
Swaziland	MC	0	0.00%
Mauritania	MC	0	0.00%
Sierra Leone	MC	0	0.00%
Central Africa Republic	COP	0	0.00%
Lesotho	MC	0	0.00%
Guinea-Bissau	COP	0	0.00%
Gambia	COP	0	0.00%
Thailand	COP	14	0.00%
Jordan	COP	1	0.00%
Finland	MC	5	0.00%
Lithuania	COP	2	0.01%
Malaysia	MC	4	0.01%
Albania	COP	1	0.01%
Kazakhstan	COP	5	0.01%
Mali	COP	1	0.02%
Burkina Faso	COP	2	0.02%
Ghana	COP	2	0.02%
Laos	COP	1	0.02%
Moldova	COP	1	0.02%
Latvia	COP	2	0.02%
Togo	COP	1	0.02%
Sri Lanka	MC	1	0.02%
Sierra Leone	COP	1	0.03%
Lesotho	COP	1	0.03%
Viet Nam	COP	5	0.03%
Singapore	COP	11	0.03%
Kazakhstan	MC	2	0.03%

(*Continues*)

Table A8 Continued

Country	Conference	Density	Representational bias
Estonia	COP	2	0.03%
Ireland	MC	5	0.04%
Chile	MC	4	0.04%
Cambodia	COP	2	0.04%
Mauritius	COP	2	0.04%
Mozambique	COP	2	0.04%
Ghana	MC	1	0.04%
Namibia	COP	2	0.04%
Chad	COP	2	0.05%
Bahrain	MC	1	0.05%
Kyrgyz Republic	COP	2	0.05%
Mauritania	COP	2	0.05%
Qatar	MC	2	0.06%
Hungary	COP	9	0.06%
Honduras	MC	1	0.06%
Botswana	COP	3	0.07%
Cambodia	MC	1	0.07%
Zimbabwe	MC	1	0.07%
Namibia	MC	1	0.07%
Mali	MC	1	0.07%
Chad	MC	1	0.07%
Haiti	MC	1	0.07%
Zimbabwe	COP	3	0.07%
Georgia	COP	3	0.07%
Guinea	MC	1	0.07%
Morocco	COP	7	0.07%
Niger	MC	1	0.07%
Uzbekistan	COP	4	0.07%
Kyrgyz Republic	MC	1	0.08%
Guinea	COP	3	0.08%
Guinea-Bissau	MC	1	0.08%
Niger	COP	3	0.08%
Panama	COP	4	0.08%
Swaziland	COP	3	0.08%
Sri Lanka	COP	5	0.09%
Chile	COP	13	0.09%
Dominican Republic	MC	2	0.09%
Belarus	MC	2	0.10%
Nigeria	MC	4	0.10%
Congo	COP	4	0.10%
Armenia	COP	4	0.11%
Rwanda	COP	4	0.11%
Senegal	COP	5	0.11%
Paraguay	COP	5	0.12%
Honduras	COP	5	0.12%
Burkina Faso	MC	2	0.12%
Slovak	COP	7	0.13%
Austria	COP	27	0.13%
Cameroon	MC	2	0.13%
Jordan	MC	2	0.13%

(*Continues*)

Table A8 Continued

Country	Conference	Density	Representational bias
Paraguay	MC	2	0.14%
Peru	MC	4	0.14%
Guatemala	COP	7	0.15%
Mauritius	MC	2	0.15%
Nicaragua	MC	2	0.15%
Madagascar	MC	2	0.15%
Uruguay	COP	7	0.15%
Costa Rica	COP	7	0.15%
Argentina	COP	26	0.15%
Malawi	MC	2	0.16%
Togo	MC	2	0.16%
Central Africa Republic	MC	2	0.16%
Gambia	MC	2	0.16%
Thailand	MC	7	0.16%
Benin	MC	3	0.17%
Tunisia	MC	3	0.18%
Guatemala	MC	3	0.19%
Papua New Guinea	COP	7	0.19%
Uruguay	MC	3	0.19%
El Salvador	COP	8	0.20%
Azerbaijan	MC	3	0.20%
Ecuador	COP	10	0.20%
Belgium	COP	34	0.21%
El Salvador	MC	3	0.21%
Cote D'ivoire	MC	3	0.21%
Senegal	MC	3	0.21%
Tanzania	MC	3	0.21%
Zambia	COP	8	0.22%
Peru	COP	14	0.22%
Malawi	COP	8	0.23%
Georgia	MC	3	0.23%
Finland	COP	22	0.23%
South Africa	COP	24	0.24%
Netherlands	MC	19	0.24%
Malaysia	COP	19	0.24%
Ecuador	MC	4	0.24%
Republic of the Congo	COP	9	0.24%
Costa Rica	MC	4	0.28%
Nicaragua	COP	10	0.28%
Argentina	MC	11	0.30%
Uganda	MC	4	0.31%
New Zealand	COP	18	0.32%
Cameroon	COP	14	0.37%
Bolivia	COP	14	0.38%
Spain	MC	32	0.38%
Switzerland	COP	42	0.39%
Tanzania	COP	16	0.44%
Kenya	MC	6	0.45%
Denmark	MC	12	0.45%
Ethiopia	COP	17	0.46%

(*Continues*)

Table A8 Continued

Country	Conference	Density	Representational bias
Bolivia	MC	6	0.46%
Zambia	MC	6	0.47%
New Zealand	MC	9	0.53%
Nigeria	COP	27	0.56%
Uganda	COP	20	0.56%
Pakistan	MC	10	0.57%
Belgium	MC	17	0.61%
Nepal	COP	22	0.62%
Denmark	COP	40	0.64%
Bangladesh	COP	27	0.64%
Philippines	COP	31	0.65%
Bangladesh	MC	10	0.67%
Kenya	COP	25	0.69%
Norway	COP	47	0.76%
Colombia	MC	14	0.78%
France	MC	64	0.81%
Nepal	MC	12	0.96%
Congo	MC	13	1.05%
Australia	MC	33	1.08%
Sweden	COP	64	1.10%
Republic of Korea	COP	94	1.13%
South Africa	MC	20	1.17%
Netherlands	COP	88	1.25%
Switzerland	MC	28	1.46%
Philippines	MC	21	1.46%
India	COP	118	1.66%
United Kingdom	COP	232	2.27%
Canada	COP	171	2.52%
Australia	COP	146	2.63%
Norway	MC	43	2.91%
India	MC	61	3.21%
Canada	MC	135	8.59%

Table A9 Summary table variables used in paper

Variable	Operationalization	Mean	Min	Max
Dependent variable				
Participation bias	Proportion of a country active at conference – stake in world economy (see Table A8)	0	−0.053	0.085
Independent variable				
Level of development	GNI_capita (logged) (World Bank) World Bank development indicators (high-, middle-high-, middle-low-, low-income countries;	8.01N. A.	4.841	10.944
Control variables				
Democracy	Polity index (−10 to 10)	6.27	−10	10
Size of government	Proportion government expenditure of total GDP of a country (World Bank)	30.49	12.48	56.44
Population	Number of citizens in country/percentage of world population (World Bank)	0.71	0.008	19.50
Gini index	Distribution of wealth of a country (0–100) (World Bank)	40.34	12.48	56.44
Foreign aid	Recipient of foreign aid (in percentages of total GNI per year) (World Bank)	3.63	0	22.91