Membership has its privileges:

Shared international organizational affiliation and foreign aid flows, 1978-2010

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Abstract

A central tenet of economic sociology is that social ties among actors can both facilitate and constrain economic exchanges between them. Recent scholars have extended these ideas to the global system by examining how social ties formed through international organizations enable or inhibit economic exchanges between countries. Similarly, this paper examines the relationship between shared organizational memberships and bilateral aid flows between donor and recipient countries from 1978 to 2010. We propose that joint membership in international nongovernmental organizations (INGOs) and intergovernmental organizations (IGOs) facilitates aid flows from donor to recipient. However, we also suggest this relationship is contingent upon the level of development in the recipient country. Results from a multi-stage analysis of more than 61,000 donor-recipient dyads show that while shared memberships strongly increase the likelihood of an aid relationship between countries, they tend to predict increased volumes of aid only for recipient countries at the lowest levels of development as measured by GDP. Findings suggest that an institutional approach is needed to fully understand the relational dynamics of aid flows in the contemporary period.

Introduction

A central tenet of economic sociology suggests social ties among actors can both facilitate and constrain economic exchanges between them (Granovetter 1985). Actors embedded in social relations can smooth the uncertainty and risk associated with exchanges by building trust and sharing information with other actors. Social networks can also have paradoxical or detrimental effects depending on the quality and structure of the ties (Powell 1990; Uzzi 1997).

Scholars have extended these ideas to the global system by examining how social ties formed through international organizations enable or inhibit economic exchanges between countries. Forms of exchange that traverse national borders spawn various transaction costs that can introduce risk to the exchange, whether due to limited information, cultural and political dissimilarities, or the lack of formal regulatory mechanisms. International organizations can bridge these gaps by bringing countries into repeated exchanges with other countries, thereby raising awareness, engendering empathy, and spreading information needed to facilitate the venture. Thus, previous research has shown that shared memberships in intergovernmental organizations can boost trade and foreign direct investment between countries as well as induce competition at the network level (Ingram, Robinson, and Busch 2005 Alcacer and Ingram 2013; Bandelj 2002). However, social ties between countries can have the unintended effects of enhancing global inequities. For example, Lundsgaarde et al. (2010) find that countries tend to trade with and give aid to the same partners. Such findings raise serious implications for global equity, as countries with few prospects for economic development may also receive less in the way of more benevolent forms of exchange.

We extend this research by examining how shared memberships in international organizations shape the flow of bilateral aid from donors to recipients using a new dyad-level

dataset. Aid provides a compelling case for many reasons. Unlike foreign direct investment, in which international organizations govern private transactions by filling the "institutional abyss" that exists between states (Alcacer and Ingram 2013), donor governments have greater control over the disbursement of aid. Thus, aid perhaps provides a more stringent test of the embeddedness hypothesis; that is, state control over aid transactions may pre-empt other forms of private regulation needed for more conventional economic exchanges. However, as other scholars have argued, aid typically comes with a bag of mixed (and often utilitarian) motivations. Aid can be used to achieve development objectives, respond to humanitarian emergencies, promote commercial opportunities, or strengthen geopolitical ties. Therefore, whether shared ties through organizations enable aid flows remains an important empirical question.

Aid also provides an opportunity to extend theory on global networks. As Alcacer and Ingram (2013: 1058) note, "relational governance is specific to the members of a relationship." Whether aid flows from one member of an international organization to another depends on the recipient country as well as the tie itself. We heed this call by focusing on the characteristics of the recipient country that interact with shared affiliations with donors to enable the flow of aid. To do so, we draw upon the world society literature and its relational dimensions to explain why aid is more likely to flow through some dyads and not others.

Specifically, we ask: 1) How are bilateral aid flows between donor and recipient countries conditioned by their shared memberships within international nongovernmental organizations (INGOs) and intergovernmental organizations (IGOs)?; and 2) Does this relationship hold when we examine recipients at different levels of economic development and state strength? Drawing upon a multi-stage analysis of more than 61,000 donor-recipient dyad-years, we find that shared organizational affinities increase the likelihood of aid ties between

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countries, but are only associated with increased volumes of aid for those recipients at the lowest levels of development. Our findings suggest that aid and international organizations are tightly coupled in more resource poor environments. However, when local material needs are less dire, the international aid system is more loosely coupled with the organizations likely to mobilize or distribute the aid. An alternate story hints that international organizations are more likely to distribute aid when the local state is weak. Thus, our findings have important implications for global inequality, particularly if international organizations can facilitate the flow of aid to where it is needed most.

We begin by briefly reviewing prior literature on aid before developing our argument for why relational ties within world society are an important but understudied consideration. We then discuss our methods and results before concluding the paper with a discussion on the implications our paper holds for future research.

Aid and International Organizations

Official development assistance from country members of the Organisation for Economic and Cooperation's Development Assistance Committee (DAC) amounted to nearly $135.2 billion in 2014 (oecd.org). The United States government gives the most annually ($32.7 billion in 2014), though Scandinavian countries tend to give the largest percentage of GNI in aid (1.10% and 0.99% for Sweden and Norway, respectively). More recently, non-DAC donors have entered the fray. Although data is not captured in traditional reporting systems, the AidData project has tracked more than $73 billion in Chinese aid to more than 50 countries between 2000 and 2011. Estimates of total aid from all 38 non-DAC donors range from $11-42 billion. [1]

Aggregated flows of bilateral aid tell us little about how aid itself is organized. Beginning in the 1970s, the international development system, including most bilateral aid, underwent a dramatic shift as governments and multilateral donors began to focus on improving individual welfare rather than launching national economic growth (Chabott 1999). Coupled with the change in focus by traditional development institutions was the rise of international nongovernmental organizations charged with implementing "people participatory" forms of development in poor countries, such as UN-sponsored postwar reconstruction programs in Central America that mandated NGO involvement (Reimann 2006). The shifting landscape of foreign aid has thus led scholars to reconsider conventional reasons why countries give aid.

Scholars have long been interested in the decision by wealthy nations to donate aid to poorer ones (i.e. Lumsdaine 1993; Schraeder, Hook and Taylor 1998). Realist accounts posited that aid was given primarily to serve the geopolitical and commercial interests of powerful donors (Morgenthau 1962). Scholars cited the concentrated aid flows between donors and their former colonies and current trade partners as examples of such self-interest (Bermeo 2011; Berthelemy 2006). The end of the Cold War suggested that such self-interested aid would subside yet donors continued to provide assistance, presumably tying aid to policy objectives or more humanitarian concerns (Opeskin 1996; Schraeder, Hook, and Taylor 1998). Recent scholars have looked to the changing nature of aid, including its distribution among a greater number of countries and its changing priorities (Kilby 2011; Swiss 2011; Ilcan and Lacey 2011).

A dyad-level prediction based on conventional accounts is straightforward. If aid were motived by self-interest or utilitarian concerns, we might expect aid between a donor and a given recipient to depend on whether one is a former colony or current trade partner of the other. In contrast, if humanitarian concerns were paramount, we might expect aid to be driven by the level

of development or recent humanitarian disasters in the recipient country (i.e., where the need for aid is presumably greater). Thus, we treat many of these explanations as control variables in the subsequent analyses (specifically, past colonial relationships, mutual trade partnerships, and recent conflicts and natural disasters). We also examine whether countries with more democratic institutions receive more aid, as previous research on donor selectivity has suggested (Dollar and Levin 2006; Alesina and Dollar 2000).

We suggest an additional alternative that highlights how aid is organized through the relational configurations of world society. Neoinstitutional scholars have argued that features of modern nation-states, such as public policies and education systems, "derive from worldwide models constructed and propagated through global cultural and associational processes" (Meyer et al. 1997:144). Nation-states seek legitimacy in the global system by adhering to common models broadcast by international organizations, producing a tremendous amount of isomorphism in structures, policies, and organizations (Frank et al. 2000; Hafner-Burton and Tsutsui 2005). Recent scholars have highlighted the importance of world society for other consequences, such as aggregated aid flows. Swiss (2012b) found that countries that adhere to world society norms and organizations typically received more overall aid from bilateral donors, a finding demonstrated at the sector level by Barrett and Tsui (1999) in the case of countries adopting national population policies (see also Peterson 2014).

World society scholars often use aggregated national memberships in international nongovernmental organizations (INGOs) as a proxy for connectedness to world society (Boli and Thomas 1999). However, recent scholars have argued that world society theory is inherently relational, as it "implies that ties between states through INGOs create an international social network," and thus network measures may be a better proxy for how near or distant a country is

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from the center of world society (Paxton, Hughes, and Reigh 2015: 301). Network measures

also account for which INGOs may be most influential in the transmission of world society

(presumably, two countries may have the same number of INGO memberships but belong to

very different ones). At the dyad level, shared INGO memberships between two countries also

suggest a possible conduit through which aspects of world society move from one party to

another. Thus, scholars have begun to map out the world society network created through ties

between states via shared memberships in INGOs (Hughes et al. 2009; Paxton, Hughes, and

Reith 2015) and IGOs (Beckfield 2010), as well as how shared ties via IGOs affect trade

(Ingram, Robinson, and Busch 2005), foreign direct investment (Alcacer and Ingram 2013),

democracy (Torfason and Ingram 2010), and conflict (Hafner-Burton and Montgomery 2006).

However, to our knowledge, scholars have not yet examined how the relational structure of

world society via INGOs determines outcomes at the national level, or how the network structure

of either INGOs or IGOs shapes aid flows, in particular.

From a broader network perspective, ties between donors and recipients formed through

shared membership in international organizations help to smooth over difficulties associated with

economic exchange. As Martens (2005) notes, functionalist accounts of aid implicitly assume

that donors have full information of recipient needs and that the preferences of both parties are

aligned (i.e., the donor wants to give aid and recipients want to receive it). However, uncertainty

is endemic to aid transactions, particularly when aid is conditional, as donors rarely have full

information on whether the recipient country will be able to effectively administer the aid.

Although aid is not an economic exchange like trade or foreign direct investment (i.e., there is no

direct return of goods or services), similar costs and risks exist that make the disbursement of aid

less than obvious. Thus, intermediary organizations, like aid agencies, consultants,

nongovernmental organizations, and missionaries, are introduced to help reduce the uncertainty associated with the long-distance donation (Martens 2005; Ilcan and Lacey 2011; Watkins, Swidler, and Hannan 2012).

Numerous studies find evidence of relational ties formed through IGOs facilitating economic exchanges between countries. Intergovernmental organizations have a normative influence that facilitates cross-national trade and investment. They can mitigate cultural and social differences that can potentially hinder exchange among member states, as well as bring about "sympathy and empathy by creating the perception of joint purpose between the citizens of states that pursue shared social, cultural, humanitarian, and other noneconomic end" (Ingram, Robinson, and Busch 2005: 80). And, when state capacity to regulate private exchange is weak or nonexistent, IGOs are even more vital to opening up avenues of exchange (Alcacer and Ingram 2013; Ingram, Robinson, and Busch 2005; Zhou 2010; though see Schrank 2013 for a critique). Such networks are important for other outcomes, as well. Torfason and Ingram (2010) argue that the global network of IGOs has facilitated the diffusion of democracy through the sharing of norms and information about legitimate forms of governance. Regarding aid, specifically, Gaydosh (2012) finds that IGO ties are important predictors for aid between the United States and sub-Saharan African countries.

These studies are limited by their explicit focus on intergovernmental organizations, like the WTO, which are explicitly designed to govern economic exchanges. This is in part due to data availability, as annual dyad-level data on IGO memberships is available through the Correlates of War dataset. However, research on world society has consistently shown that INGOs are also important mediators through which norms and institutions are shared between states, organizations, and individuals (Boli and Thomas 1999). Scholars in this tradition argue

that global institutions and culture play a critical role in the diffusion of national policies and subnational organizations among nation-nations-states (Meyer et al. 1997; Schofer et al. 2012; Frank, Hardinge and Wosick-Correa 2009; Schofer and Longhofer 2011). Indeed, research on the influence of world society on the diffusion of policies and priorities among aid donor agencies has shown that aid actors are not immune to these global models (Swiss 2011; 2012a). However, while an abundance of studies have looked at the effects of INGOs on policy adoption and the diffusion of organizational practices, few have drawn upon it to explain resource flows between countries. One notable exception is Barrett and Tsui's (1999) study of population policies, in which the authors found that national population policies signaled developing countries' commitments to the international community and thus fostered more financial assistance from the United States.

We build on their prior work, as well as recent work on the INGO network (Hughes et al. 2009; Paxton et al. 2015), by looking to the role of shared INGO memberships in fostering aid from a wider set of bilateral donors. We posit that shared memberships in INGOs are likely to be consequential for aid for at least three reasons. First, over the past three decades, INGOs, and NGOs more generally, have become key subcontractors of aid projects, sometimes receiving official governmental aid directly (Ilcan and Lacey 2011; Watkins et al. 2012). Critics who charged traditional forms of aid (from government to government) as being too costly and inefficient argued that NGOs could more effectively deliver aid by relying upon more volunteers and "on the ground" information, though evidence to support the claim was spotty (Edwards and Hulme 1996). In as early as the 1990s, Canada, Germany, Netherlands, Switzerland, and the Scandinavian countries, along with the U.S., were channelling 10-25% of all aid through private organizations (Smillie and Helmich 1999; Reimann 2006). It is now estimated that 30% of all

U.S. aid flows through private organizations, including INGOs and for-profit contractors, each year (Stroup 2012).

Second, even if the INGO itself is not the official subcontractor of aid, it can serve to smooth over cultural and social differences that introduce uncertainty by providing governments with important information about the need for aid or how it might be used. As Ingram et al. (2005: 851) note, "NGOs may serve a purpose analogous to that we ascribe SCIGOs [social and cultural IGOs], in terms of knitting together national cultures, creating empathy, sympathy, and trust at the seams." Similarly, Brinkerhoff and Brinkerhoff (1999: 255) describe how partnering with NGOs can help donor governments "expand and enhance the relevance of their projects and programs, create new understandings, and attain effectiveness where it was previously unattainable."

Finally, at a more general level, shared membership in INGOs signals a commitment to the broader agendas of world society and a conduit through which those agendas travel. As Chabbott (1999:246) notes, INGOs impress "on the world polity both the moral imperative and the practical feasibility of addressing human needs on an international basis" (see also Boli 2006). For example, INGOs can motivate the act to give aid by raising awareness of global emergencies in need of immediate action by members of world society (i.e., natural disasters). As a consequence, scholars have begun to investigate the effects of embeddedness in world society on aggregated aid flows (Swiss 2012b; Barrett and Tsui 1999). Thus, for these three reasons – whether INGOs represent subcontractors of aid disbursements, facilitators of economic exchange, or shared commitments to the agendas of world society -- we expect: *The greater the number of shared dyadic INGO ties between a donor and recipient, the more aid is likely to flow between them.* We further expect shared IGO ties to have a similar effect: *The greater the*

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number of shared dyadic IGO ties between a donor and recipient, the more aid is likely to flow between them.

However, reasons to question the straightforward assumption that donors are more likely to give aid to recipients that belong to the same organizations arise once we adopt a network perspective. Beckfield (2003; 2010) notes that world society is heterogeneous and unequal, with wealthier countries significantly more embedded (i.e., have more memberships) than poorer countries. The implications for our study are clear, as semi-periphery countries may have more memberships but relatively less need for aid than more peripheral ones. Thus, if aid were primarily driven by need in the recipient country, shared ties may not be a good indicator of aid flows. However, we heed Alcacer and Ingram's (2013) call to pay close attention to the parties of the exchange, or the nodes of the network, as well as the ties between them. In their case of FDI, shared IGO memberships were particularly important when one party to the exchange was non-democratic, as democratic institutions can provide greater security for an investment, thus making the IGO redundant. Similarly, we might expect ties to matter more for countries in greater need. Membership in international organizations signals efforts by recipient countries to meet and maintain legitimacy in the international system (Meyer et al. 1997). Put differently, poor countries may seek out memberships as a way to gain favour with donors as so-called 'aid darlings.' Evidence also suggests that world society effects are most prevalent in developing countries where domestic institutions are somewhat weaker (Longhofer and Schofer 2010). For example, part of the shift in the international development regime beginning in the 1980s mandated that IGOs and INGOs be the primary monitors of governance in poor countries (Chabbott 1999). Thus, we expect *the relationship between shared dyadic ties and aid flows will be greater for recipients at lower levels of economic or political development.*

Data and Methods

We compiled a dataset of dyadic foreign aid flows using data culled from the
Organization for Economic Cooperation and Development (OECD) Query Wizard for
International Development Statistics. The country dyad sample consists of 278,256 dyad-years,
composed of 6,512 separate dyads representing 44 donor countries and 148 possible recipient
countries. [2] Data spans the period from 1978 through 2010. Recipient countries enter into the
dataset either in 1978 or following independence.

Relying upon the OECD as the source of data on aid flows means that most of our donor
countries are members of the OECD's Development Assistance Committee (DAC), and if not,
are countries that have chosen to report their aid through the OECD. DAC countries are OECD
members that meet specific criteria set by the OECD regarding "the existence of appropriate
strategies, policies, and institutional frameworks that ensure capacity to deliver a development
co-operation programme," as well as proper monitoring and evaluation systems to measure aid
performance. [3] DAC members pledge to submit all official development statistics to the
OECD's Creditor Reporting System, making it possible for researchers to analyze the patterns of
aid flowing from the largest donor countries.

We employ a two-stage approach to model the relationship between shared
organizational ties and foreign aid levels. In the first stage we use a random effects logit
regression to model whether or not there is an aid relationship between a dyadic pair in a given
year. From our full sample of dyadic aid flows, we restrict our sample to only those dyads for
which we have data on all of our independent variables, reducing our sample size in the first

stage of the analysis to 61,152 dyad-years representing 3,047 dyads, 40 donors, and 119 recipient countries.

In the second stage of our analysis we use two-way fixed effects regression to model the effect of shared organizational ties on the amount of aid transferred within all those dyads where an aid tie exists. [4] The sample of dyads in the second stage is reduced to 2,147 dyads where there is a net positive flow of aid in a given year. This represents 30,463 dyad-year observations, 37 donors, and 118 recipient countries. To account for unobserved heterogeneity between dyads and autocorrelation within we use White standard errors clustered on each dyad. The two-way fixed effects model includes time fixed effects through a dummy variable for each year from 1978 through 2005. Time fixed effects allow us to account for any prevailing period effects influencing all dyads in our sample, such as a global economic downturn. [5]

We treat the aid relationship between countries as a two-stage process from the donor's point of view: (1) will we provide aid to this country?; and, if so, (2) how much aid will we provide? In this way, we assess the influence of shared organizational ties on both decisions – whether to provide aid and how much to provide.

[TABLE 1 ABOUT HERE]

[FIGURE 1 ABOUT HERE]

Dependent Variable

The focus of this study is the aid relationship between two countries. First, we examine whether an aid relationship exists in a given year, and, if so, analyze the net volume of foreign aid in millions of constant 2000 US dollars between the two dyad members in that year. Once the dyads in the dataset with no aid flows are accounted for, the overall median aid flow for the sample is $1.88 million, while the mean is $20.46 million. Annual mean aid flows range from a

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low of $11.91 million in 2001 to a high of $32.27 million in 1988. Figure 1 captures the fact that

there is no consistent trend with average annual aid flows over the sample period. There was a

significant decline in average flows throughout the 1990s followed by modest increases in the

past decade, but overall the trend over time has been mixed. This pattern of decreasing total aid

flows reflects both the pullback in aid witnessed with recessionary politics in the West in the

1990s, as well as the overall proliferation of donor-recipient relationships in this time. For

instance, even though between 1990 and 2010 the total ODA eligible countries as defined by the

OECD DAC dropped from 170 to 153, the average number of countries the top 29 Western

donor countries provided bilateral ODA to rose from approximately 40 to 53 (Brown and Swiss

2013). Indeed, in recent years, bilateral official development assistance had reached its peak

levels, achieving a total among DAC donors of nearly $135 billion USD in 2013. This means

that more aid has been spread among more recipients even though fewer countries are eligible:

this dispersion and fragmentation of aid has indeed been a concern of aid donors for much of the

past decade as part of the so-called 'aid effectiveness' agenda (Brown and Swiss 2013; Easterly

and Pfutze 2008; Easterly and Williamson 2011; OECD 2005). In the second stage of our

analysis we use the five-year lead of the aid flow measure for each dyad. [6] This means, for

instance, that our dependent variable for dyads in 1990 is the aid flow values for the year 1995.

Thus, although the remainder of our covariates span the time period from 1978 through 2005, we

are actually estimating their effect on dyadic aid flows in the period from 1983 through 2010.

We log the aid flow measure to account for skewness.

Organizational Affinities: Shared INGO and IGO ties

Our main independent variables are the number of international nongovernmental (INGO) and intergovernmental (IGO) memberships shared by a dyadic pair of countries. The INGO ties measure is drawn from Hughes et al. (2009) and represents the mutual INGO memberships of dyad partners at three time points: 1978, 1988, and 1998. [7] A country-level INGO membership score refers to the total number of INGOs to which any citizen of a country belongs (Boli and Thomas 1999). [8] Correspondingly, shared INGO memberships represent the total number of INGOs to which citizens of both countries in the dyad belong. For example, if a citizen in Ghana and a citizen in the United Kingdom both belong to Oxfam, then the dyad-level shared membership score is "1." Hughes et al. (2009) published data only for the years 1978, 1988, and 1998. In our models we employ linear interpolation and extrapolation to predict annual measures of shared INGO ties. [9] Median INGO ties range from 32 in 1978 to 110 in 1998. In 1978, some dyads in the sample share no INGO memberships in common, while by 1998, the minimum number of dyadic INGO ties is 13. In keeping with research about the increasing complexity of world society over time, the trend of a greater number of shared ties among dyadic partners holds across our period of analysis.

Our shared IGO ties measure is drawn from the Correlates of War IGO data set (Pevehouse, Nordstrom and Warnke 2004). Like the INGO ties measure, the shared IGO memberships count represents all those intergovernmental organizations to which each country in a dyad are members. This measure is recorded annually and ranges over a median IGO dyad score of 25 in 1978 to a median of 34 in 2005. The sheer number of common IGO membership ties increases over the period of our analysis, with a minimum shared ties in 1978 of 4 IGOs to a minimum of 16 IGOs in 2005. This indicates the increasing number of IGOs in this period and

mirrors similar growth witnessed in INGOs. In our fixed effects models we log both the INGO and IGO measures to account for skewness.

Recipient Controls

We include six recipient country variables as controls: total population, total official development assistance received [10], GDP per capita in constant 2000 USD terms, Polity IV democracy/autocracy score, the presence of intrastate conflict, and the total number of population affected by disaster in a given year (World Bank 2012; Marshall, Jaggers and Gurr 2009; UCDP/PRIO 2013; CRED 2013). These factors account respectively for the influence of the size of a recipient society, the herd mentality of donors in providing more aid to so-called 'aid darlings', the role of lower levels of economic development, the effects of conflict, and the impact of disasters. Population, ODA volume, GDP per capita, and disaster-affected population are logged to address skewness. The conflict dummy variable indicates a year in which there were greater than 1,000 battle related deaths as a result of intrastate conflict.

The Polity IV measure allows us to test the effects of two divergent aid trends: democracy promotion and aid to fragile states. If we witness aid is higher in those countries at the lowest levels of democracy, we may find support for the notion that aid is flowing to that recipient in an effort to promote democracy or that it is flowing to countries with the weakest democracies in an effort to support fragile states (e.g. Afghanistan and Iraq).

Other Dyad Controls

Our models include three dyadic controls that specify features of the relationship between donor and recipient states. Following other dyadic research on issues like trade (Zhou 2010), we

specify several aspects of the dyadic relations to control for the competing theoretical perspectives on aid. First, we control for whether a dyad was ever in a colonial relationship. In our sample, 102 dyads are those with past colonial ties and are the category of interest in our dummy variable, reflecting 3.4 percent of all dyads in our analysis. To account for the effects of economic ties between dyad countries we include measures of their economic relations and development. This allows us to control for the perspective that aid is really about facilitating other donor national interests such as trade and investment. We include two measures to test this premise, including the physical proximity between the capital cities of both dyad partners (Mayer and Zignago 2011) and the value of mutual imports between dyad partners (Barbieri, Keshk and Pollins 2009). We log both of these measures to account for skewness. In the fixed effects models, both the colonial relationship and physical distance measures are dropped from the models because they do not vary over time within a dyadic pair.

Interaction Effects

A common finding in recent research on world society is the extent to which it penetrates societies unevenly, often incorporating under-developed or weak states in a much less intensive fashion than it does the developed west (Beckfield 2003; Beckfield 2008; Clark 2010; Swiss 2009). Previous research on the effects of organizational ties in world society has shown that INGO ties have differential effects on norm adoption and enforcement in weak states (Swiss 2009). Weaker states are less likely to be embedded in world society, but we expect that the organizational ties they do possess will increase aid flows more so than in more effective states.

To account for the potential differences in effects of organizational affiliation in different types of states we modeled the interaction of our dyadic INGO and IGO membership measures

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with recipient GDP per capita and with recipient Polity IV scores. These interactions will allow us to differentiate the effect of shared organizational affinities between different levels of recipient country economic development and democratization. [11]

Results

In the first stage of our analysis we estimate the likelihood of an aid relationship existing between countries in each annual dyadic pair between 1983 and 2005. Results in Table 2 show the exponentiated logit coefficients, or odds-ratios, for each of our measures. Along with the recipient and dyad level controls, Model 1 includes our shared INGO memberships variable, model 2 the shared IGO memberships measure, and model 3 includes both organizational affiliation measures. In each case, the odds of an aid tie within a dyad are increased by shared organizational affiliation. For instance, in model 1, the odds ratio for INGO memberships of 1.006 means that an increase of 87 shared INGO memberships (1 standard deviation) would increase the odds of a dyadic aid tie by 68%. [12] Likewise, in model 2, a more modest standard deviation increase in shared IGO memberships of 9 IGOs predicts an increase in the odds of an aid tie of 195%. Model 3 echoes these findings, showing that when both organizational types are considered, the marginal effect of an IGO tie has a larger effect on the likelihood of an aid tie between countries. Figure 2 plots the predicted probability of an aid tie at different levels of each shared organizational membership type, all else equal. At the highest levels of shared ties, the probability of an aid relationship nears 100% in each case, though the increase is more gradual in the case of INGO ties than for IGO ties.

[FIGURE 2 ABOUT HERE]

[TABLE 2 ABOUT HERE]

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Not surprisingly, other control factors in the models are also strong predictors of an aid tie. Notably, if a country is a former colony of the donor country, the probability of an aid tie is sharply increased. A former colony has a 95% probability of receiving aid from its former colonizer, whereas a country that was never in a colonial relationship with the donor has a predicted probability of only 43%, holding everything else at its mean. The lone factor associated with a reduced likelihood of aid ties is recipient GDP per capita. With increased national income of the potential recipient country, the odds of an aid relationship diminish. Donors are more likely to provide aid to poorer countries, all else equal.

[TABLE 3 ABOUT HERE]

Shared organizational memberships predict an increased odds of a foreign aid relationship between dyadic partners. Once that decision to provide aid has been taken, how do shared ties influence the levels of dyadic aid flow between donor and recipient? In the second stage of our analysis, we model this effect using a two-way fixed effects regression that accounts for static characteristics within dyads over time as well as for macro-level factors influencing all dyads in a given year. The effects of common dyadic INGO and IGO memberships are shown below in Table 3. Model 4 includes the recipient country and dyad-level controls. Both recipient country population and GDP per capita are significantly associated with aid flows, but in opposite directions. The greater the population of a country, the more aid it will receive. Conversely, the wealthier the country, the less aid it is likely to receive from a donor. Likewise, countries with a recent experience of conflict are likely to receive 11.5% more aid than those that have not, all else equal. Trade between dyad partners has no notable effect on the level of aid.

In Model 5 we introduce the INGO dyad score. The effect of shared INGO memberships is slightly negative, reducing the predicted amount of aid between dyad members. For instance,

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a 20% increase in the number of shared dyadic INGO memberships, would predict only a 1.36% reduction in aid flows between countries, all else equal. A 50% increase in shared INGO memberships would result in about a 3% predicted decrease in dyadic aid flows. The effects of the recipient factors echo those from the first model. Shared IGO memberships is included in Model 6 and is also negatively related to aid flows. A 20% increase in the number of shared IGO ties within a dyad predicts about an 11.3% decline in aid. Likewise, a 50% increase in IGO ties would yield a 23.5% reduction in aid between dyad donor and recipient, ceteris paribus.

In contrast to the effects of shared ties in the first stage of our analysis – associated with sharply increased likelihood of any aid tie between countries – our results here suggest that once aid ties are established, the more ties a donor and recipient country share, the lower the level of aid likely to flow within the dyad. For instance, a dyad at the 25th percentile of shared INGO ties (44 shared ties) is predicted in Model 5 to see $3.17 million in aid flow from donor to recipient, while an identical dyad at the 75th percentile of shared INGO ties (174 ties) had a predicted aid flow of only $2.86 million. This effect is more pronounced with shared IGO ties, where a dyad at the 25th percentile of shared ties is predicted to have aid flows of $3.44 million, while a similar dyad at the 75th percentile of shared ties is predicted to have aid flows of only $2.68 million, all else equal.

To assess our second hypothesis, we included interaction effects for INGO and IGO ties with both GDP per capita and democracy in the recipient country. Model 7 in Table 3 shows the results of the first interaction between INGO ties and GDP per capita and indicates that shared organizational memberships do not uniformly affect dyadic aid flows. Instead, all else equal, we find that INGO ties have a positive effect on aid levels at the lowest levels of recipient GDP per capita, but that the marginal effect of shared ties diminishes as the level of recipient GDP per

capita increases. Model 8 repeats the same interaction for IGO ties, again showing that at the lowest levels of GDP per capita, IGO ties have a positive effect on aid flows, but that the effect diminishes as countries increase their national income per capita.

[FIGURE 3 ABOUT HERE]

[FIGURE 4 ABOUT HERE]

Based on these interaction effects, Figures 3 and 4 show that the marginal effects of shared INGO and IGO ties are positive at the lowest levels of recipient GDP per capita. Assuming we hold donor factors constant, this means shared memberships only have a positive influence on aid to the poorest countries in our sample, meaning that when faced with providing aid to two equally poor recipient countries, the country which shares greater INGO and IGO memberships in common with the donor is likely to receive more aid. Once a certain threshold of national income is reached this relationship changes; with wealthier recipients the more ties a dyad has in common, the less aid is likely to flow between dyadic partners.

To assess whether the effect of shared ties also varied by level of political development in recipient countries we also included interactions between aid ties and Polity IV score. Models 9 and 10 reveal a similar pattern to that seen with GDP per capita, with the effect of shared ties diminishing as countries become more democratic. In contrast to the earlier interaction results, however, even the most authoritarian regimes show a negative effect of shared ties on aid flows. Thus, the level of political development does influence the effect of shared ties, but that influence results only in magnifying the negative relationship between shared ties and aid. The same number of shared ties in a more authoritarian regime and in a more democratic one would reduce aid more in the democracy.

Discussion and Conclusion

We find that organizational affinities are important predictors of whether any aid flows between countries, and also predict increased aid to countries at the lowest levels of economic development. By informing both the decision to provide aid at all, and if so, how much aid to provide, the effect of shared ties plays an interesting and contradictory role. Our contention is that world society rewards peripheral countries that seek out legitimacy by the international system, but that these rewards likely reflect domestic realities, as well. In the case of aid, it is the combination of memberships and local need that result in increased aid flows from donors to recipients. For these recipients, participation in international organizations may signal adherence to global norms about proper state activity, provide necessary information to donors about local situations, and reduce transaction costs for donors. As the level of development goes up in a country, so do its organizational memberships, and thus memberships alone are a poor predictor of aid flows.

Aside from signalling state legitimacy and adherence to international norms, the increased presence of international organizations in a developing country also helps facilitate the delivery of aid programming. Bilateral and multilateral foreign aid is seldom delivered solely through local governments. Indeed, organizations ranging from INGOs like Médecins sans frontières (MSF) and Oxfam to IGOs like the International Labour Organization or the regional development banks are common partners for bilateral aid donors. In this respect, shared organizational affinities may help directly in the delivery of aid programs. When an INGO or IGO wants to undertake development programming in a given developing member country it can court donors from developed member countries to fund the program – especially in the case

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where international organizations do not have dedicated sources of funds for delivery of aid programming.

The reliance of donors on INGOs and IGOs for the delivery of aid is readily apparent when taking a cursory look at the top recipients or executing agencies of bilateral aid. For instance, in fiscal year 2012 (FY2012), the top two recipients of USAID funds were the World Bank and the UN's World Food Program, receiving more than $3.1 billion in aid funds that year (USAID 2013). Likewise, of the more than $7.6 billion received by the top-40 USAID vendors in FY2012, nearly $4 billion went to INGOs and other domestic nongovernmental agencies.

[TABLE 4 ABOUT HERE]

American reliance on INGOs and IGOs to deliver foreign aid funds and act as conduits through which global norms and models can be channeled is also reflected in the global donor community. Table 4 illustrates the breakdown of donor spending by funding channel for 35 donors tracked by the OECD's Creditor Reporting System – a clearinghouse of data on the flows of aid at the project level – for more than 143,000 projects implemented by donors in 2011. The results show a diversity of channels used for implementation, but that even in the global donor community the reliance on IGOs and INGOs is still significant. Indeed, the highest mean level of spending by channel is donor aid channeled through IGOs, and the largest number of projects outside of the government/public sector are implemented by NGOs collectively. INGOs make up a significant portion of these funds and projects, and their share is likely underestimated given the reputation for donor reporting irregularities within the CRS data.

One only need look to the recent use of INGO and IGO aid actors to deliver humanitarian relief in the wake of Typhoon Haiyan in the Philippines to appreciate the extent to which the humanitarian aid sector relies heavily on interlocutors to deliver donor funded relief to disaster-

hit areas. Implementing partners for the $61.7 million in relief from the United States included Catholic Relief Services ($3m), Oxfam ($2.5m), Plan International ($3.25m), and a range of UN agencies, such as the World Foods Programme and UNICEF. [13] The reliance of donors on IGO and INGO partners to deliver funds like these has the potential to generate perceived negative impacts on the quality of aid delivered due to competition among a crowded set of actors (Cooley and Ron 2002). In the case of longer-term development aid, numerous examples of such competition can be seen in nearly every bilateral agency.

In line with this approach to humanitarian relief, donors' official development assistance programs – as indicated above in Table 4 – are also often delivered in partnership with or solely through the actions of an INGO or IGO partner. The shared memberships of states in these organizations helps anchor the aid project in both states through a trusted common partner, mitigating possible perceptions of risk by donor governments on behalf of their taxpayers and, at the same time, building aid relationships through IGO and INGO channels that are already acknowledged for their abilities to spread and build world cultural models and norms (Boli and Thomas 1999).

The reliance of donors on organizational actors to implement aid thus has the potential both to spread world society norms and models to developing countries and to strengthen these same world society organizations by funding their continued operations and existence. Foreign aid funds, in this instance, likely play a key role in augmenting the resource base for world society actors that exist and operate internationally. Future research should pay greater attention to the potential role aid plays in funding world society in this regard.

In analyses not shown here, we also find that shared ties matter for countries that are not former colonies in determining whether that country will receive aid. In this sense, the shared

memberships might act as a flag of legitimacy for a potential recipient that has relatively few historical ties to a donor state. In contrast, as shared INGO and IGO ties increase between a donor and its former colony, the predicted likelihood of an aid relationship (though still very high) decrease slightly. In the non-colony the shared memberships facilitate aid ties, while in the former colony they are perhaps taken for granted and/or assumed to indicate that the country may no longer require aid after all. This is perhaps not surprising, as colonizers and their colonies likely belong to similar organizations, especially if the organizations were formed prior to decolonization. However, the findings hint at an intriguing implication for world society; that is, are ties within world society in part an artefact of prior colonial relationships and, if so, what does this mean for the supposed universality of world society? We are agnostic on this point for the time being, though further research on this relationship, such as which colonial legacies are most reflected in shared memberships, is warranted.

We should note that our study comes with some caveats. As Schrank (2013) points out in his critique of Alcacer and Ingram (2013), foreign direct investment preceded IGO connections in the case of Taiwan, suggesting that reverse causality may be a problem in analyses like this one. Although we include appropriate lags in our models to correct for some serial autocorrelation, we have not fully addressed the causality concerns that our findings might suggest. For example, is aid a reward for participating in the international system or does aid lead to increased participation? It seems plausible, and perhaps likely, that the arrival of aid from powerful actors in world society brings with it opportunities and perhaps expectations to join relevant international organizations. Future research from this project will delve into this issue in greater detail.

Our study makes a number of contributions to the literatures on social networks and world society. We introduce a new form of economic transaction to the growing literature on shared organizational ties and exchanges like trade and foreign direct investment (Alcacer and Ingram 2013; Ingram, Robinson, and Busch 2005). Like those studies, we find that shared memberships facilitate the flow of aid, but only when the economic characteristics of the recipient countries are taken into account. We also introduce non-governmental memberships, in particular, which has been lacking in prior research.

Finally, our study contributes to our understanding of world society, a relational theory (Paxton et al. 2015) that has tended to focus primarily on aggregated INGO memberships and the adoption of ceremonial policies. In addition to contributing an analysis that examines how shared INGO ties shape resource flows between states, our findings also raise implications for the supposed universality of world society. Aid flows are not motivated purely by humanitarian or utilitarian concerns. Instead, they depend in part on the social structure of a world society that Beckfield and others have noted is uneven in terms of which countries belong to which international organizations. Our findings suggest that the uneven structure of world society brings with it uneven rewards, as well. If our results are accurate, those countries in need of aid that rest on the periphery of world society are unlikely to receive the same level of generosity from the aid regime as a similarly resourced country with more ties via international organizations that presumably conforms more to global norms and expectations. In other words, international organizations may alleviate inequality by facilitating the flow of foreign aid for some countries but, through their absence, augment it for others.

About the Authors

Liam Swiss is an assistant professor of sociology at Memorial University in St. John's, Canada. His research examines the role of foreign aid in international norm diffusion, violence against aid workers, and women's political representation in the Global South. His research has appeared in the *American Sociological Review*, *Development Policy Review*, *Social Forces*, and *Third World Quarterly*.

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Endnotes

[1] http://aiddata.org/opening-data#nondac_donors

[2] We also collected information on dyadic aid flows between countries and select international organizations in the OECD dataset. We chose not to include these international organization aid flows in our analysis because our unit of analysis is the donor-recipient country dyad.

[3] http://www.oecd.org/dac/dacmembers.htm

[4] If we include all dyads – even those with zero aid in a given year – our main INGO and IGO findings hold.

[5] At the urging of an anonymous reviewer to account for concerns about endogeneity we ran alternate instrumental variable regression models with two-way fixed effects for dyads and years. Following Murdie (2014) we used logged annual tourist arrivals and annual percent increase in telephone lines as instruments for dyadic INGO and IGO ties. Results of these models echo those we present here, but are not included in our final study for sake of parsimony.

[6] In his critique of Alcacer and Ingram (2013), Schrank (2013) suggests their use of a 1-year lag does not take into account the time it takes to bring foreign direct investment from conception to execution. Thus, we employ a five-year lag structure here, though we did not find evidence to suggest our findings are sensitive to other lag structures.

[7] We thank Melanie Hughes and her co-authors for generously sharing this data with us.

[8] It is important to note that the membership score does not depend on the total number of members in each country of a given INGO (rather, a single member and multiple members both generate a membership score of "1"). In theory, one could also measure the strength of an INGO tie by looking at how many members in each country belong to the organization. However, the UIA's *Yearbook of International Organizations*, from which the network data is collected, does not include information on total memberships.

[9] We adopted this approach at the suggestion of an anonymous reviewer. We also ran two other sets of alternate models: in (1) we carried forward the values from each observed year for the subsequent decade (*i.e* before 1988, each dyad has the 1978 INGO score; from 1988 to 1997 dyads had the INGO score for 1988; and all years 1998 and higher were coded with the 1998 value.) and in (2) we also repeated our analysis using only the three panel years of 1978, 1988, and 1998. Results were more or less consistent with those reported here when we use either alternate approach.

[10] Minus the dyad amount represented in the dependent variable.

[11] Admittedly, GDP per capita is a crude aggregate measure of development, but it is the simplest means of differentiating between different development levels among recipient countries in our sample.

[12] We calculate the predicted change in odds for a 50 membership increase as follows: $((1.006)^{50}-1)$ x 100 = 34.8.

[13] http://www.usaid.gov/sites/default/files/documents/1866/12.03.13_USAID-DCHATyphoonYolandaHaiyan_FactSheet15.pdf

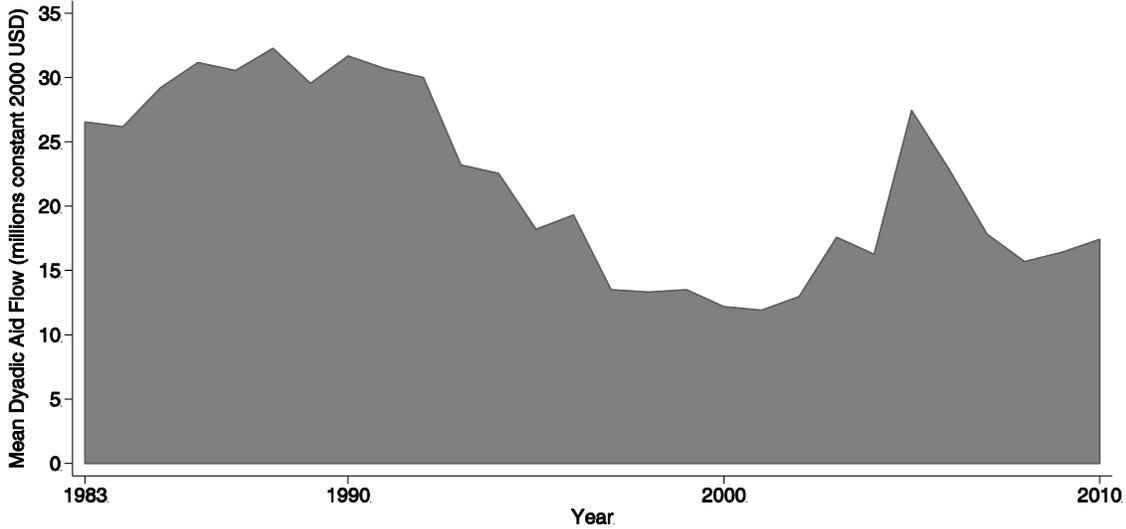**Figure 1: Average Annual Dyadic Aid Flows, 1983-2010 (millions of constant 2000 USD)**

Figure 2: Predicted Probabilities of Dyadic Aid Tie by level of INGO and IGO Ties with 95% Confidence Intervals
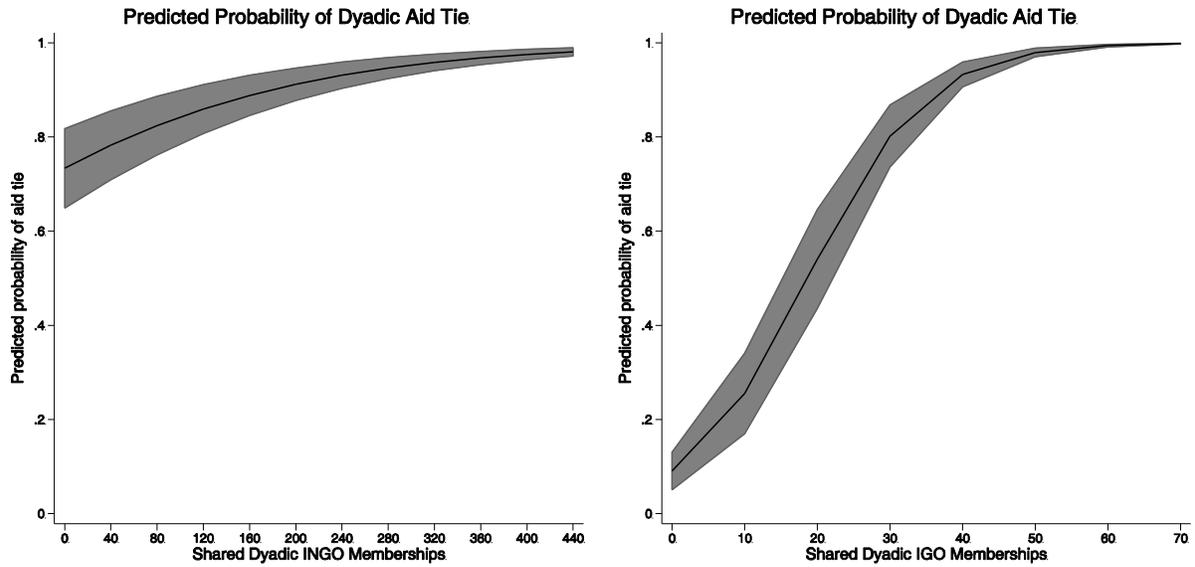
Figure 3: Average Marginal Effects of Shared INGO Ties by Recipient GDP per capita with 95% Confidence Intervals
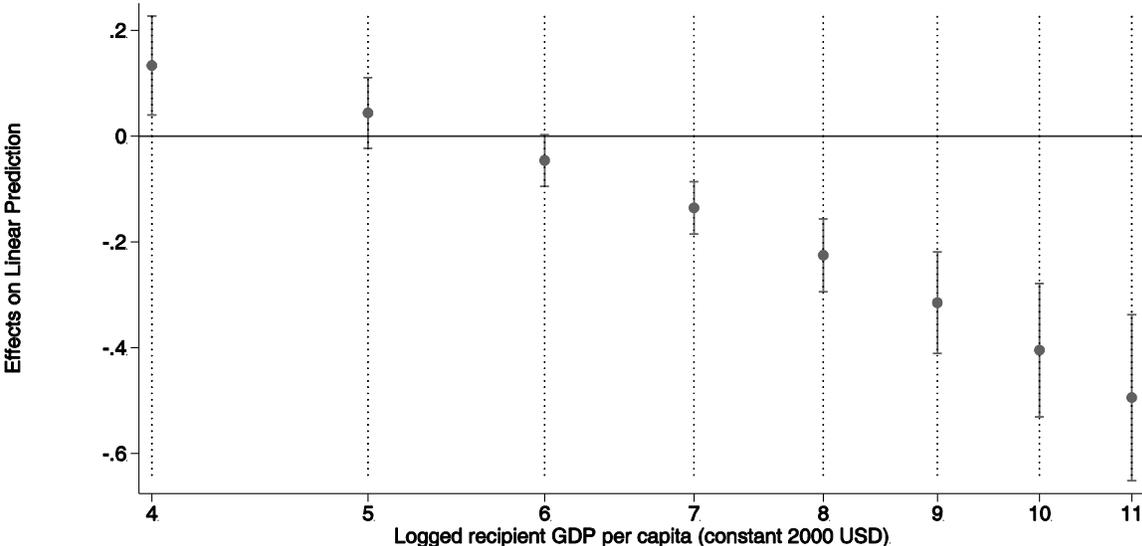
Figure 4: Average Marginal Effects of Shared IGO Ties by Recipient GDP per Capita with 95% Confidence Intervals
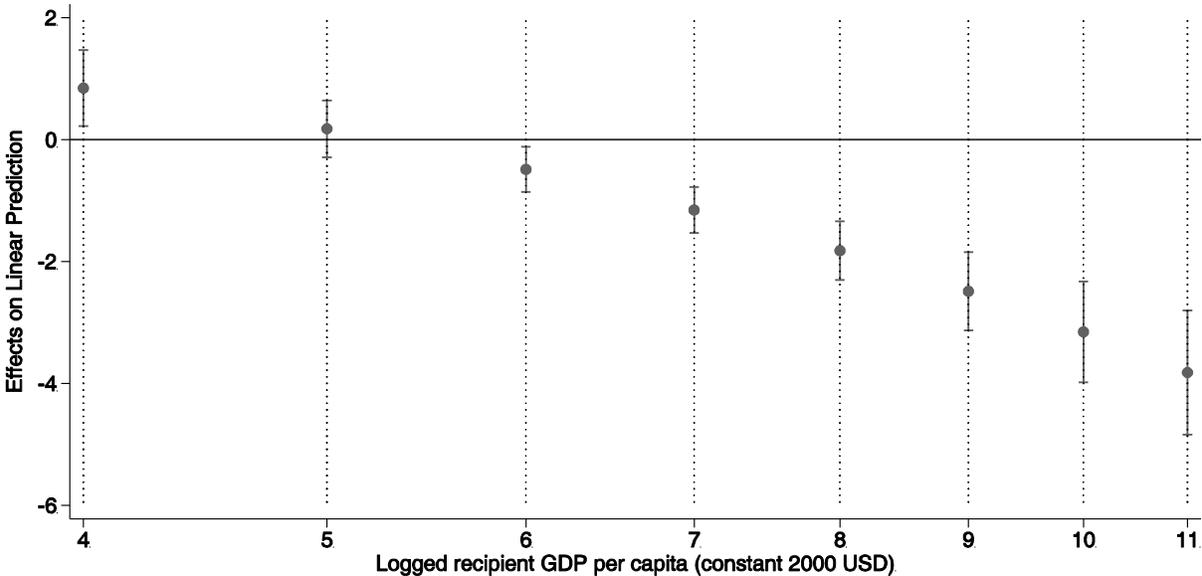
Table 1: Dyadic Aid Flow Measures (millions of 2000 constant dollars), 1983-2010[*]

Year	Mean	Median	Min	Max
1983	26.54	2.49	0.02	2235.29
1984	26.16	2.53	0.02	2076.29
1985	29.19	3.35	0.02	3116.80
1986	31.17	4.34	0.02	2977.99
1987	30.56	4.29	0.02	1819.70
1988	32.27	4.66	0.01	1733.63
1989	29.54	4.17	0.01	1600.00
1990	31.69	4.20	0.01	3090.91
1991	30.67	3.75	0.01	3745.89
1992	30.02	3.68	0.01	2331.29
1993	23.19	3.03	0.01	1481.53
1994	22.56	2.40	0.01	1445.99
1995	18.20	2.32	0.01	1008.38
1996	19.31	2.56	0.01	2473.11
1997	13.49	1.75	0.01	581.55
1998	13.31	1.48	0.01	874.84
1999	13.51	1.34	0.01	1660.64
2000	12.17	1.23	0.01	970.10
2001	11.91	1.20	0.01	836.64
2002	12.95	1.25	0.01	809.43
2003	17.58	1.39	0.01	1449.33
2004	16.25	1.41	0.01	2754.78
2005	27.44	1.71	0.01	9901.05
2006	22.86	1.32	0.01	4083.54
2007	17.81	1.34	0.01	3114.07
2008	15.70	1.50	0.01	678.53
2009	16.41	1.37	0.01	962.33
2010	17.42	0.87	0.01	945.31
Total	20.46	1.89	0.01	9901.05

*N=30,463 dyad years

Table 2. Random Effects Logit Models of Dyadic Foreign Aid Ties, 1978-2005

	(1)	(2)	(3)
RECIPIENT FACTORS			
Total Recipient Population	1.600***	1.065	1.017
	(0.096)	(0.059)	(0.056)
Total Recipient ODA	1.207***	1.134***	1.154***
	(0.028)	(0.027)	(0.028)
Recipient GDP per capita	0.465***	0.348***	0.340***
	(0.025)	(0.019)	(0.018)
Recipient Polity IV score	1.046***	1.026***	1.024***
	(0.004)	(0.004)	(0.004)
Country affected by conflict	0.970	1.031	1.020
	(0.047)	(0.050)	(0.050)
Total population affected by disaster	1.018***	1.014***	1.013***
	(0.004)	(0.004)	(0.004)
DYAD FACTORS			
Ever in colonial relationship	42.813***	20.758***	22.507***
	(19.962)	(9.274)	(10.010)
Distance between capital cities	0.958	1.398**	1.276
	(0.131)	(0.178)	(0.163)
Mutual Imports Product	1.193***	1.198***	1.185***
	(0.014)	(0.014)	(0.014)
ORGANIZATIONAL AFFILIATION			
INGO Dyad Score	1.006***		1.002***
	(0.000)		(0.000)
IGO Dyad Score		1.128***	1.108***
		(0.005)	(0.006)
Constant	0.001***	0.019*	0.103
	(0.001)	(0.030)	(0.162)
Dyad-Years	61152	61152	61152
Dyads	3047	3047	3047
LL	-1.91e+04	-1.89e+04	-1.89e+04
AIC	38134	37796	37754
Intra-class Correlation	0.866	0.848	0.847

Exponentiated coefficients (odds ratios) shown; Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: Two-Way Fixed Effects Models of Shared INGO/IGO Affiliation on Bilateral Aid Dyad Flows, 1978-2005

	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RECIPIENT FACTORS							
Total Recipient Population	0.399	0.282	0.293	0.155	-0.080	0.241	0.229
	(0.295)	(0.299)	(0.296)	(0.298)	(0.300)	(0.303)	(0.295)
Total Recipient ODA	0.197***	0.207***	0.232***	0.187***	0.205***	0.206***	0.225***
	(0.024)	(0.024)	(0.025)	(0.024)	(0.025)	(0.024)	(0.025)
Recipient GDP per capita	-0.469***	-0.454***	-0.425***	-0.049	1.878***	-0.452***	-0.415***
	(0.087)	(0.087)	(0.087)	(0.112)	(0.376)	(0.087)	(0.087)
Recipient Polity IV score	0.005	0.005	0.006	0.004	0.002	0.018	0.146***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.013)	(0.044)
Country affected by conflict	0.109**	0.109**	0.091*	0.100*	0.091*	0.108**	0.094*
	(0.040)	(0.040)	(0.039)	(0.039)	(0.039)	(0.040)	(0.039)
Total population affected by disaster	0.003	0.002	0.002	0.002	0.002	0.002	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
DYAD FACTORS							
Mutual Imports Product	0.003	0.003	0.002	0.010	0.015	0.005	0.005
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
ORGANIZATIONAL AFFILIATION							
INGO Dyad Score		-0.075**		0.492***		-0.084***	
		(0.024)		(0.111)		(0.025)	
INGO x GDP interaction				-0.090***			
				(0.017)			
INGO x Polity IV interaction						-0.003	
						(0.003)	
IGO Dyad Score			-0.660***		3.512***		-0.785***
			(0.180)		(0.710)		(0.181)
IGO x GDP interaction					-0.667***		

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
						(0.107)	
IGO x Polity IV interaction							-0.041^{**}
							(0.013)
Constant	-7.025	-5.262	-4.211	-5.428	-12.258^{*}	-4.580	-2.716
	(4.847)	(4.899)	(4.913)	(4.871)	(5.055)	(4.975)	(4.910)
Observations (N)	30463	30463	30463	30463	30463	30463	30463
Dyads (N)	2147	2147	2147	2147	2147	2147	2147
R^2	0.806	0.806	0.806	0.807	0.807	0.806	0.806
AIC	93648	93610	93579	93475	93375	93607	93529

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed tests)

Table 4: Aid Spending by Disbursement Channel for 143,736 Projects by 35 Donor Countries in 2011

Disbursement Channel	Median	Mean	Max	Total	Projects
Public Sector/Governments	0.017	1.284	927.436	75560	58845
NGOs and CSOs (unspecified)	0.017	0.183	52.185	904	4947
INGOs	0.089	0.904	78.900	2775	3070
Northern NGOs	0.019	0.282	126.997	9376	33264
Southern NGOs	0.050	0.268	79.194	1289	4800
Partnerships/Networks	0.048	1.009	91.443	614	608
IGOs: Multilaterals and IFIs	0.203	1.791	493.969	18658	10419
Others	0.007	0.373	400.916	10356	27783
Total	0.018	0.832	927.436	119530	143736

Source: OECD Creditor Reporting System (http://stats.oecd.org/Index.aspx?DataSetCode=CRS1)