Buying support at the UNFCCC:
The strategic use of climate aid

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Abstract

The relationship between aid and voting in the UN agencies has been well documented in the aid literature. However, we are not aware of any study that extends the analysis to the wider field of international negotiations, outside the sphere of formal voting. This article thus studies the strategic use of aid in the context of global environmental politics, a field in which decisions are mostly taken by consensus. A novel dataset on negotiation behavior under the UN Framework Convention on Climate Change allows us to assess statements of support and opposition towards other parties' positions, rather than voting. On this basis, we identify the role of aid as a strategic tool in a country's negotiation strategy. Is increased aid related to greater support and less opposition? If so, is this any aid, or only such funding that is directly related to the area under negotiation? We apply linear and instrumental variable regressions on a three-dimensional panel dataset with donor-recipient dyads for the period 2002-2013, using a measure of negotiation support as our dependent variable and total, mitigation or adaptation aid as alternative explanatory variables. We find that aid can indeed buy support in the climate negotiations, but that this opportunity is limited to mitigation and adaptation aid, rather than general ODA. We argue that this is due to both greater demand for and greater supply of these specific types of aid, whose allocation is under the direct responsibility of the specialized delegates participating in the negotiations. However, we find that this negotiation strategy is rather expensive as aid flows have to be substantial to trigger any sizeable effect on negotiation support.

Acknowledgements

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"Mr President, I deeply regret that European delegation offered money here
for adoption of this document."
Statement of a Cuban delegate at the
UNFCCC meeting in Copenhagen (Dimitrov 2010: 813)

1. Introduction

The strategic allocation of development aid is well documented in the existing literature on UN voting. Through the strategic use of aid, donor countries induce aid recipient countries to vote in line with their positions on important issues discussed at the United Nations General Assembly (UNGA) (Dreher et al., 2008) or the United Nations Security Council (UNSC) (Kuziemko and Werker, 2006). Anecdotal evidence suggests that the strategic use of aid may go beyond this and also be relevant in the broader context of international negotiations, to ensure support or avoid opposition even when there are no formal votes. Consensus decisions rather than majority voting are a wide-spread phenomenon, and even in organizations like UNGA that also use majority voting, most decisions are taken by consensus (Häge and Hug 2016). We suggest that buying support should be relevant in these contexts, too. Motives can range from pushing forward a certain agenda, to avoiding public criticism that may put the government in a negative light in the international media and influence national constituents.

We study this phenomenon in the field of global environmental politics. As in many other fields, decisions are taken by consensus, and therefore formal votes play a much lesser role than positional statements within the negotiations. Our new dataset describing negotiation behavior under the United Nations Framework Convention on Climate Change (UNFCCC) allows us to assess statements of support and opposition towards other parties' positions, rather than voting. At regular meetings of the UNFCCC bodies, country delegates negotiate a wide variety of climate-related issues ranging from implementation and monitoring of the performance of existing measures and agreements, to the preparation of new agreements relating to mitigation, adaptation, the provision of financial and technical support, among others. Using the summaries of these negotiation meetings published in the Earth Negotiations Bulletins (ENBs), we code the instances in which one country agrees with or opposes the positions expressed by its peers, as well as the negotiation issue to which this support or opposition relates.

On this basis, we identify the role of aid as a strategic tool in a country's negotiation strategy. Is increased aid related to greater support and less opposition? If so, is this any aid, or only such funding that is directly related to the area under negotiation, i.e., in our context, aid for the adaptation to or the mitigation of global climate change? Different causal pathways are consistent with such a correlation: Does aid lead to a better understanding and hence greater alignment between the donor and the recipient, is it directly used to obtain a more favorable position by the recipient country in the context of specific negotiation objectives, or is it used ex post to reward or punish potential recipients depending on their negotiation behavior?

Section 2 reviews what we know from the extant literature on aid and voting as well as the relevant literature on negotiation behavior. Section 3 provides the conceptual framework for our analysis and derives the hypotheses that will then be tested based on data and methods described in Section 4. Section 5 presents the results of a three-dimensional panel analysis, and uses a variety of fixed effects approaches and a novel

interpretation of 2SLS to improve our understanding of the causal relationship between aid and negotiation support. Section 6 concludes.

2. Insights from existing literature

This article brings together scholarship on international negotiations with the literature on UN voting. Within the negotiations literature, several concepts can help us understand how or why aid could be used strategically to encourage specific negotiation behavior. Threats and promises are well-known negotiation strategies (Walton and McKersie 1965; Lax and Sebenius 1986; for work focusing on multilateral intergovernmental negotiations see, e.g. Dür and Mateo 2009, Bailer 2012, Weiler 2012). Clearly the commitment to provide aid is part of these promises, and the premonition to withdraw aid is part of the threats. However, this part of the literature does not focus specifically on the role of aid, and discussions generally remain at the level of a comparison of different types of negotiation strategies (e.g., hard versus soft strategies, see e.g. Wagner 1999, Elms 2006, Dür and Mateo 2009, Weiler 2012).

The promise to provide aid in exchange to support in a multilateral negotiation can also be considered as an example of issue-linkage. Issue-linkage is usually characterized as a way to enhance the chances of cooperation by allowing parties to change the structure of payoffs in the negotiation game e.g. by expanding the opportunities to punish non-cooperation (see e.g. Oye 1985, Barrett 1997).[1] Alternatively, aid provision – particularly aid for purposes that are specific to the issues under negotiation – can be regarded as a side-payment or transfer that is also usually introduced in multilateral agreements as a way to reduce heterogeneity across parties and thus encourage broader participation (Carraro and Siniscalco 1993; Chen 1997). Issue-linkage and side payments are useful strategies in long-term negotiation processes that are best characterized as repeated games (Axelrod 1984, Oye 1985, Wagner 2001).

The relevant negotiations and game-theoretic literature tends to examine the contribution of these strategies to the overall result of the negotiations – the likelihood to achieve full cooperation – and to compliance and enforcement problems (see, in addition to the above, also Hopmann 1995, Wagner 1999, Underdal 2011). Some scholars analyze the role of these bargaining strategies in more simple bilateral negotiations (Elms 2006). But the literature has so far not addressed the question of how effective they are in influencing individual partner countries' negotiation behavior towards preference alignment with a donor within a multilateral setting. For this broader case of multilateral negotiations, some other studies focus on the role and formation of coalitions, including loose groups of countries that join positions on a specific issue, and some of these also discuss which forms of bargaining may be conducive to drawing other negotiators on one's side (Drahos 2003 for the World Trade Organization (WTO), Sebenius 1992, Money 1998, Wagner 1999).

In contrast, the literature on UN voting explicitly focuses on the role of development aid. This literature is vast, with first publications already in the 1960s (see, e.g., Keohane 1966). Rai (1980) summarizes and updates this early literature. He clearly delineates the possible causal channels, namely the use of aid as a means to either incentivize (ex ante), or to reward or punish (ex post) voting alignment (or the lack thereof) with the donor at the General Assembly. In the 1990s, the general effect of aid on UNGA voting is rejected based on econometric analysis (Sexton and Decker 1992), but reconfirmed for "important votes", i.e. votes on topics of actual relevance to the donor (Wang 1999). Simultaneously, several authors explore the

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[1] A common example of issue linkage cited in the literature is the introduction of trade sanctions as a way to encourage compliance with multilateral environmental agreements.

reversely causal channel of voting alignment leading to more aid. Thacker (1999), for instance, finds that UN voting alignment with the United States, the most powerful member of the IMF, increases a country's probability of receiving an IMF loan. Towards the end of the 1990s the strategic use of aid in the context of UN voting was already a well-established result.

Nevertheless the field has grown ever more quickly in the 2000s, with authors further trying to disentangle reward and punishment from inducement (Derouen and Heo 2004) and examining the UNSC and the United Nations Commission on Human Rights (UNCHR) rather than just UNGA voting (Kuziemko and Werker 2006; Dreher and Vreeland 2009; Lebovic and Voeten 2009; Bueno de Mesquita and Smith 2012; Hwang, Sanford and Lee 2015). Recent studies are also increasingly looking beyond the US at a broader set of donor countries (Pincin 2012; Lim and Vreeland 2013; Bueno de Mesquita and Smith 2016), and at the influence that such donors may exert on multilateral agencies (like the IMF, the World Bank and regional development banks) to mobilize their funding for vote buying purposes (Barro and Lee 2005; Kilby 2006; Reynaud and Vauday 2009; Dreher, Vreeland and Sturm 2012). In addition, Dreher, Nunnenkamp and Thiele (2008), Kilby (2013a, 2013b), and Kersting and Kilby (2016) differentiate between different types of aid that are more or less conducive to strategic use in the context of UN vote buying. Conceptually, there has also been a discussion on how to disentangle the effect of vote alignment when preferences are aligned anyway, from the effect of alignment when initial preferences are truly opposing (Andersen, Harr and Tarp 2006; Kilby 2011; Carter and Stone 2015). Finally, some studies consider the effect of this type of strategic aid on development outcomes (Stone 2004; Dreher, Eichenauer and Gehring 2015, Dreher and Kilby 2010).

In a few cases authors also look at voting outside the UN, namely at the International Whaling Commission (Miller and Dolšak 2008; Strand and Tuman 2012). However, we are not aware of any study that extends the analysis to the wider field of international negotiations, outside the sphere of formal voting. It appears highly plausible that aid is used strategically there as well. However, there are several caveats to consider:

First, making statements within an international negotiation process is conceptually different from voting. It allows for a more nuanced expression of preferences than just a yes- or a no-vote. Moreover, even if a country is in clear agreement or disagreement with another party's statement, it will not necessarily see any need to express this within the plenary. Such a lack of expression is different from an abstention in a vote (Ehlermann and Ehring 2005: 67): The country in question may simply rely on others to make the relevant point or feel that it has not (yet) sufficiently familiarized itself with the specific topic under discussion to form a clear opinion. It may also use diplomatic language in a way that is identifiable as disagreement only by those directly involved.

Second, statements within international negotiation processes usually have no immediate effect on the overall outcome of the negotiation process. Statements can be used strategically to obtain a better starting position in the following round of negotiations, and they can be revised at any time (Yamin and Depledge 2004: 440). For this reason, influencing such statements within international negotiations may not appear important enough to donors to attempt any influence through aid. From this perspective, statements in negotiation processes could resemble the votes qualified as "unimportant" in the UN voting literature and, just as the latter, not show any significant relationship to development aid.

Third, other than at the UN, negotiators from industrialized countries typically represent their country only in a very specific thematic area and within an ex-ante defined mandate (Skovgaard and Gallant 2015; see also Groen and Niemann 2010 for the specific case of the EU delegation to the UNFCCC), and their authority may not go beyond that. For industrialized country negotiators this implies that they may not have a handle on overall aid and can commit funding only in their specific field. Similarly, negotiators from

developing countries may not be overly interested in general development aid, but prefer funding over which they will have more direct authority. The discussion about the specific type of aid that could be relevant as a strategic tool hence appears even more important in the context of international negotiations than in the context of UN voting, and will also require the consideration of different categories.

In sum, the expected mechanisms relating aid and negotiation support may not be fully identical to those discussed in the above cited literature, and it is not a priori clear, to what extent we will find a relationship between aid and negotiation support at all. In the following section, we will clarify the possible mechanisms and illustrate them with some of the ample anecdotal evidence and suggestive statements by negotiators at the UNFCCC.

3. Conceptual framework

If statements in the framework of international negotiations are generally not binding, and usually do not directly lead to any outcome, why would anyone care about support or criticism in this context at all? The following arguments may be relevant in this context:

First, international negotiations are often intensively reported about in the media. In addition, they are closely observed by diverse Non-Governmental Organizations (NGOs), business lobbies and other interest groups (Betzold 2013; Böhmelt et al. 2014). At the UNFCCC, these groups directly attend most of the meetings. Under such conditions, whatever is said does not remain behind closed doors. We thus expect effects of support or opposition by other parties on the reputation of the national delegation or even of the government as a whole through information that spreads to peers outside the negotiation process and to the domestic public. Most countries prefer to be seen as 'deal makers' rather than as obstructive laggards or 'deal breakers'. Criticism is hence perceived as 'shaming and blaming' while praise is perceived as a sign of successful international diplomacy.

Conrad's (2012) discussion of the Chinese problem with the international media blaming the country for the failure of the UNFCCC's summit in Copenhagen presents an illustrative example:

"*China's negotiating style during the final hours of Copenhagen has captivated media observers around the world [...].The state of negotiations posed an imminent risk of Premier Wen Jiabao being associated with a political failure. [... Eventually] the team around Wen Jiabao was primarily concerned with limiting the damage and insulating the Prime Minister from the foreseeable failure of the summit.*" (Conrad 2012: 444)

Second, while they are non-binding, statements given at any time of the negotiations pave the way for the (dis)agreement on which the negotiations will end. Changing positions, unless well-explained, can appear inconsistent and be considered as a sign for incompetence, weakness or opportunism. A frequent and/or drastic change will be caught by the media, implying reputational cost for the delegation. Achieving support at any point within the negotiations hence leads to path dependencies that increase the chance of an agreement on this point in the future.

Third, and again related to the fear of any party to be singled out as a deal breaker, substantive support for any proposition in the negotiations can lead to social pressure on other parties to follow suit. Similar dynamics can occur in the context of initial criticism: Criticism by one country may trigger criticism by others. These dynamics make each individual statement more relevant than it may appear at first glance.

Finally, under the type of consensus-based decision-making procedure that is typical of the UNFCCC and many other arenas of international negotiation, any individual party has a de facto veto power over any decision (Steinberg 2002; Yamin and Depledge 2004: 443; Ehlermann and Ehring 2005: 65).[2] It therefore becomes essential to convince *all* parties to support an emerging consensus. Hence convincing each individual country becomes very important – more important than in UNGA voting where a few opposing views cannot block the decisions. This in turn suggests that donors may resort to all means at their disposition – including threats and promises related to aid – to convince recipient countries to support their positions.

On the basis of these arguments, we expect parties to care about support and opposition in the negotiations. While the political benefits and costs may be less pronounced than if there had been a direct vote, we still expect them to be sufficiently pronounced to induce action by parties trying to obtain the former, and to avoid the latter. Development aid can be a useful tool in this respect.

Development aid may be related to support or opposition in the negotiations in different ways. On the one hand, aid can generally elicit support for the donor by fostering mutual understanding and trust through the experience of fruitful collaboration. This collaboration and exchange may lead to the natural development of common principles and ideas, so that positions become more aligned. This can generate ties between certain donors and recipients, especially in the long-run. We do not consider this as a strategic use of aid because the alignment of preferences and the potentially resulting support in the climate negotiations are then more of a by-product than the central objective of the engagement in aid. As put by Goldsmith et al. (2014: 90) who discuss the use of aid in this specific context: "By doing good, a country can do well". In other words, it allows the donor to increase its soft power, but this need not even be intentional.

On the other hand, aid can be used strategically to buy votes in the negotiations. This vote buying can happen individually (vote buying by individual donors), but also by the group of developed countries as a whole, e.g., when mechanisms for the financing of poor countries are directly built into the text of the agreement under discussion in order to elicit their overall consent, and to make them swallow those parts of the agreement they would otherwise oppose (for the theory on such broad transfers, see e.g. Carraro and Siniscalco 1993; Chen 1997). For instance, when parties suggested the "Copenhagen Accord" as a minimalistic substitute for the much broader agreement initially intended, the promise of 100 billion USD/year in climate finance figured in the document. In this context, some vulnerable developing country delegates explicitly voiced the allegation of a bribe that industrialized countries were using to obtain consensus on an inacceptable document, simply to mask their failure. Dimitrov (2010) reports a number of related statements, notably the following statement by the Sudanese ambassador:

"*[The Copenhagen Accord] is murderous. It condemns and turns Africa into a furnace because 2 degrees Celsius results in 3.5 degrees [temperature rise in Africa] according to IPCC. [...] The promise of 100 billion US dollars would not bribe us to destroy the continent.*" (Dimitrov 2010: 811)

The quote of the Cuban delegation at the beginning of this paper is taken from the same context. Other reports relate to vote buying by individual donors as illustrated by the following example of Japan prior to the negotiation of the Kyoto Protocol:

"*In Japan, ministers are distributing funds with an eye on diplomatic aims. The government's Cool Earth Partnership, announced last year, includes US$10 billion for climate projects in developing countries. After*

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[2] Note that there are a few exception to this rule as "consensus" has at times been interpreted in a rather peculiar way in international negotiations (see Michaelowa, Michaelowa and Bagchi 2016).

interviewing government officials, Friends of the Earth Japan concluded that the scheme was designed in part to buy support for Japan's position at Kyoto protocol negotiations, where the country is pushing for India and China to do more to limit emissions. Ministers are currently considering partnership projects in some of the world's poorest nations, such as Burkina Faso and Bangladesh." Giles (2009)

While these examples suggest that aid is provided (or at least promised) ex ante, other accounts suggest that aid may also be provided ex post as a reward or be withdrawn as a punishment. This is similar to the tit-for-tat or reciprocating strategy suggested by Axelrod (1984) as a way to encourage cooperation in repeated negotiations, and is also in line with UN voting literature where evidence has also been found for both. While this suggests that there may be a reverse causality issue (does aid cause support, or does support cause aid?), we believe that the distinction is not really relevant here. Firstly, as in the tit-for-tat game, these multilateral negotiations typically consist of several rounds that may stretch over many years, allowing for reciprocating strategies over time: today's reward for yesterday's support in turns constitutes an incentive for further support tomorrow. In addition, an ex-post reward or punishment may well be anticipated, which is then substantively equivalent to an initial promise. Aid commitments are not much more than promises anyway, since subsequent disbursements cannot be fully taken for granted. The same argument can be made for threats of withdrawal. Anecdotal evidence related to such threats was even reported by the media:

"*The US State Department is denying climate change assistance to countries opposing the Copenhagen accord*" (The Guardian, 9 April 2010)

"*It was made very clear by the EU, UK, France and the US that if they did not back them then they would suffer.*" (African diplomat, cited by The Guardian, 11 April 2010)

This clearly suggests a strategic use of development aid to obtain support. As far as possible, we will attempt to empirically disentangle this strategic use of aid for support in the climate negotiations, from the less strategic use discussed initially, when a better understanding is simply the natural by-product of increased aid. Along with multiple fixed effects and a somewhat indirect interpretation of a standard instrumental variable approach (see Section 4), we will distinguish between several types of aid that may be conceptually different in this respect.

General aid, i.e. Official Development Assistance (ODA) as a whole, can a priori be used in both ways. It is the basis of bilateral cooperation between donor and recipient governments, and can generate long-term partnerships between countries. As argued above, while such partnerships can be beneficial in a concrete negotiation context, they were not built up with this specific objective, and the related funding can hence not be considered as strategic for support in these negotiations. However, as highlighted in the UN voting literature, general ODA can also be used as an incentive, threat or reward, and in principle, this is also true for the specific context of the negotiation process we examine. To the extent that ODA is valuable to the recipient, its promise represents the famous 'carrot', and the threat of its withdrawal the corresponding 'stick'.

Yet, the negotiators on both sides are different from the diplomats that represent their countries in the UN General Assembly or in the UNSC. In the climate negotiations, the typical negotiator is a specialized staff from an environmental agency or ministry, and even if the heads of state are frequently flown in at the end of the negotiations for the final speech, the more specialized staff is de facto responsible to negotiate the deal (see, e.g., Skovgaard and Gallant 2015). As mentioned above, these negotiators may not have the authority over general ODA. On the donor side, they would need to enter complex negotiations with other parts of their own government in order to induce a change in overall aid. More easily, they can promise specific climate finance, which falls in their area of responsibility. On the recipient side, there may also be a

greater demand for climate-specific funding, because other funding will be channeled into government budgets that are not under the control of the agencies represented in the negotiations. Assuming that they have a strong interest in the size of their own budget, which affects their standing within the domestic government, they will hence prefer specific climate funding to general ODA. In such a setting, we should expect climate finance rather than development aid in general, to be used for strategic purposes within the UNFCCC negotiations.

Within climate finance, we can further distinguish between two aid-related categories, namely aid for the adaptation to, and aid for the mitigation of global climate change ('adaptation aid' and 'mitigation aid'). If developing country negotiators do not only care about boosting their budget, adaptation aid should be preferable to them. This is because adaptation directly addresses the needs of their domestic population. In contrast, mitigation addresses a global public good. Since the benefits from global public goods are globally non-excludable by definition, there is no particular local benefit of a mitigation activity implemented locally as compared to the same activity implemented elsewhere. In reality, the line cannot be drawn so sharply because most mitigation projects also bring about some local co-benefits, but for a given amount of aid, the directly locally relevant effect will still be higher for adaptation aid than for mitigation aid.

This leads us to formulate a set of nested hypotheses, from broad to specific:

H1: Aid is used to buy support (or avoid opposition) in the negotiations.

H2: Only climate aid is used to buy support (or avoid opposition) in the negotiations.

H3: Only adaptation aid is used to buy support (or avoid opposition) in the negotiations.

4. Data and empirical methods

4.1. Data

Our dataset consists of a three-dimensional panel with dyadic information for donor-recipient pairs over the years 2002-2013. While we coded negotiation related data since 1995, the time series is restricted by the availability of reliable data on climate aid. Donors considered are the traditional members of the OECD's Development Assistance Committee (DAC) as far as they correspond to parties to the UNFCCC. Since EU donors typically speak with one voice in the climate negotiations, they are considered as a single donor here. Information referring to the EU is correspondingly aggregated across all EU members. Overall the dataset hence includes the following ten donors: Australia, Canada, EU, Iceland, Japan, Korea, New Zealand, Norway, Switzerland, and the United States. Similarly, all 151 DAC aid recipients are included that have simultaneously been parties to the UNFCCC.

The dependent variable is based on a new dataset describing negotiation behavior under the UNFCCC (see Codebook in Annex 1). We code all regular meetings of the UNFCCC bodies across the different areas under discussion. Coding is based on the summaries of these negotiations meetings as published by the International Institute for Sustainable Development (IISD) in its Earth Negotiations Bulletins (ENBs). Using the ENBs we code how countries interact with each other in the negotiations. We thereby distinguish between supportive statements (speaking on behalf of, supporting, speaking with or agreeing with one another) on the one hand and opposing statements (delaying, opposing or criticizing other's positions or statements) on the other. The most straightforward way to compute measures for support ('*Positive statements*') and opposition ('*Negative statements*') is then simply to add up the respective number of

statements by each recipient with respect to each donor across the different negotiation meetings in any given year.

This simple aggregation of supportive and opposing statements hides a more nuanced range of relationships reflected in the sub-categories mentioned in brackets above. Within the supportive statements, we have at one extreme the case of groups of countries actively coordinating common positions so that one of them is able to "speak on behalf" of the others; then the case of countries directly expressing "support" for one of their peers; and finally the cases in which countries either speak with one another or simply agree with what someone else already said. Within the opposing statements, one extreme is the case in which a country openly criticizes another's positions, actions or statements, followed by a country simply expressing an opposing position, and finally a country seeking to delay the discussion of someone else's proposal.

If countries consider the reputational costs and benefits of support and opposition in the negotiations, the above mentioned differences in the sub-categories should be relevant to them. Open criticism, for instance, will much more easily attract the attention of the media than a mild statement of disagreement. In our preferred alternative measure, we hence weight the different sub-categories before building the sum. In addition we integrate supportive and opposing statements in a single indicator for all statements, by subtracting the weighted sum of the latter from the sum of the former. This leads to the variable '*Statement*', which takes into account both the frequency and the degree of the support and ranges from -18 (strong and frequent opposition) to 16 (strong and frequent support):

$$Statement_{ijt} = 3 \cdot speaking\ on\ behalf_{ijt} + 3 \cdot support_{ijt} + 2 \cdot agreement_{ijt} + 2 \cdot spoke\ with_{ijt}$$
$$-1 \cdot delay_{ijt} - 2 \cdot opposition_{ijt} - 3 \cdot criticism_{ijt}, \tag{1}$$

whereby each of the variables *speaking on behalf*$_{ijt}$ etc. measures the frequency of the respective statement for each donor i, recipient j, and year t.

As an example: In 2010, China opposed the EU eight times, but also agreed with the EU once. The *Statement* variable for this particular year and dyad is hence coded as:

$$Statement_{EU,\ China,\ 2010} = 3 \cdot 0 + 3 \cdot 0 + 2 \cdot 1 + 2 \cdot 0 - 1 \cdot 0 - 2 \cdot 8 - 3 \cdot 0 = -14$$

In order to put these values into perspective, we also code the total number of positional statements for each dyad and year independently of the direction of the statement ('*Total statements*'). This is to be able to control for the fact that some countries simply participate in the debate more often than others, which may be related to the size of their delegation, the delegates' language proficiency and the like.

The explanatory variables are bilateral ODA commitments (in constant 2014 USD) for each donor-recipient dyad and year as reported by OECD (2016). We use total commitments as well as commitments based on the so-called 'Rio markers' that separately identify mitigation and adaptation aid. Data verified by the DAC and hence more reliable than earlier data (see Michaelowa and Michaelowa 2011, Bagchi, Castro and Michaelowa 2016: 11) is available for mitigation aid since 2002, and for adaptation aid since 2010. For both categories, two types of variables are available depending on whether adaptation or mitigation are the main objective of the respective aid activity ('*Adaptation principal*', '*Mitigation principal*') or only one relevant objective among others ('*Adaptation significant*', '*Mitigation significant*'). This distinction is important in the context of the global public good character of mitigation aid, which should be strongest when mitigation is the principal objective.

To reduce the effect of outliers, both the dependent variables and the aid variables are used in natural logarithms. To avoid the creation of missing values for values smaller or equal to zero, +19 is added to

Statement and +1 is added to the aid variables as well as to *Positive statements* and *Negative statements* before the transformation is carried out. An analogous transformation is carried out for *Total statements* when used in the regression of *Positive* and *Negative statements*. In the regression of *Statement*, however, we prefer to use a quadratic form to capture the fact that both very high and very low values of *Statement* may simply reflect a highly vocal UNFCCC member country.

In addition to these main variables, we use a number of controls, such as the '*Trade relationship'* between the donor and the recipient (UN Comtrade 2016), an indicator variable for both donor and recipient being democratic ('*Democracy*') (QoG 2015), Voeten's (2013) voting similarity index, i.e., the share of aligned UN votes between donor and recipient ('*UN alignment*'), recipients' vulnerability to climate change ('*Vulnerability*') as measured by the ND-GAIN vulnerability index (ND-ECI 2015) and the natural logarithm of the recipients' '*GDP per capita'*, PPP (constant 2011 international $) (World Bank 2016). All variable definitions and basic descriptive statistics are presented in Annex 1, Table A1. We also tried other models including further variables such as foreign direct investment between the two countries in each dyad as well as separate measures for exports and imports instead of the Trade relationship variable. This did not lead to any substantive change in results.

4.2. Methodological approach

Since the data are in the form of a three-dimensional panel, we have the possibility to use dyad fixed effects as well as year fixed effects. This controls for all time invariant donor and recipient characteristics as well as for characteristics that vary only over time and not across dyads. The year fixed effects capture the influence of individual years such as, for instance, the year 2009 with the Copenhagen summit, but also general trends over time. The dyad fixed effects capture the influence of all unobservables or otherwise omitted variables that are specific to the donor and/or the recipient. The latter substantially reduce the potential sources of endogeneity. Dyad fixed effects notably control for long-term relationships between a donor and a recipient, based, e.g., on common culture and language, or on prior development cooperation. If aid is positively significant in this type of model, the effect cannot be explained by the natural alignment of preferences between long-term development partners, and therefore suggests that aid is used strategically.

To further explore the causal channels we also run a two-staged least squares (2SLS) model based on Jackson's (2014) idea to instrument aid with a variable whose exogenous variation is taken from disasters in other recipients of the same donor. The idea is simple: Assuming that a donor's overall aid budget is fixed for any given year, if a major disaster happens somewhere in the world, funding will be reallocated to this region and away from other countries. This generates an exogenously driven reduction of aid for these other countries. As the amount of funding that is reallocated depends on the importance of the country hit by the disaster in the donor's overall aid budget, disasters are weighted by this country's share in the donor's aid budget during the previous ten years. Jackson (2014) considers all disasters based on meteorological and climatological extreme events using data from the Emergency Events Database (EM-DAT). From this database we draw information on the number of people affected (in thousands). On this basis, the instrumental variable can be defined as:

$$IV_{ijt} = \sum_k \theta_{ikt} \cdot (people\ affected)_{kt} \tag{2}$$

With $k \in \{1, 2, \ldots, j-1, j+1, \ldots J\}$, i.e., including all recipients except j, and

$\theta_{ikt} = \frac{\sum_{\tau=t-10}^{t-1} ODA_{ik\tau}}{\sum_{\tau=t-10}^{t-1} ODA_{i\tau}}$, the weight of recipient k in donor i's aid budget.

In our specific context, however, some doubts with respect to the exogeneity of this variable may remain. Since we analyze the international climate negotiations, disasters linked to climatological extreme events may have an effect on the negotiations. Hence the exclusion restriction could be violated. In addition, if a neighboring country is struck by crisis, this experience may lead to a change in one's negotiation strategy that could be spuriously related to the reduction in aid.

To avoid these potentially remaining sources of endogeneity, we adjust the instrument suggested by Jackson (2014) by taking into account only meteorological (and not climatological) disasters, and by excluding not only the recipient itself, but also all neighboring recipients. The coding of neighbors is based on Neumayer's (2011) contiguity measure. According to this measure, countries are considered as contiguous if they either share a border, or if they are separated by less than 150 km across an ocean. On this basis we construct our adjusted instrumental variable:

$$IV2_{ijt} = \sum_k \theta_{ikt} \cdot (people\ affected\ by\ meteorological\ disasters)_{kt} \qquad (3)$$

with $k \in \sim N$. The set $\sim N$ contains all recipients except j or any of its neighbors.

In the regressions, we will use the natural logarithm of these variables (previously adding +1 to avoid the generation of missing values). In this form, the IV should better match the statement-related variables, which are equally logged.

A separate methodological consideration needs to be given to the case of the alternative dependent variables ln(*Positive statements*) and ln(*Negative statements*). Looking at them separately could be relevant since it could be that support and criticism are influenced by aid in different ways. The two variables are left-censored as less than zero statements cannot be made. This suggests the use of a Tobit model. However, dyad fixed effects are not compatible with this approach because their consistent estimation requires a large number of periods, while we only have 5 years for adaptation aid and 11 years for mitigation aid. We hence stick to a linear approximation, and the model results should be interpreted with some caution.

Given the three-dimensional nature of the panel data set, special care also needs to be given to clustering. It is not sufficient to cluster at the recipient-donor dyad level, as this would imply that observations for the same donor but different recipients or for the same recipient but different donors should be uncorrelated. It is highly plausible that this assumption will be violated. We will therefore use multi-way clustering as suggested by Cameron, Gelbach, and Miller (2011). *(Note for our discussants: This is not yet implemented in the tables shown here, but we did the new calculations and the main results are robust to this change.)*

5. Empirical results

Table 1 presents our main results based on panel regressions with dyad and year fixed effects. Equations 1-5 use all available observations for the different aid variables while Equations 6-8 use the limited sample available for adaptation aid for total aid and mitigation aid as well. While this leads to slightly changed coefficient estimates, the substantive outcomes are identical: Total ODA does not affect the statements made in favor or against a donor country. For adaptation and mitigation aid, however, we do find evidence for a positive relationship. The size of these effects is rather small roughly indicating that a 1-2% increase in support (on our scale moving from strong criticism to clear support) requires a doubling of aid. So while there is a significant relationship, a very strong increase in aid is required to make a sizeable difference in substantive terms. These results are robust to the inclusion of further controls as described in Section 3, and generally, to variations in the number of control variables. Table A3 in Annex 2 shows almost identical

results based on parsimonious regressions that only include *Total statements* and its square along with the dyad and year fixed effects. Similarly, when assessing positive and negative statements separately in Table A4, again total ODA is not significant at all, while mitigation and adaptation aid are significant in most regressions.

Table 1: Buying support at the UNFCCC

Dependent variable: ln(Statement)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables for Aid:	Total ODA	Adaptation principal	Adaptation significant	Mitigation principal	Mitigation significant	Total ODA	Mitigation principal	Mitigation significant
ln(Aid)	0.000	0.009	0.016*	0.010**	0.016***	-0.001	0.020***	0.012*
	(0.67)	(0.34)	(0.08)	(0.05)	(0.01)	(0.44)	(0.00)	(0.07)
Total statements	-0.004	-0.015*	-0.016*	-0.010	-0.012	-0.014*	-0.018**	-0.016*
	(0.59)	(0.08)	(0.06)	(0.19)	(0.15)	(0.10)	(0.04)	(0.07)
Total statements^2	-0.002***	-0.001	-0.001	-0.002**	-0.002**	-0.001	-0.001	-0.001
	(0.00)	(0.12)	(0.15)	(0.03)	(0.04)	(0.11)	(0.17)	(0.16)
Trade relationship	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.002
	(0.66)	(0.83)	(0.78)	(0.63)	(0.63)	(0.83)	(0.80)	(0.80)
Democracy	-0.002			0.000	-0.000			
	(0.44)			(0.77)	(0.94)			
UN voting	0.015***	0.002	0.002	0.012**	0.013***	0.003	0.002	0.003
	(0.01)	(0.77)	(0.78)	(0.01)	(0.01)	(0.75)	(0.84)	(0.75)
Vulnerability	0.193***	0.467***	0.479***	0.161***	0.155***	0.469***	0.460***	0.472***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
ln(GDP per capita)	-0.009*	-0.033***	-0.035***	-0.013***	-0.013***	-0.032***	-0.031***	-0.031***
	(0.08)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)
Observations	17,502	7,720	7,720	17,322	17,322	7,720	7,720	7,720
Number of dyads	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Within R-squared	0.096	0.099	0.101	0.096	0.098	0.098	0.106	0.100
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dyad FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: p-values based on robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

These results lend some support to H1 that aid is used to buy support and/or avoid opposition in the negotiations. Given that the aid variables are not lagged and that the panel regressions are based on annual data, the outcomes reflect a short-term relationship, not an effect of aid that could build up over time and generate a natural alignment between donor and recipient. Time-invariant general characteristics of donor and recipient that could lead to their positional closeness and simultaneously to intensive development cooperation are controlled for through the dyad fixed effects and cannot bias the coefficient estimates.

The results are equally consistent with H2 that posits that only climate-change related aid should be used for this purpose. However, surprisingly, mitigation aid is at least as much used as adaptation aid (in fact, one of the adaptation variables is not significant), and this is true even when mitigation is the principal objective, so that the financial support is primarily used to create a global public good, rather than a private, or a local public good as would be the case with adaptation. It seems that the co-benefits of development projects in the area of mitigation aid have been attractive enough to make this type of aid interesting for recipients. It might also be that there is some lobbying by domestic private entrepreneurs who want to implement such projects in recipient countries. In any case, H3 is clearly rejected by the available evidence.

The coefficient estimates for the control variables are only partially significant. One frequently significant variable is *Total statements*, whose introduction in a flexible, non-linear form allows us to control for the

general level of a recipient's bargaining activity with respect to the donor. Both recipients who often criticize and recipients who often voice agreement (i.e., the recipients at both ends of the *Statement* scale) are doing so to some extent, just because they are generally very active.

Vote alignment in the UN General Assembly is positively significant in most regressions indicating that positional closeness and/or mutual understanding between nations is correlated across different policy areas. Furthermore, highly vulnerable countries tend to support the donors more strongly and to voice less opposition. This may be due to the fact that some Western countries, and notably the EU, have been seen as rather progressive actors during the last decade. Finally, GDP per capita is negatively significant, suggesting that the greatest disagreement between developed and developing countries occurs with respect to emerging economies, which should primarily capture the BASIC countries (Brazil, South Africa, India and China) that have built their own negotiation group and have been very vocal throughout the negotiation process, as well as the rich oil-producing economies which are known for their attempts to block progress in the negotiations.

While endogeneity problems related to simultaneity and omitted variables are very unlikely in a dyadic panel model, this specification cannot exclude reverse causality. In addition, even if we can exclude long-term convergence of preferences due to aid as a mechanism at work in Table 1[3], we cannot exclude that short-term random variations in aid that evoke some spontaneous gratitude drive the above described results. While this would also mean that aid influences support in the negotiations, it would not reflect the strategic interaction underlying our support-buying hypotheses. To clarify the issue, we carry out an instrumental variable regression based on *IV2* described in Section 3. The results of the corresponding two-staged least squares (2SLS) procedures are presented in Table 2.

As the partial F statistics show a reasonably high correlation between our instrument and the different aid variables (except for *Mitigation significant*), and since the way we defined *IV2* should make sure that it is truly exogenous, the coefficient of aid now reflects the effect of a fully random variation in corresponding commitments. Noticeably, none of the aid-related coefficients is positively significant any more. The results hence strongly suggest that a fully exogenous increase in aid does not trigger any greater support or reduced criticism by the recipient.

Note that there is an unexpected sign of the coefficient of *IV2* in 1st stage for *Total ODA* (Table A2, Regression 1). When replicating the estimation using *IV* instead of *IV2* (despite slight doubts about its exogeneity), the expected negative coefficient of the instrument is reestablished in the 1st stage, but the 2nd stage regression remains substantially unchanged and ODA remains completely insignificant (regression not shown). There are also some unexpected signs of significant coefficients in the 2nd stage regression with *Mitigation principal* (Table 2, Regression 5). Nevertheless, the results do not provide us any ground to reconsider the interpretations provided above.

We hence conclude that a random change in aid does not buy any goodwill, at least not in the short run, no matter what type of aid we consider. The positive coefficients of climate change related aid in Table 1 are thus most probably affected by some reverse causality, but reverse causality that is in the very nature of the strategic support buying procedure. The overall picture we obtain suggests a situation in which the promise of aid and/or the threat of its withdrawal are used as an effective tool to solicit recipient support and avoid criticism. This includes cases in which the promise of aid is directly built into an international agreement

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[3] Note that we are not claiming that such long-term effects of aid do not exist. In fact, it seems highly plausible to us that they do. However, as they reflect a different facet of the relationship between aid and support than we focus on here, we carry out our analysis in a way that this channel of causality is excluded.

such as the promise of the 100 billion in the context of the Copenhagen Accord. Yet, as highlighted above, the support-buying mechanism seems to work only for climate change related aid, not for ODA more broadly, and the size of the effects is relatively small, so that support buying at the UNFCCC appears to be a rather costly strategy.

Table 2: The impact of exogenous variation in aid (2SLS estimation)

Dependent variable: ln(Statement)	(1)	(2)	(3)	(4)	(5)
Variables for Aid:	Total ODA	Adaptation principal	Adaptation significant	Mitigation principal	Mitigation significant
ln(Aid)	0.006	0.017	0.014	-0.199***	0.689
	(0.70)	(0.79)	(0.79)	(0.00)	(0.23)
Total statements	-0.004	-0.017*	-0.017*	0.037**	-0.156
	(0.45)	(0.08)	(0.09)	(0.03)	(0.20)
Total statements^2	-0.002***	-0.001	-0.001	-0.004***	0.007
	(0.00)	(0.17)	(0.20)	(0.00)	(0.34)
Trade relationship	0.002	0.005	0.005	-0.012*	0.027
	(0.63)	(0.49)	(0.48)	(0.07)	(0.32)
Democracy	-0.001			-0.008	-0.002
	(0.64)			(0.13)	(0.80)
UN voting	0.014**	0.007	0.008	0.027***	0.012
	(0.02)	(0.39)	(0.38)	(0.00)	(0.23)
Vulnerability	0.128***	0.446***	0.460***	-0.172*	0.237
	(0.01)	(0.00)	(0.01)	(0.07)	(0.32)
ln(GDP per capita)	-0.003	-0.029	-0.029	0.016**	-0.029
	(0.64)	(0.17)	(0.18)	(0.02)	(0.26)
Observations	17,492	7,710	7,710	17,312	17,312
Number of dyads	1,290	1,290	1,290	1,290	1,290
F (2nd stage)	5.475	5.871	5.877	2.919	2.967
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Kleibergen-Paap rk LM statistic	24.96	18.03	21.48	14.32	1.478
Year FE	No	No	No	No	No
Dyad FE	Yes	Yes	Yes	Yes	Yes

Notes: p-values based on robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.
For the first stage regressions based on *IV2* as explained in Section 3, see Annex 2, Table A2.

6. Conclusion

Based on a new dataset on member country interactions in the UNFCCC negotiations, we examine whether aid can buy support in international negotiation processes. The theoretical arguments follow the reasoning in the context of UN voting where "vote buying" is an academically long-established phenomenon. While aid may also increase a donor's soft power and induce long-term positive relationships that eventually lead to closer alignment in international negotiations, we focus on short term strategic interests and related "support buying". Our three dimensional panel analysis with donor-recipient dyad fixed effects as well as year fixed effects, and, alternatively, with an instrumental variable approach relying on the exogenous variation in aid inflows due to meteorological disasters in other recipient countries, reveals that aid can indeed buy support, but that this opportunity is limited to mitigation and adaptation aid, rather than general ODA. We argue that this is due to both greater demand for and greater supply of those types of financial support, whose allocation is under the direct responsibility of the delegates who are experts in a very specific field (here: international climate policy). Moreover, the approach is a rather expensive one as aid flows have to be substantial to trigger any sizeable effect on support.

The fact that we find a positive relationship between climate related aid and negotiation support clearly shows that despite the fact that most debates in this framework do not directly lead to a decision, the individual statements are taken seriously in the preparation of the final consensus – so seriously that donors are ready to pay for this, both bilaterally and as part of the common agreement negotiated within the negotiation round. The analogy between aid and negotiation support on the one hand, and aid and UNGA or UNSC voting alignment on the other hand shows that the strategic use of aid goes beyond what has been established in the aid literature so far. It should not only hold for the UNFCCC, but also for other similar international negotiations such as in the realm of the WTO.

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Annex 1 describes data and variables starting with the Codebook for negotiations-related database. Table A1 then presents an overview of the definition, sources and descriptive statistics of all variables used in the analysis.

**Codebook for relational data between parties to the
UN Framework Convention on Climate Change, 1995 – 2013**

1. General dataset description

This dataset is based on hand-coding of summaries of the negotiations under the UN Framework Convention on Climate Change (UNFCCC). It covers all meetings of the official UNFCCC bodies reported in the Earth Negotiation Bulletins (ENBs) between February 1995 (11th Session of the INC in New York) and December 2013 (COP19 in Warsaw). The original ENBs can be downloaded from http://www.iisd.ca/vol12/. The ENBs have been chosen as the data source since they are seen as a detailed and objective source of information by many negotiators and observers in the climate talks, and because there are no publicly available official transcripts of the negotiations.

The dataset was created for the SNF-funded research project "Institutional design and 'constructed peer groups' in international organizations: The case of the international climate change regime" at the University of Zurich, between 2013 and 2015. The dataset contains relational data between parties to the UNFCCC, which has been obtained by coding how parties to the UNFCCC react to other parties' interventions: the observations in the dataset describe which countries support, agree with, oppose, or criticize other countries' statements or positions as reported in the ENBs. The observations also contain information regarding the topic or issue area and the negotiation meeting in which the respective statement was made.

Four coders contributed to the data collection. Intercoder reliability was tested using Cohen's kappa. Values ranged from 0.77 to 0.92, which was deemed to indicate a substantial reliability. *Questions regarding the dataset should be directed to Paula Castro (castro@pw.uzh.ch).*

2. Variable description

Country 1: Country (or country group) that says something on behalf of, states something with, agrees with, supports, delays the proposal of, opposes to or criticizes *Country 2*.

Relation: The type of reaction of *Country 1* to a statement/position by *Country 2*: speaking on behalf of, support, speaking with, agreement, delaying proposal, opposition, criticism. Detailed descriptions of the individual types of relations can be found below.

Country 2: Country (or country group) whose position or statement is supported, agreed with, criticized, etc.

Conference: Place and year of meeting of the UNFCCC bodies (includes not only COP meetings, but also meetings of its subsidiary bodies).

Topic: Issue area to which the statements by ***Country 1*** and ***Country 2*** refer: Mitigation, adaptation, finance, etc. This information has not been used for this paper.

Comment: Usually quotes the text that shows the coded relationship (in quotation marks). May also includes comments regarding the coding.

ENB Nr: Number of the Earth Negotiation Bulletin from which the relationship was coded.

Coder: Person who coded this observation.

ID_own: Observation ID, which consists of the ENB Number followed by an observation counter within that ENB.

2. Description of coded relationships

On behalf of: when Country 1 speaks ***on behalf of*** or ***for*** an ad-hoc group of countries. In this case, it is clear that the group of parties has previously coordinated a common position, which is being presented by Country 1 for the whole group. ***On behalf of*** is not coded when a member of an established coalition (such as the EU or the G77) speaks on behalf of this coalition (e.g. "Grenada, on behalf of AOSIS…" is coded simply as a statement by AOSIS). In this case, the membership of these coalitions is already fixed, and it is clear that if the coalition makes a statement, all of its members have already agreed to this position.

Example:

- "COLOMBIA, for Costa Rica, Chile, Panama and Peru, highlighted the need to ensure: continuity to a second commitment period under the Kyoto Protocol; comparable commitments by Annex I countries not party to the Kyoto Protocol; predictability on the continuation of finance for the 2013-2020 period; and continued progress in ADP discussions."

Support: is used when the text explicitly says "Country 2, supported by Country 1, …", even when this support is expressed in different sentences.

Examples:

- "He (the EU) said additional effort should be made to reduce uncertainty in GWPs but that parties should use them if they wish. Japan supported the GWP position (…). Australia (…) also supported continued use of GWPs."

Agreement: when several countries are reported to hold the same position on an issue. This may be a text like "several parties, including Country 1, Country 2 and Country 3, proposed …". Agreement may be coded also when two different sentences refer to the same position being held by different countries, even though the relationship (agreeing with each other) is not explicitly written.

Examples:

- "The EU, the US and CANADA stressed the need to ensure consistency with the capacity building aspects of other discussions on technology transfer and adaptation."
- "He also noted that paragraphs proposed by a number of Parties including Norway, Iceland, New Zealand and Switzerland could be integrated into the EU proposal."
- "Switzerland and China noted that …"

Spokewith: when the text says something like "Country 1, ***with*** Country 2 and Country 3, stated / mentioned / …". In this case it is clear that all these countries said more or less the same, but it is not clear whether

Country 1 explicitly *supported* the other countries, whether they just had the same position, or whether there has been any active coordination between the parties in terms of their positions.

Example:

- "On the election of the Board, SAMOA, with the EU and BULGARIA, called for consideration of gender balance."

Delaying proposal: when a country proposes that someone else's proposal be discussed at a later time.

Examples:

- "The EU recognized Kazakhstan's aspiration to join Annex B, while highlighting the need to comply with legal requirements relating to Annex B amendments. She supported deferring the issue to COP/MOP 6."
- "TOGO, supported by MALAYSIA, proposed adjourning until numbers were proposed"
- "NEW ZEALAND called for consistency with Protocol language, and said the issue of share of proceeds for adaptation should be addressed later, and elsewhere."

Opposition: when the text reports one country opposing the statement or position expressed by other(s). Has also been coded when the word "opposition" is not explicitly mentioned, but it is clear from the statements that they oppose each other.

Examples:

- "Expressing disappointment at the lack of a more substantive outcome, the G-77/CHINA, opposed by the EU, proposed an alternative text"
- "The G-77/CHINA supported this approach while the US, CANADA and JAPAN opposed it"
- "MEXICO underscored its commitment to mechanisms and processes that increase the participation of observers. (…) NIGERIA noted that although participation of stakeholders has been positive, the UNFCCC is an intergovernmental process."

Criticism: when Country 1 directly criticizes Country 2 or its position / statement.

Examples:

- "He (EU) said some developed countries, particularly the US, have not included binding measures in their proposals and emphasized the EU's conviction that P&Ms should be included to fully encompass the Berlin Mandate and Geneva Declaration."
- "The MALDIVES lamented that reliance on the phrase "form should follow function" [used by China] is slowing down the negotiations"
- "CHINA criticized the US presentation for changing the direction of the AGBM, failing to link development with the existing economic structure of a country and considering only the industrial development that has occurred since 1990.

Table A1: General data and variable description

Variable	Definition	Observations	Mean	Std. Dev.	Min	Max	Source
ln(Positive Statements)	Log of the sum of positive statements where a recipient agrees, speaks on behalf, supports or speaks with a donor. Before creating the log, +1 was added to the variable to avoid the zeroes.	22650	0.048	0.213	0	2.397	Own coding from IISD (2000-2013).
ln(Negative Statements)	Log of the sum of negative statements where a recipient delays, opposes or criticizes a donor. Before creating the log, +1 was added to the variable to avoid the zeroes.	22650	0.037	0.201	0	2.773	Own coding from IISD (2000-2013)
ln(Statement)	Log of the sum of statements a recipient makes referring to a specific donor, whereby each statement is weighted by the degree of support, from -3 (opposition) to +3 (support or speaking on behalf). As the sum includes negative numbers (-18 being the lowest), we add 19 before taking logs.	22650	2.944	0.627	0	3.555	own coding from IISD (2000-2013)
ln(Adaptation principal)	Log of climate change related ODA commitments for the primary purpose of adaptation (2012 constant prices, USD millions). Before creating the log, +1 was added to the variable to avoid the zeroes.	10570	0.025	0.254	0	5.698	OECD (2016a)
ln(Adaptation significant)	Log of climate change related ODA commitments where aid has other prime objectives but has been adjusted to meet climate concerns relating to adaptation (2012 constant prices, USD millions). Before creating the log, +1 was added to the variable to avoid the zeroes.	10570	0.036	0.320	0	6.614	OECD (2016a)
ln(Mitigation principal)	Log of climate change related ODA commitments for the primary purpose of mitigation of greenhouse gases (2014 constant prices, USD millions). Before creating the log, +1 was added to the variable to avoid the zeroes.	22438	0.036	0.365	0	7.872	OECD (2016a)
ln(Mitigation significant)	Log of climate change related ODA commitments where aid has other prime objectives but has been adjusted to meet climate concerns relating to mitigation of greenhouse gases (2014 constant prices, USD millions). Before creating the log, +1 was added to the variable to avoid the zeroes.	22438	0.033	0.308	0	6.2	OECD (2016a)
ln(ODA)	Log of bilateral ODA commitments made by donors to recipients (2014 constant prices USD millions). Before creating the log, +1 was added to the variable to avoid the zeroes.	22650	1.561	1.934	0	9.353	OECD (2016b)
Total statements	Number of positional statements made by a recipient referring to any donor, by year.	22650	0.159	0.795	0	24	own coding from IISD (2000-2013)
Trade relationship	The value of trade (import+export) as a fraction of the recipient's GDP.	19680	0.062	0.788	0	63.84	UN Comtrade (2016)
Democracy	Dummy=1 if donor and recipient both are democracies according to QoG data, 0 otherwise.	22650	0.508	0.499	0	1	QoG (2015)
UN voting	Voting similarity index (0-1) equal to (total number of votes where both states agree)/(total number of joint votes). It includes all votes and not only important votes	21063	0.717	0.216	0	1	Voeten (2013)
Vulnerability	Recipient vulnerability measured by the ND-GAIN index that captures a country's exposure, sensitivity and ability to adapt to the negative impact of climate change.	19180	0.492	0.09	0.317	0.694	ND-ECI (2015)
ln(GDP per capita)	Log of GDP per capita (constant 2011 USD) of the recipient countries	20830	8.542	1.021	6.199	10.812	World Bank (2016)
No. of people. affected by meteorological disasters	Total number of people requiring immediate assistance during a period of emergency, i.e. basic survival needs such as food, water, shelter, sanitation and immediate medical assistance.	19330	6.231	2.759	0	10.622	Center for Research on the epidemiology of disasters (2015)

Table A2: 1st stage results for Table 2

	(1)	(2)	(3)	(4)	(5)
Dependent variables for the 1st stage:	**ln ODA**	**Adaptation principal**	**Adaptation significant**	**Mitigation principal**	**Mitigation significant**
Total statements	0.020	0.080***	0.104***	0.229***	0.215***
	(0.12)	(0.00)	(0.00)	(0.00)	(0.00)
Total statements^2	-0.002*	-0.006***	-0.010***	-0.011***	-0.013***
	(0.06)	(0.00)	(0.00)	(0.00)	(0.00)
Trade relationship	-0.010	-0.013	-0.035	-0.066***	-0.039*
	(0.92)	(0.58)	(0.36)	(0.00)	(0.06)
Democracy	0.127***			-0.047**	0.005
	(0.00)			(0.01)	(0.68)
UN voting	0.197***	0.010	-0.000	0.078***	-0.000
	(0.00)	(0.64)	(0.99)	(0.00)	(1.00)
Vulnerability	-0.495	-0.428	-1.516**	-1.146***	-0.262
	(0.45)	(0.45)	(0.03)	(0.00)	(0.23)
ln(GDP per capita)	0.288***	0.272***	0.359***	0.095***	0.037***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
ln(IV2)	0.014***	-0.014***	-0.017***	-0.003***	0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.22)
Observations	17,489	7,710	7,710	17,312	17,312
Number of dyads	1,290	1,290	1,290	1,290	1,290
R-squared	0.012	0.038	0.059	0.101	0.104
Kleibergen-Paap rk LM statistic	24.96	18.03	21.48	14.32	1.48
Year FE	No	No	No	No	No
Dyad FE	Yes	Yes	Yes	Yes	Yes

Table A3: Buying support at the UNFCCC, parsimonious model

Dependent variable: ln(Statement)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables for Aid:	Total ODA	Adaptation principal	Adaptation significant	Mitigation principal	Mitigation significant	Total ODA	Mitigation principal	Mitigation significant
ln(Aid)	0.000	0.009	0.013	0.010*	0.016**	-0.000	0.015***	0.012*
	(0.99)	(0.35)	(0.11)	(0.06)	(0.01)	(0.66)	(0.00)	(0.07)
Total statements	0.001	-0.008	-0.009	-0.004	-0.006	-0.007	-0.010	-0.009
	(0.86)	(0.31)	(0.26)	(0.54)	(0.45)	(0.37)	(0.19)	(0.25)
Total statements^2	-0.002***	-0.002**	-0.001*	-0.002**	-0.002**	-0.002**	-0.001*	-0.001*
	(0.00)	(0.05)	(0.05)	(0.01)	(0.02)	(0.04)	(0.06)	(0.06)
Observations	22,650	10,570	10,570	22,438	22,438	10,570	10,570	10,570
Number of dyads	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510
Within R-squared	0.081	0.085	0.087	0.081	0.083	0.084	0.090	0.087
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dyad FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: p-values based on robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A4: Separate regressions for positive and negative statements

Dependent variables:	(1) Positive Statements	(2) Positive Statements	(3) Positive Statements	(4) Positive Statements	(5) Positive Statements	(6) Negative Statements	(7) Negative Statements	(8) Negative Statements	(9) Negative Statements	(10) Negative Statements
Variables for Aid:	Total ODA	Adaptation principal	Adaptation significant	Mitigation principal	Mitigation significant	Total ODA	Adaptation principal	Adaptation significant	Mitigation principal	Mitigation significant
ln(Aid)	-0.000	0.043***	0.039***	0.028***	0.047***	0.000	-0.014	-0.006	-0.006	-0.022*
	(0.90)	(0.00)	(0.01)	(0.01)	(0.00)	(0.98)	(0.34)	(0.69)	(0.55)	(0.09)
Total statements	0.311***	0.295***	0.294***	0.307***	0.303***	0.253***	0.261***	0.260***	0.260***	0.263***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Total statements^2	-0.011***	-0.010***	-0.010***	-0.012***	-0.011***	-0.006***	-0.007***	-0.007***	-0.007***	-0.007***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Trade relationship	-0.003	-0.005	-0.004	0.001	0.002	-0.001	-0.007	-0.007	-0.004	-0.005
	(0.70)	(0.75)	(0.80)	(0.85)	(0.83)	(0.88)	(0.64)	(0.64)	(0.57)	(0.53)
Democracy	-0.006			0.001	-0.001	-0.001			-0.005	-0.004
	(0.27)			(0.88)	(0.82)	(0.78)			(0.21)	(0.25)
UN voting	0.042***	0.019	0.019	0.033***	0.035***	-0.031**	-0.008	-0.008	-0.026**	-0.027**
	(0.00)	(0.29)	(0.29)	(0.00)	(0.00)	(0.01)	(0.65)	(0.65)	(0.02)	(0.01)
Vulnerability	0.336**	1.294***	1.337***	0.316**	0.301**	-0.374***	-0.937***	-0.948***	-0.331***	-0.329***
	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
ln(GDP per capita)	-0.015	-0.088***	-0.091***	-0.028***	-0.028***	0.007	0.102***	0.101***	0.018**	0.018**
	(0.11)	(0.00)	(0.00)	(0.00)	(0.00)	(0.38)	(0.00)	(0.00)	(0.04)	(0.03)
Observations	17,502	7,720	7,720	17,322	17,322	17,502	7,720	7,720	17,322	17,322
Number of dyads	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Within R-squared	0.598	0.567	0.568	0.593	0.596	0.595	0.593	0.593	0.598	0.599
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dyad FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: p-values based on robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1