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# Foreign Aid and Voting in International Organizations: Evidence from the IWC\*

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## Abstract

I use a unique dispute between major aid donors in the International Whaling Commission (IWC) to investigate whether donor nations change their aid giving in response to changes in aid recipients' voting behavior inside international organizations (IOs). This relationship is difficult to pin down in most IOs because agenda items constantly change and donor coalitions fluctuate with them. I exploit the fact that the IWC has, on the one hand, seen two fixed aid donor blocs opposing each other for three decades over a single issue, but has on the other hand seen rich variation in both membership and voting behavior of aid recipient countries. Using an identification strategy that relates changes in bilateral aid to within-recipient variation in IWC voting-bloc affiliation and fixed cross-sectional variation in donors' voting bloc, the evidence suggests that Japan rewards joining the pro-whaling bloc, and that countries who recently experienced aid reductions from the three big anti-whaling donors – the U.S., the U.K., and France – are more likely to join the pro-whaling bloc.

JEL Codes: D72, F35, F53

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# 1 Introduction

Do major aid donors use foreign aid disbursements to buy the votes of aid recipients in international organizations (IOs)? The best evidence comes from the U.N. Security Council, where the partially exogenous determination of membership has been used to identify the effect of membership on U.S. aid, World Bank loans, and IMF loans (Kuziemko and Werker [2006], Dreher et al. [2009b,a]). Rewarding membership does not, however, necessarily imply vote-buying. It could instead be rewarding exposure or prominence. Because observed votes in the Security Council are usually unanimous, and because the permanent members' positions are usually aligned for those proposals that actually come to a vote, the Security Council data do not provide evidence of actual vote-buying.

We therefore need to look elsewhere for evidence that donors use their aid disbursements to influence voting in IOs. Unfortunately, in most IOs voting data is as difficult to interpret as in the Security Council. Any donor could be using aid to influence votes, and because donors are often broadly aligned we lack a control or counterfactual aid flow for any given donor. Furthermore, the relatively high-frequency voting data in IOs are difficult to map into low-frequency annual foreign aid data, because many IOs' agendas change frequently within a year.<sup>1</sup> To address these issues, this paper exploits a unique dispute in the International Whaling Commission (IWC). This dispute has four key features: First, the IWC is a single-issue organization, focused entirely on commercial whale-catching ("whaling"), so that in practically all proposals in the data, the pro- and the anti-whaling positions are clearly distinguished. Second, major donors have been divided into two unchanged voting blocs since 1982, Japan on one side and France, Britain (U.K.) and the United States (U.S.) on the other. Third, there is substantial within-country over-time variation in IWC membership and voting behavior of aid recipients. Fourth, while aid recipients frequently change allegiance, they do have a clearly identified position in any given year, because all proposals in the IWC are voted on in one annual meeting.

These four features matter to the identification strategy in two ways: First, they allow coding voting behavior as a categorical measure of affiliation with a *voting bloc*. Every aid recipient IWC member is clearly affiliated with either the pro-whaling bloc or the anti-whaling bloc in a given

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<sup>1</sup>This is especially problematic because we don't know the lead or lag structure with which aid may reward votes.

year, with years of non-attendance or non-membership as the omitted category.<sup>2</sup> With this categorical treatment, a single regression can estimate the effect of joining the IWC (into one of the voting-blocs) and the effect of changes in voting behavior thereafter. This is important because foreign aid could be used to entice either membership or voting, and focusing on only one of the two will miss part of the picture. Second, the dispute's unique nature means we can exploit the interaction of within-recipient over-time variation in voting-bloc affiliation with cross-donor variation in responses, giving rise to a triple-difference identification strategy in which bilateral aid from donor  $j$  to recipient  $i$  in year  $t$  changes as the result of an interaction between a change in  $i$ 's voting-bloc affiliation and donor  $j$ 's fixed bloc affiliation.<sup>3</sup> This identification strategy is framed by a simple model of vote buying in which two rival lobbies ("pro" and "anti") compete in an IO with endogenous entry, and reward or punish voting in either bloc.

Focusing first on a restricted sample of only current IWC members (i.e., disregarding years before a country joined the IWC), I find strong evidence that voting with the pro-whaling bloc is rewarded by the pro-whaling donor bloc (Japan) and punished by the anti-whaling donor bloc (the U.K., the U.S., and France). There appears to be no changes in aid when aid recipients leave the anti-whaling bloc. Breaking the results down by donor shows that all three major anti-whaling donors significantly reduce their foreign aid payments when a country joins the pro-bloc. Extending the sample to include years before a country joined the IWC additionally captures the effect of joining the IWC (into a voting bloc) and consequently strengthens the results. Further extending the sample cross-sectionally to include all aid-recipient countries who were never IWC members allows me to introduce a battery of controls that are common in the aid literature (which usually studies the full universe of aid recipient countries). The results are robust to including all controls as well as donor-specific year fixed effects and donor-specific regional time trends.

The second part of the empirics studies the timing of aid-changes around the year a country enters the pro-whaling bloc (from either non-membership or membership in the other voting bloc). Japanese aid increases by about 9 dollars per capita one year after a country joined the pro-

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<sup>2</sup>Like most IOs, the IWC has an open membership policy. The omitted category also includes instances of "neutral" membership, when a country does not agree with either bloc on more than 75% of proposals in a year.

<sup>3</sup>Unlike the studies on the U.N. Security Council (Kuziemko and Werker [2006], Dreher et al. [2009b,a]), this strategy does not rely on exogenous variation but on the co-movement of variables. This approach is intuitively appealing when studying voting buying because an exogenously changed vote does not need to be bought with aid and exogenously changed aid does not need to be rewarded with a vote.

whaling bloc, increases by an additional 9 dollars per capita in the following year, and thereafter remains permanently higher by those 18 dollars per capita. Anti-whalers' aid decreases by about 15 dollars per capita one year after a country joined the pro-whaling bloc, an additional 3 dollars per capita in the following year, and thereafter remains permanently lower by around 19 dollars per capita. While Japanese aid only changes after – and therefore most likely in response to – joining the pro-whaling voting bloc, I find significant pre-trends in aid from anti-whaling donors. This suggests that countries that experience idiosyncratic reductions in aid from anti-whaling donors may select into joining the IWC's pro-whaling bloc.<sup>4</sup> It is unclear to what extent the subsequent aid reductions from anti-whaling donors that I find are a punishment for joining as opposed to merely the continuation of unrelated pre-trends, although there is some evidence for punishment beyond the continuation of pre-trends.

As IOs go, the IWC is relatively small, but its unique structure nonetheless means that the findings presented here contribute to the literature on foreign aid in important ways. One, this is the first paper to show that major donors use foreign aid as reward and punishment for actual voting (as opposed to membership) in an IO. Second, while previous studies have focused on the U.S., IMF and World Bank, for whom the Security Council natural experiment showed significant effects (Kuziemko and Werker [2006], Dreher et al. [2009b,a]), this paper provides evidence for the three next-biggest donors after the U.S., namely Japan, the U.K., and France, suggesting that the majority of *all* aid is disbursed by institutions that act strategically. Aside from the papers immediately concerned with the use of foreign aid to buy votes, this paper speaks to a broader literature on the political determinants of foreign aid flows. Several seminal studies have established links between donors' political and strategic objectives and their aid-giving (Burnside and Dollar [2000]; Easterly et al. [2004]; Alesina and Dollar [2000]; Weder and Alesina [2002]). The paper most closely related to mine is Faye and Niehaus [2012], which uses a similar triple-difference methodology to investigate how bilateral aid changes when a recipient country's government faces an election, depending on that recipient country's government's political alignment with a given donor nation, as measured by U.N. General Assembly voting overlap.<sup>5</sup> In the remainder of the paper, section

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<sup>4</sup>The results cannot speak to whether this happens on Japan's initiation or not.

<sup>5</sup>Two previous studies have examined the effect of IWC voting behavior on Japanese aid disbursements (Miller and Dolšák [2007] and Strand and Truman [2009]). However, the evidence in these studies is less than compelling: First, they consider only Japanese aid and therefore provide no plausible counterfactual to observed changes in aid flows. Second, both study only IWC members' voting behavior and ignore the effect of membership. Third, (based on my

2 provides background information on the institutional features of, and the ideological dispute in, the IWC, as well as detailed descriptives on the voting data. Section 3 lays out the other data and describes the sample. Section 4 presents the empirical strategy and the core results. Section 5 presents results on the timing of changes in aid. Section 6 concludes.

## 2 The IWC in Context

### 2.1 Rules

The IWC is an IO whose official mission is to “provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry.”<sup>6</sup> The IWC has one meeting a year, in which it votes on issues such as continuing a moratorium on all commercial whaling, the issuing of special permits for scientific or aboriginal whaling and establishing ocean sanctuaries in which no whaling of any kind is permitted. Membership is voluntary, but decisions made in the IWC are binding for its members. Major decisions require a two-thirds majority; minor proposals (such as introducing an additional working language) require only a simple majority. Voting behavior is perfectly observable; there is no secret ballot (though Japan proposed to introduce it at every meeting from 2001 to 2006). Typical pro-whaling bills pertain to extending special-permit whaling quotas, permitting scientific whaling exemptions, or modifying the moratorium on whaling. Typical anti-whaling bills pertain to the extending ocean sanctuaries where no whaling of any kind is allowed or to tightening the moratorium further.<sup>7</sup> Any country can join the IWC for a modest membership fee. There are no privileged members with veto power, and each member country has one vote in each proposal. The value of each member’s vote is therefore the same, making vote-buying potentially attractive.

### 2.2 History

Few countries catch whales today, but membership in the IWC is open to any country, and today most IWC members have no commercial interests in whaling. IWC members include land-locked

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own replication exercise,) neither study’s results survive the inclusion of recipient fixed effects or clustering standard errors at the recipient level, both of which are standard practice.

<sup>6</sup><http://www.iwcoffice.org/commission/iwcmain.html>.

<sup>7</sup>For a full list of proposals that came up for a vote in recent years, see Miller and Dolšak [2007].

countries such as Switzerland and Luxembourg on the anti-whaling side, and Mongolia on the pro-whaling side. The IWC was founded in 1948; within 3 years of its foundation it comprised 10 member nations — all with commercial whaling interests. In the ensuing 15 years, its membership composition remained stable but then membership grew rapidly from 1976 until 1982. Most new members were wealthy countries with no commercial whaling, which, combined with changing attitudes among existing members, tipped the majority opinion against commercial whaling, and in 1982 the IWC voted with the requisite two-thirds majority to place a moratorium on all commercial whaling. This moratorium became effective in 1986 and was to run for five years. In 1990 the IWC passed a proposal to continue the moratorium indefinitely, postponing the resumption of all commercial whaling in any form. Since 1990, the IWC has seen its membership balloon from 40 to 70 countries from 1991 to 2006, with the pro-whaling bloc expanding relative to the anti-whaling bloc. Anecdotal evidence suggests this expansion was driven by a mix of vote-buying and persuasion. On the pro-whaling side, Japan is regularly accused of using its foreign aid budget to convince countries to vote on her behalf (Economist [2001], Hodess and Wolkers [2004], Economist [2006]). On the anti-whaling side, the U.K. has been characterized as the informal leader of the anti-whaling bloc, and British diplomacy has allegedly convinced many countries to join the IWC on the anti-whaling side, albeit not in exchange for aid (Independent [2007]).

### 2.3 The Ideological Divide

The IWC maintains records of every annual meeting since 1991. Voting on any contentious issues effectively stopped altogether in 2007, so that there are 16 years of observed voting data, covering 1991-2006. With Japan unequivocally representing the pro-whaling position, voting behavior is coded as follows: Country  $i$ 's vote on proposal  $k$  is coded as a binary variable, equalling 1 if it voted with Japan and 0 if it voted against Japan.<sup>8</sup> Each aid recipient's overlap in voting with Japan in a given year is the share of proposals in that year on which it voted like Japan. This variable is called  $voteshare_{it}$ , a continuous measure between 0 and 100. Pooled over the entire sample of country-year observations, figure 1 shows that the distribution of  $voteshare$  is highly bimodal, both among aid recipients (left panel), and among countries that do not receive aid (right panel).

This U-shaped distribution of the voting data reflects the opposing blocs in the IWC. Table

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<sup>8</sup>Abstentions are not considered, and I disregard unimportant procedural votes, which usually pass unanimously.

Figure 1: Voting Distribution of Member Countries, Split by Aid Recipient Status

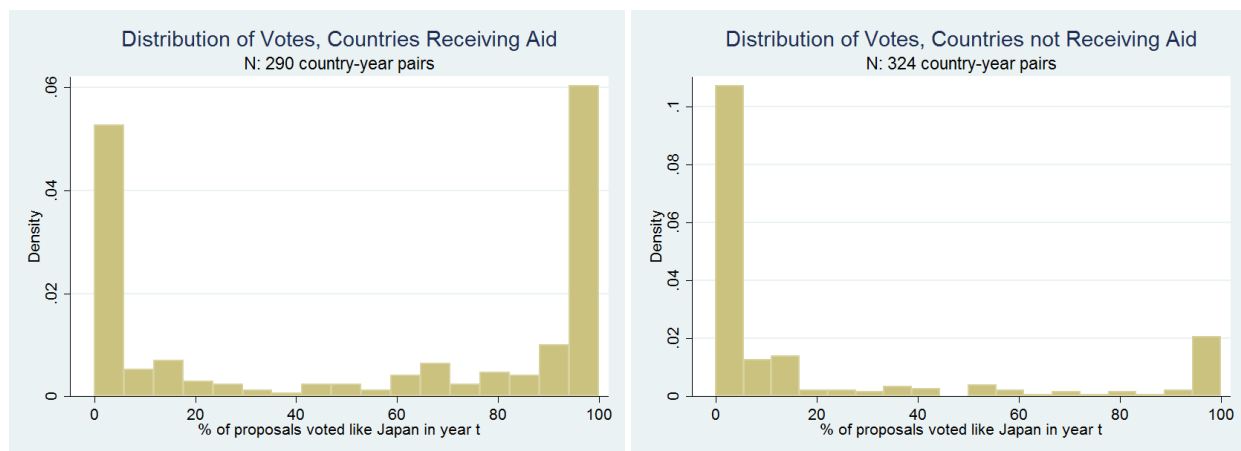


Table 1: Voting Agreement (in %) with Japan – Countries That Do Not Receive Aid

|                    | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 Australia        | 0    | 13   | 7    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 2 Belgium          |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    | 0    | 0    |
| 3 Czech Republic   |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    | 0    |
| 4 Denmark          | 33   | 25   | 21   | 40   | 38   | 57   | 50   | 43   | 25   | 50   | 67   | 40   | 27   | 40   | 33   | 33   |
| 5 Finland          | 0    | 0    | 14   | 0    | 0    | 0    | 0    | 7    | 0    | 0    | 13   | 6    | 0    | 0    | 0    | 0    |
| 6 France           | 0    | 13   | 0    | 0    | 8    | 0    | 0    | 0    | 0    | 0    | 13   | 0    | 0    | 0    | 0    | 0    |
| 7 Germany          | 0    | 13   | 7    | 0    | 15   | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 8 Hungary          |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    | 0    | 0    |
| 9 Iceland          | 100  |      |      |      |      |      |      |      |      |      | 100  | --   | 100  | 80   | 100  | 100  |
| 10 Ireland         | 0    | 0    | 7    | 0    | 15   | 14   | 0    | 7    | 0    | 13   | 0    | 0    | 0    | 10   | 0    | 0    |
| 11 Italy           |      |      |      |      |      |      |      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 12 Japan           | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  |
| 13 Luxembourg      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    |
| 14 Moncao          | 0    | 0    | 0    | 0    | 17   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 15 Netherlands     | 0    | 13   | 7    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 16 New Zealand     | 0    | 13   | 7    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 17 Norway          | 100  | 100  | 93   | 100  | 100  | 100  | 100  | 93   | 100  | 100  | 100  | 82   | 100  | 90   | 100  | 100  |
| 18 Portugal        |      |      |      |      |      |      |      |      |      |      |      | 0    | 0    | 0    | 0    | 0    |
| 19 San Marino      |      |      |      |      |      |      |      |      |      |      |      | 0    | 0    | 0    | 0    | 0    |
| 20 Slovak Republic |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    | 0    |
| 21 Spain           | 0    | 13   | 7    | 0    | 0    | 0    | 0    | 7    | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 0    |
| 22 Sweden          | 0    | 13   | 15   | 20   | 8    | 0    | 0    | 14   | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 0    |
| 23 Switzerland     | 0    | 13   | 14   | 0    | 23   | 14   | 0    | 8    | 0    | 13   | 13   | 0    | 0    | 0    | 0    | 0    |
| 24 U.K.            | 0    | 13   | 7    | 0    | 8    | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 25 U.S.A.          | 0    | 14   | 7    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

Notes: This table shows the share of proposals on which a country voted with Japan in a given year, for the sample of IWC members who are not aid recipients. These data play no role in the regressions on foreign aid, their purpose is to serve as contrast to the voting behavior of aid-recipients in table 2. See detailed notes in table 2.

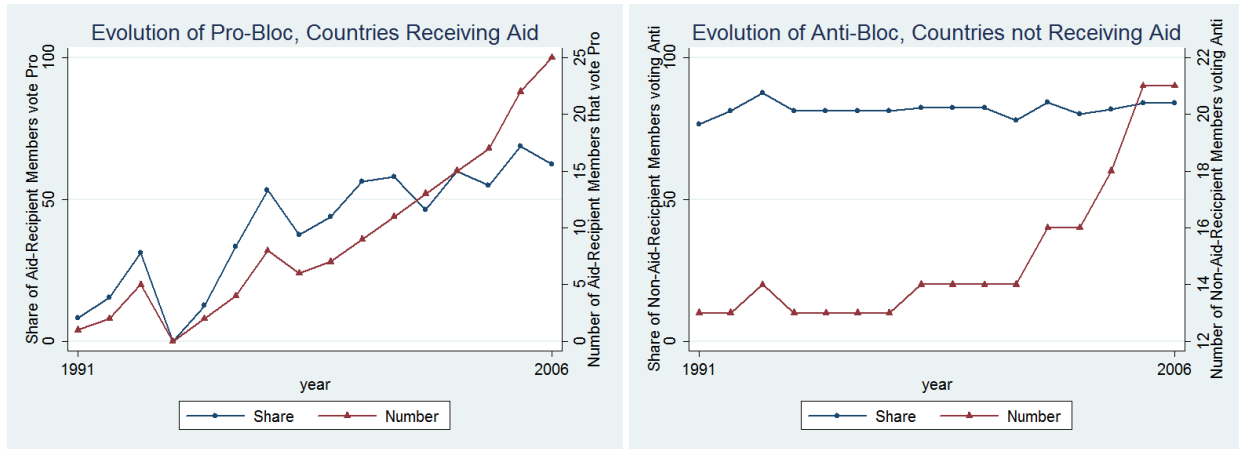


1 shows the data underlying the right panel figure 1. Greyed cells are years in which a country voted with Japan. I define country  $i$  as voting with the pro-whaling bloc in year  $t$  ( $Vote-Pro_{it} = 1$ ) if  $voteshare_{it}$  is bigger than 75%, and as voting with the anti-whaling bloc if  $voteshare_{it}$  is smaller than 25%. Table 1 shows that France, the U.K. and the U.S. almost never agree with Japan. (The U.K. voted with Japan on four out of 163 proposals, and the U.S. did so on two.) The table also shows that since 2001 there has been substantial entry into the IWC by non aid-recipient countries and that these countries have overwhelmingly joined the anti-whaling bloc. (Many of these new entrants are (recent) European Union members.) Only Norway and Iceland, which have strong whaling traditions, tend to vote with Japan. Voting behavior in table 1 is very stable, with no bloc-switching whatsoever. Because the data in table 1 illustrate voting patterns among countries that do not receive aid, they play no role in the empirics on aid receipts.

Table 2 is the equivalent table for aid recipients; it shows the data underlying the left panel of figure 1, and this is the data used for identification. It is apparent that aid recipients have strongly gravitated towards the pro-whaling bloc over time. A few long-standing IWC members, such as Antigua & Barbuda and Saint Kitts & Nevis, have switched allegiance to vote for the the pro-whaling bloc. A more prevalent pattern is that countries with no traditional involvement in the IWC – both Mongolia and Mali are landlocked – have joined its pro-whaling bloc, particularly since 2001.

Later in the paper, tables 4 and 5 report on the effect of  $Vote-Pro_{it}$ , which characterizes voting behavior very sharply as an indicator variable that equals 1 when  $voteshare_{it} > 0.75$ , i.e. the greyed cells in tables 1 and 2. In contrast to the sharpness of  $Vote-Pro_{it}$  in any given year, the process by which countries “arrive” in the pro-whaling bloc is noisy. For example, Dominica would clearly be considered a pro-whaler overall, but it voted neutral or was absent in three of the first five years of its membership. Senegal was absent from 1991 to 2002, then voted for the anti-whaling bloc in 2003, was then absent again, before voting with Japan from 2004 to 2006. Because of this, I additionally define a point when a country “joined the pro-whaling bloc.” This point is denoted by the vertical double-line “||” in table 2 (notwithstanding some later episodes of, say, neutral voting). I also define an indicator  $Pro-Bloc_{it}$  that equals 1 for all years after a country “joined” the pro-bloc, i.e. in table 2  $Pro-Bloc_{it} = 1$  for every year after the vertical double-line ||, while

Figure 2: Evolution of Pro-Bloc Among Countries That Receive Aid (Left Panel) and Anti-Bloc Among Countries That Do Not (Right Panel)



$Vote-Pro_{it} = 1$  in every greyed cell.<sup>9</sup> Later in the paper, in table 6 I report on the effect of  $Pro-Bloc_{it}$  to study the timing aid changes around a country's entry into the pro-whaling bloc.

Tables 1 and 2 show that the 2000s saw a rapid inflow of members into the IWC, both among countries that do and countries that do not receive aid. Figure 2 shows how this changed the composition of countries in the pro- and anti-whaling blocs. The left panel shows the number of aid recipients in the pro-whaling bloc over time, as well as the share of pro-whalers among aid recipients. Both the absolute number and the share of pro-whalers among aid recipients grew rapidly. In 2005, there were 25 aid recipients in the pro-whaling bloc, i.e. about 65% of all aid recipient IWC members. The right panel shows the number of countries that are *not* aid recipients in the anti-whaling bloc over time, as well as their share among IWC members not receiving aid. Since 2000, their number increased by seven, but Iceland joined Japan and Norway as a third pro-whaler, which kept the anti-whaling bloc's share of IWC members that are *not* aid recipients constant at around 85%.

<sup>9</sup>The cutoff  $\parallel$  is not always completely unambiguous. For example, one could argue Dominica joined the pro-bloc in 1993 (the first year of voting with Japan) or perhaps in 1997 (the first year of an uninterrupted sequence of voting with Japan.) One could argue that the Solomon Islands did so in either 1993 or 1995. The few cases of ambiguity, however, make no difference to any of the results.

Table 2: Voting Agreement (in %) with Japan – Countries That Receive Aid

|                             | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 Antigua & Barbuda         | --   | --   | --   | 33   | 15   | --   | 100  | 100  | 100  | 88   | 100  | 100  | 100  | 80   | 100  | 100  |
| 2 Argentina                 | --   | 0    | 7    | 0    | 0    | --   | 0    | 0    | 0    | --   | 0    | 6    | 0    | 0    | 0    | 0    |
| 3 Belize                    |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  | --   | 17   |
| 4 Benin                     |      |      |      |      |      |      |      |      |      |      |      | 100  | 100  | 100  | 100  | 100  |
| 5 Brazil                    | 0    | 13   | 8    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 6 Cambodia                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 7 Cameroon                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 8 Chile                     | 0    | 25   | 29   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 9 China                     | 0    | 13   | 33   | 20   | 15   | 43   | 75   | 43   | 45   | 75   | 93   | 76   | 85   | 90   | 56   | 50   |
| 10 Costa Rica               | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 0    | --   | --   | --   | --   |
| 11 Cote d'Ivoire            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 12 Dominica                 |      | 38   | 92   | 60   | 77   | --   | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  |
| 13 Gabon                    |      |      |      |      |      |      |      |      |      |      |      | 94   | --   | 89   | 100  | 100  |
| 14 Gambia                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 15 Grenada                  |      |      | 100  | 67   | 67   | 86   | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  |
| 16 Guinea                   |      |      |      |      |      |      |      |      |      | 100  | 100  | 100  | 100  | 80   | 100  | 100  |
| 17 India                    | 0    | --   | 0    | 0    | 0    | --   | --   | 0    | --   | 0    | 0    | 13   | 0    | 0    | --   | 0    |
| 18 Israel                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    |
| 19 Kenya                    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 0    | --   | 10   | --   | --   |
| 20 Kiribati                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 78   |
| 21 Mali                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | --   |
| 22 Marshall Islands         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 23 Mauritania               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 24 Mexico                   | 0    | 63   | 14   | 0    | 8    | 0    | 0    | 7    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    |
| 25 Mongolia                 |      |      |      |      |      |      |      |      |      |      |      | 94   | 100  | 90   | 100  | 100  |
| 26 Morocco                  |      |      |      |      |      |      |      |      |      |      | 63   | 53   | 74   | --   | 67   | 67   |
| 27 Nauru                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 100  |
| 28 Nicaragua                |      |      |      |      |      |      |      |      |      |      |      |      | 100  | 89   | 100  | 100  |
| 29 Oman                     | 0    | --   | 0    | --   | 0    | 0    | 50   | 21   | 25   | 25   | 19   | 12   | 0    | 10   | 22   | 17   |
| 30 Palau                    |      |      |      |      |      |      |      |      |      |      |      | 100  | 100  | 100  | 100  | 100  |
| 31 Panama                   |      |      |      |      |      |      |      |      |      |      | 100  | 94   | 100  | 44   | 0    | 0    |
| 32 Peru                     | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 13   | 0    | 11   | --   | --   |
| 33 Korea                    | 0    | 13   | 50   | 20   | 54   | 29   | 0    | 14   | 33   | 50   | 94   | 35   | 69   | 60   | 56   | 67   |
| 34 Russia                   | 100  | 50   | 29   | 0    | 33   | 57   | 75   | 50   | 42   | 88   | --   | 65   | 100  | 78   | 100  | 100  |
| 35 Senegal                  | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 0    | --   | 75   | 100  | 100  |
| 36 Seychelles               | 0    | 13   | 21   | --   | --   |      |      |      |      |      |      |      |      |      |      |      |
| 37 Solomon Islands          |      |      | 86   | 50   | 100  | 100  | 100  | 93   | 100  | --   | 88   | 88   | 92   | 80   | 89   | 67   |
| 38 South Africa             | 0    | 0    | 7    | 0    | 0    | 0    | 0    | 14   | 0    | 13   | 0    | 0    | 0    | 0    | 0    | 0    |
| 39 St. Kitts-Nevis          |      | 0    | --   | --   | --   | --   | --   | --   | 100  | 100  | 100  | 100  | 100  | 70   | 100  | 100  |
| 40 St. Lucia                | 67   | 100  | 93   | --   | 62   | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 90   | 100  | 100  |
| 41 St. Vincent & Grenadines | 67   | 100  | 93   | 60   | 67   | 100  | 100  | 93   | 100  | 100  | 100  | 63   | 67   | 50   | 78   | 83   |
| 42 Suriname                 |      |      |      |      |      |      |      |      |      |      |      |      |      | 60   | 100  | 100  |
| 43 Togo                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      | --   | 100  |
| 44 Tuvalu                   |      |      |      |      |      |      |      |      |      |      |      |      |      | 80   | 100  | 83   |
| 45 Venezuela                |      | --   | --   | --   | --   | --   | --   | --   | --   | --   |      |      |      |      |      |      |

Notes: This table shows all voting- and attendance patterns among those IWC members that received foreign aid during the period under study. Data are coded as the share of proposals on which a country voted with Japan in a given year, "--" signifies a member's non-attendance at the annual meeting, an empty cell signifies non-membership. (Non-attendance ("--"), neutral voting (voting-agreement with Japan of more than 25% but less than 75%), and non-membership are together treated as the omitted category in most empirics because finer break-downs of these three revealed no interesting patterns.) Years in which a country votes with the pro-bloc ( $Vote-Pro_{it} = 1$ ) are shaded in grey. When studying entry, the vertical double-line "||" signifies the point where a country can be said to have "joined the pro-bloc" (notwithstanding some later episodes of, say, neutral voting). Every year after "||" is coded as  $Pro-Bloc_{it} = 1$ . (Belize and Panama went from voting with the pro-bloc to the anti-bloc and are therefore not considered as having permanently joined the pro-bloc.) Russia already voted with the pro-bloc in the first year of data and is also therefore not considered to have joined the pro-bloc within the observed period. Similarly, St. Lucia and St. Vincent are not considered in the permanent coding because they persistently voted for the pro-bloc from 1992, and - not knowing how they voted before 1991 - it is not clear when they joined the pro-bloc.

## 2.4 Vote-Buying

Japan has frequently been accused of buffering its bloc's ranks with vote-buying.<sup>10</sup> If the voting patterns in table 2 are in fact driven by vote buying, two facts are puzzling: One, any country, including Japan, could walk away from the IWC and no longer be bound by its rules. Two, throughout the observed period, the pro-whaling bloc never came close to the two-thirds majority needed to overturn the status quo. What explains these puzzles? First, there seems to be strong economic pressure on potential dissenters to remain within the diplomatic framework. Caron [1995] cites concrete instances of such pressure, which revolve around trade restrictions and access to fishing waters, and concludes that "...but for such sanctions, several states, including Iceland, Japan, Norway, and the Soviet Union, would have opted out of the moratorium and continued commercial whaling."<sup>11</sup> The diplomatic cost of leaving the IWC might therefore be so high that Japan prefers to operate within the IO framework instead, recruiting new members and buying the votes of existing ones.<sup>12</sup> Second, while Japan has not come anywhere near the required two-thirds majority it needs to end the moratorium, a 50% share of the votes is sufficient for many many lesser issues. In 2006, Japan succeeded in passing what was deemed the first pro-whaling proposal, the so-called *St. Kitts Declaration* (Economist [2006]).<sup>13</sup> In 2006, the dispute therefore reached a stage where the status quo could not be challenged but the pro-whaling bloc could make a public stink through the IWC itself.

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<sup>10</sup>The Economist in 2001 cited New Zealand's then prime minister as stating that Japan had been "caught red-handed" buying votes for whale-hunting, although this was not further elaborated on (Economist [2001]).

<sup>11</sup>Miller and Dolšak [2007] report similarly that the U.S. pressured Japan into signing the original moratorium in the early 80s by threatening to deny them access to fishing grounds in the *U.S. Exclusive Economic Zone*.

<sup>12</sup>If Japan is indeed bribing countries to vote pro-whaling, then its efforts to introduce a secret ballot (at every yearly meeting from 2001-2006) may be viewed as an attempt to reduce the costs of bribes. Intuitively, secret ballots increase a principal's costs of monitoring the voting behavior of agents. However, a recent public opinion poll commissioned by the World Wildlife Fund suggests that most pro-whaling countries receive little backing among their populace on the issue of whaling (Miller and Dolšak [2007]). This might indicate that any increased monitoring costs to Japan would be offset by the benefits of shielding members of its coalition from public pressure and thereby potentially reducing the bribes necessary to induce these members to vote in favor of whaling

<sup>13</sup>While this proposal simply entailed an official statement decrying the unscientific nature of the debate, it was characterized as a "propaganda coup" in the press (Independent [2007]).

### 3 Aid Data and Controls

The main outcome is bilateral foreign aid flows from donor  $j$  to recipient  $i$  in year  $t$ .<sup>14</sup> I measure bilateral per capita foreign aid flows by *Net Total Official Development Assistance* (ODA) from the OECD's Development Assistance Cooperation (DAC) database. Per capita aid is preferable here to the commonly used log of absolute aid, because of the relatively frequent occurrence of zero or even negative aid flows, which occur when repayments exceed new loans and grants. This is an issue because Japan, the U.K. and France — unlike the U.S. and large donors institutions such as the World Bank — give no aid at all to many aid recipients. Furthermore, many aid recipients in table 2 are relatively small, and more frequently receive zero aid. As a result, the sample is about 20% bigger when using per capita aid than when using the log of aid. Table 3 shows the relative importance of aid from the four main donors. The U.S. gives on average the most aid in per capita terms, and the other three each give about half that much. Other donors give significantly less: Germany, the next biggest donor *not* reported, on average gives just under 3 dollar in recipient per capita terms, less than a quarter of the U.S. and less than half that of the U.K., the smallest donor that I consider.

**Controls:** I control for Population and GDP, taken from the World Bank development indicators. Following Alesina and Dollar [2000] I also include as a control for strategic alliances using the *General Assembly dataset's* UNfriend variable, which calculates the number of times a given recipient country voted like a given donor country in the U.N. General Assembly in a given year. As suggested by Doucouliagos and Paldam [2009], I control for other bilateral economic donor-recipient links, I include bilateral trade (imports plus exports) between each donor and recipient, taken from the "Correlates of War" Bilateral Trade dataset v3.0. Finally, in some specifications I include the "KOF Index of Globalization" constructed by Dreher [2006], which proxies for changes in recipient countries' openness. This measure is a popular control in the aid literature, but has the drawback that it does not cover all of the IWC member countries' early years.

**Sample:** The IWC voted its moratorium in 1982, and I therefore let the data begin in 1982.

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<sup>14</sup>Because of the large differences in recipient-country sizes, aid flows need to be scaled in some way. I follow Alesina and Dollar [2000] and Miller and Dolšak [2007] in using per capita bilateral aid as the dependent variable. By contrast, Weder and Alesina [2002] used the log of per capita aid and Kuziemko and Werker [2006] the log of absolute aid. I prefer the per capita scaling, because there are many zeros and even negative aid flows in the data. (Negative aid arises when repayments exceed new aid.)

Table 3: Aid from the Four Major Donors

| <b>Aid</b>       | <b>mean</b> | <b>(s.d.)</b> |
|------------------|-------------|---------------|
| ODA p.c.(France) | 7.06        | (22.74)       |
| ODA p.c.(Japan)  | 7.13        | (26.99)       |
| ODA p.c.(U.K.)   | 6.96        | (53.88)       |
| ODA p.c.(U.S.A.) | 13.58       | (84.07)       |

Notes: Aid magnitudes are averaged over the cross-section of all 148 aid-recipients and data from 1982 to 2006.

For countries that were IWC members in 1991, the first year I observe voting data, I have to let the data start in 1991 because there is unobserved voting before 1991. For example, Saint Lucia and Saint Vincent & the Grenadines were members before 1991 so that their data begins in 1991 when I can first observe their voting behavior. By contrast, Saint Kitts & Nevis and Grenada only joined the IWC in 1992 and 1993 respectively, so that I can let their data begin in 1982. This sample-selection generates an unbalanced panel in the 1982-1991 period. I take care to address the unbalancedness by including donor-recipient fixed effects, time fixed effects and region specific linear and quadratic time trends in the empirics. It is important to re-iterate that years before 1991 can only be included in regressions that use the *bloc coding* of voting behavior. If country  $i$  was not an IWC member before 1991, then  $\text{Vote-Pro}_{it} = 0$  and  $\text{Vote-Anti}_{it} = 0$  for  $t < 1991$ . One advantage of the bloc coding is therefore that it allows the inclusion of years in the data before a country joined the IWC. By contrast, the continuous variable  $\text{voteshare}_{it}$  is simply not defined in years before 1991, and those years can therefore not be included.<sup>15</sup>

## 4 Competition over Members' Votes

### Estimation Framework:

A natural way to set up the regressions is to interact  $\text{Vote-Pro}_{it}$ , the indicator for whether  $i$  is voting with the pro-bloc, with donor  $j$ 's affiliation with either bloc,  $\{\text{Pro}^j, \text{Anti}^j\}$ , in an identification strategy that is similar in spirit to a triple-difference.<sup>16</sup> In Online Appendix A, I de-

<sup>15</sup>The paper carefully distinguishes differences in results between the continuous and the bloc coding that are due to the feasible sample size from differences that are obtained within the same sample.

<sup>16</sup>Donor positions have no  $t$  subscript because for Japan,  $\text{Pro}^j$  equals 1 in every year; and for France, the U.K., and the U.S.,  $\text{Anti}^j$  equals 1 in every year.

velop a simple model of vote buying in a committee with entry and exit (into non-membership or non-attendance), as well as switching between blocs. Because leaving the opposing bloc into non-membership is itself valuable, and should therefore be rewarded, the model suggests a “saturated” regression specification like

$$\begin{aligned} \text{ODA}_{ijt} = & u_{ij} + u_{jt} + (\alpha_1 \text{Pro}^j + \alpha_2 \text{Anti}^j) \cdot \text{Vote-Pro}_{it} + \beta_j \mathbf{X}_{ijt} + \mathbf{T}_{ijt} \\ & + (\alpha_3 \text{Pro}^j + \alpha_4 \text{Anti}^j) \cdot \text{Vote-Anti}_{it} + \epsilon_{ijt}. \end{aligned} \quad (1)$$

This specification estimates the effect of joining or leaving either voting bloc. For instance, if Japan rewards movements into the pro-whaling bloc, then  $\alpha_1 \geq 0$ . If Japan also rewards leaving the anti-whaling bloc, then  $\alpha_3 \leq 0$  as well. If the anti-donors act in the opposite manner, then  $\alpha_2 \leq 0$  and  $\alpha_4 \geq 0$ . For example, a IWC member that switches from the anti-whaling bloc into the pro-whaling bloc gets rewards of  $\alpha_1 - \alpha_3 > \alpha_1$  from Japan and gets punished by  $\alpha_2 - \alpha_4 > \alpha_2$  from the anti-whaling bloc. A new IWC member joining into the pro-whaling bloc only gets rewards of  $\alpha_1$  and punishments of  $\alpha_2$ .

As a matter of fact, however, specification (1) never generates any even marginally significant estimates on  $\alpha_3$  and  $\alpha_4$  in any specifications. Furthermore, the estimates of  $\alpha_1$  and  $\alpha_2$  in specification (1) were always identical to those derived in the following, more parsimonious, specification

$$\text{ODA}_{ijt} = u_{ij} + u_{jt} + (\alpha_1 \text{Pro}^j + \alpha_2 \text{Anti}^j) \cdot \text{Vote-Pro}_{it} + \beta_j \mathbf{X}_{ijt} + \mathbf{T}_{ijt} + \epsilon_{ijt}, \quad (2)$$

in which any separate effects of leaving or joining the anti-whaling bloc are disregarded.<sup>17</sup> I therefore focus on the more parsimonious specification (2) in what follows. To compare the bloc-coding of voting behavior with the alternative continuous coding, I also estimate

$$\text{ODA}_{ijt} = u_{ij} + u_{jt} + (\alpha_1 \text{Pro}^j + \alpha_2 \text{Anti}^j) \cdot \text{voteshare}_{it} + \beta_j \mathbf{X}_{ijt} + \mathbf{T}_{ijt} + \epsilon_{ijt}, \quad (3)$$

where  $\text{voteshare}_{it}$  is simply the continuous measure reported in table 2.

In all regressions, each donor  $j$  has their own coefficient  $\beta_j$  on each of the controls, i.e. Japan

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<sup>17</sup>Closer inspection of table 2 makes it clear that specification (1) has no bite over (2) because there are simply not enough occurrences of aid-recipients exiting the anti-whaling bloc without also entering the pro-whaling bloc immediately after, and there is therefore not enough residual variation to separately identify  $\alpha_3$  and  $\alpha_4$ .

is allowed to respond differently than France to population growth in a recipient country. (Online Appendix B table 3 reports the coefficients for the main controls by donor.) Donor-recipient fixed effects  $u_{ij}$  capture time-invariant heterogeneity in bilateral aid flows, driven by things like colonial history and geographic or linguistic proximity. I also include donor-year fixed effects  $u_{jt}$ , which control for general changes in each donor’s budget but also for reallocations from larger to smaller recipients, which could lead to changes in per capita aid receipts that could spuriously coincide with changes in IWC membership. (Such broad reallocations are unlikely to be working in one direction for Japan and the opposite direction for the other donors.) Lastly, I include donor-specific regional linear and quadratic time trends  $T_{ijt}$ .<sup>18</sup> While every observation is for a donor-recipient pair in a given year, standard errors are clustered more conservatively at the recipient level, so that all specifications allow for arbitrary correlations *across* donors of each recipient’s unobservables.

Unobserved time-varying heterogeneity that correlates with IWC membership could still remain. An example might be general integration into the international community, which would likely have an independent effect on aid. However, the estimation strategy mitigates this concern because it does not estimate the effect of IWC membership but rather the effect of a recipient’s (time-varying) bloc-affiliation interacted with each donor’s (time-invariant) bloc-affiliation. The identifying assumption here is that there is no omitted variable that is positively correlated with pro-whaling IWC-membership *and* positively correlated with Japanese bilateral aid *and* negatively correlated with bilateral aid receipts from France, the U.K., and the U.S.

**Within-Country Variation During IWC Membership:** Table 4 uses the data on aid recipient IWC members while they are members, i.e., the data consist of all non-empty cells in table 2. Focusing on this subset has two advantages: First, it identifies the response of donors to *changes* in voting behavior only, as opposed to, say, the effect of newly joining the IWC. Second, it allows the comparison of the continuous measure of voting ( $\text{voteshare}_{it}$ ) and the dummy-measure  $\text{Vote-Pro}_{it}$ . Because  $\text{voteshare}_{it}$  is undefined – and therefore missing – when a country did not vote, the continuous coding is only identified inside this sample.

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<sup>18</sup>I follow Kuziemko and Werker [2006] in dividing the world into five regions: Europe and Central Asia, East Asia and the Pacific, Sub-Saharan Africa, Latin America and the Caribbean, and Other. Regions are determined based on the United Nations classification of regions.



Table 4: Results in the *Within IWC Members* Sample

| Dependent:   | ODA per capita |          |           | log(ODA) |          |       |
|--|----------------|----------|-----------|----------|----------|-------|
|  | (1)            | (2)      | (3)       | (4)      | (5)      | (6)   |
| <b>voteshare<sub>it</sub>* (Donor: Pro<sub>j</sub> = 1)</b>  | 16.847**       |          |           | 0.795*   |          |       |
|  | (2.026)        |          |           | (1.909)  |          |       |
| <b>voteshare<sub>it</sub>* (Donor: Anti<sub>j</sub> = 1)</b> | -9.796**       |          |           | -0.327   |          |       |
|  | (-2.340)       |          |           | (-1.065) |          |       |
| <b>Vote-Pro<sub>it</sub>* (Donor: Pro<sub>j</sub> = 1)</b>   |                | 10.196** | 14.204**  | 0.281    | 0.820**  |       |
|  |                | (1.994)  | (2.529)   | (1.313)  | (2.195)  |       |
| <b>Vote-Pro<sub>it</sub>* (Donor: Anti<sub>j</sub> = 1)</b>  |                | -5.677** | -8.706**  | -0.274   | -0.406** |       |
|  |                | (-2.592) | (-2.367)  | (-1.549) | (-2.430) |       |
| <b>Observations</b>  | 1,136          | 1,136    | 1,684     | 869      | 869      | 1,343 |
| <b>R<sup>2</sup></b>   | 0.668          | 0.668    | 0.640     | 0.853    | 0.853    | 0.858 |
| <b>voteshare<sub>it</sub>* (Donor: U.K.)</b>                 | -19.186*       |          |           | -0.202   |          |       |
|  | (-1.820)       |          |           | (-0.355) |          |       |
| <b>voteshare<sub>it</sub>* (Donor: U.S.A.)</b>               | -1.615         |          |           | -0.312   |          |       |
|  | (-1.148)       |          |           | (-0.877) |          |       |
| <b>voteshare<sub>it</sub>* (Donor: France)</b>               | -8.587         |          |           | -0.487   |          |       |
|  | (-1.567)       |          |           | (-0.970) |          |       |
| <b>Vote-Pro<sub>it</sub>* (Donor: U.K.)</b>                  |                | -9.104*  | -20.034** | 0.080    | -0.310   |       |
|  |                | (-1.927) | (-2.211)  | (0.291)  | (-0.944) |       |
| <b>Vote-Pro<sub>it</sub>* (Donor: U.S.A.)</b>                |                | -0.137   | -1.289    | -0.538** | -0.437*  |       |
|  |                | (-0.156) | (-1.075)  | (-1.982) | (-1.696) |       |
| <b>Vote-Pro<sub>it</sub>* (Donor: France)</b>                |                | -7.792*  | -4.794    | -0.500** | -0.488** |       |
|  |                | (-1.827) | (-1.371)  | (-1.986) | (-2.247) |       |
| <b>R<sup>2</sup></b>   | 0.669          | 0.669    | 0.644     | 0.853    | 0.853    | 0.858 |

*Notes:* This table uses variation only from voting behavior of IWC-members, i.e. it disregards any rewards or punishment associated with joining the IWC. Columns 1 uses the continuous voteshare variable, columns 2–3 use the bloc-coding. Columns 4–6 do the same for the log of aid, where the number of observations is smaller because of zeros. The bottom panel breaks the anti-bloc response down by individual members. This specification also includes the Japanese response which is identical to the pro-bloc response in the top-panel and therefore not reported. Relative to column 1, column 2 shows that the bloc-coding provides sharper results. Column 3 shows that there is added sharpness from including years of non-attendance. (The continuous voteshare variable is missing for those years.) All regressions in this table include donor-recipient-pair fixed effects as the only controls. Standard errors are clustered at the recipient level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 4 column 1 reports on estimating equation (3), with  $\text{voteshare}_{it}$  as the regressor of interest. Voting with Japan reduces aid from anti-whaling donors, and increases aid from Japan. Column 2 reports on specification (2), with  $\text{Vote-Pro}_{it}$  as the regressor of interest; i.e. column 2 uses the same sample as column 1 but with the bloc-coding. (The control group relative to which  $\text{Vote-Pro}_{it} = 1$  is defined consists of attending IWC members who either vote neutrally or with the anti-whaling bloc.) The results are very comparable. Column 3 extends the sample to include IWC members in years of non-attendance (“–” in table 2). The coefficients increase in magnitude, suggesting that non-attendance is neither rewarded nor punished. Columns 4–6 replicate the same regression for the log of aid. The bottom panel presents the results of a regression which breaks the anti-whaling bloc’s response down by donor, but is otherwise identical. The Japanese coefficient is always identical to that of the pro-bloc and is therefore not reported a second time. The anti-whaling countries punish pro-bloc voting to varying degrees, with the U.K. showing the strongest response in per capita data, and the U.S. and France showing a stronger response in logs. (This turns out to be because aid from the U.K. often goes to zero and so becomes missing in logs.)

Which aid recipients are driving the results in table 4? To answer this question, Online Appendix B table 1 shows the 25 most influential observations for each donor-specific coefficient in table 4, i.e. it reports how often each aid-recipient appears in the list of the 25 most influential observations driving each donor’s coefficient.<sup>19</sup> For Japan, the Caribbean islands of Antigua, Dominica, Grenada, Saint Kitts & Nevis, and Saint Lucia make up the bulk of the influential observations. Aid reductions are biggest where per capita aid is high to begin with because of special relationships between a donor and recipient. For aid from the U.K. for example, two of its former colonies – Dominica and the Solomon Islands – see the biggest reductions. For aid from the U.S., Grenada – which received high amounts of U.S. aid since its invasion in 1983 – sees the biggest reductions. For aid from France, three of its former colonies – Saint Lucia, Gabon, and Dominica – see the biggest reductions.<sup>20</sup>

**Full Sample:** While table 4 reveals interesting patterns, restricting attention only to IWC mem-

<sup>19</sup>“Influence” can be measured using either *Cook’s Distance* or the *DFbeta* criteria. *Cook’s Distance* measures an observation’s influence over all coefficients, while *DFbeta* measures it separately by coefficient (Belsey et al. [1980]). For this exercise, I used *DFbeta*.

<sup>20</sup>Saint Lucia and Dominica were both French colonies before becoming British colonies. See Dippel et al. [2015].

Table 5: The Effect of  $\text{Vote-Pro}_{it}$  in the Full Sample

|  | (1)                              | (2)                    | (3)                   | (4)                    | (5)                    | (6)                    |
|--|----------------------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|
|  | <b>Dependent: ODA per capita</b> |                        |                       |                        |                        |                        |
| <b>Vote-Pro<sub>it</sub> * (Donor: Pro<sub>j</sub> = 1)</b>  | 10.733**<br>(2.420)              | 10.733**<br>(2.439)    | 10.859**<br>(2.544)   | 10.791***<br>(2.919)   | 10.759***<br>(2.980)   | 10.687***<br>(2.999)   |
| <b>Vote-Pro<sub>it</sub> * (Donor: Anti<sub>j</sub> = 1)</b> | -11.928***<br>(-3.654)           | -11.928***<br>(-3.683) | -9.126***<br>(-2.877) | -9.931***<br>(-3.342)  | -9.394***<br>(-3.384)  | -8.247***<br>(-3.401)  |
| <b>Observations</b>  | 3,980                            | 12,552                 | 12,382                | 12,382                 | 12,382                 | 12,080                 |
| <b>R<sup>2</sup></b>   | 0.601                            | 0.684                  | 0.687                 | 0.696                  | 0.702                  | 0.681                  |
| <b>Vote-Pro<sub>it</sub> * (Donor: U.K.)</b>                 | -15.566**<br>(-2.669)            | -15.566***<br>(-2.689) | -13.597**<br>(-2.477) | -13.401***<br>(-2.760) | -14.163***<br>(-2.905) | -13.919***<br>(-3.063) |
| <b>Vote-Pro<sub>it</sub> * (Donor: U.S.A.)</b>               | -10.617<br>(-1.621)              | -10.617<br>(-1.633)    | -7.551<br>(-1.299)    | -10.475*<br>(-1.674)   | -7.968<br>(-1.425)     | -5.191<br>(-1.010)     |
| <b>Vote-Pro<sub>it</sub> * (Donor: France)</b>               | -9.599**<br>(-2.214)             | -9.599**<br>(-2.231)   | -6.165<br>(-1.511)    | -5.880<br>(-1.446)     | -6.030<br>(-1.560)     | -5.641<br>(-1.521)     |
| <b>R<sup>2</sup></b>   | 0.817                            | 0.779                  | 0.798                 | 0.806                  | 0.814                  | 0.813                  |

*Notes:* Column 1 includes the sample of only ever-members, i.e. countries that appear in table 4, but takes the data back to start in 1982 (see sample description in text). Column 2 includes the full sample of developing countries, before adding controls. Column 2 confirms that the coefficients of interest are estimated only by the IWC members, i.e. are identical to columns 1. Column 3 adds all control variables, except the KOF index. Column 4 adds donor-specific year fixed effects. Column 5 further adds regional time-quartics. Finally, column 6 adds the KOF index as a last control. This reduces the number of observations because the KOF index is unavailable for the early years in some countries. The bottom panel reports on a separate regression which estimates coefficients by donor, but is otherwise identical to that in the top panel. (Japan's coefficient is always identical to that of the pro-bloc, and therefore not reported a second time.) Standard errors are clustered at the recipient-country level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Online Appendix B table 2 reports the same results for the log of aid.

bers during their membership has two disadvantages: One is that this disregards any effect of joining the IWC. Table 5 extends the sample to include years of absent membership and years before to-be members joined the IWC.

The second disadvantage is that including controls may give misleading results when only such a narrow set of countries is included in the regression. For example, computing a linear and quadratic trend for Sub-Saharan African aid based on only the five Sub-Saharan African countries in table 2 may be very misleading. In order to adequately control for other determinants of aid-giving, one should include *all* aid recipients in the data. Countries that were never in the IWC are simply coded as  $\text{Vote-Pro}_{it} = 0$  throughout so that including them has no effect on the core coefficients of interest but ensures that control variables are treated appropriately. Table 5 secondly extends the sample to the full stream of foreign aid data for all aid recipients, including countries all those who were never members of the IWC.

Column 1 maintains the sample of only the aid recipients listed in table 2, i.e. those that were ever IWC members, but includes years before they joined the IWC. (See the sample description in section 3.) Recipient-donor fixed effects  $u_{ij}$  are the only control (as in table 4). The estimates are very similar to the estimates in column 3 of table 4. Column 2 extends the sample to include all aid-recipients. When no other controls are included, the coefficients in columns 1 and 2 need to be the same because, with  $u_{ij}$  as the only control, the identifying residual variation is unchanged by adding additional aid recipients that were never in the IWC. The value of adding all aid recipients comes from being able to include a battery of control variables (with donor-specific coefficients). Column 3 adds all control variables described in section 3 (except the KOF index), column 4 adds donor-specific year fixed effects, column 5 adds donor-specific linear and quadratic regional trends, and column 6 adds the KOF index as a last robustness check, which reduces the sample size somewhat because the index is unavailable for some countries in the early years. On-line Appendix B table 2 reports the same results for the log of aid. All the controls are meaningful in the sense of having an impact on the regressions'  $R^2$ . Yet, their inclusion has remarkably little impact on the coefficients  $\hat{\alpha}_1$  and  $\hat{\alpha}_2$ . In other words, variation in IWC voting-bloc affiliation appears to be mostly orthogonal to observable changes in aid recipients' population, GDP, trade, institutions, openness, and even to donor-recipient specific voting agreement in the U.N. General Assembly, although all of these do matter for foreign aid.

## 5 Entry and Timing of Reward and Punishment

Table 5 gives an added sense of robustness relative to table 4 because it allows for the inclusion of many parametric and non-parametric controls. It does not, however, shed light on the question whether this result is driven by short-run adjustments in aid immediately following changes in voting behavior, or whether the adjustment is of a more long-run nature. To address this question, I next study aid-flows around the time countries “join the pro-bloc” (“||” in table 2).

Figure 3 provides some preliminary graphical evidence regarding timing. Time is normalized to 0 the year before a country joined the pro-whaling bloc, and aid is normalized for each recipient to 10 dollars in the year before joining the pro-bloc. Figure 3 shows median normalized per capita aid flows from Japan to aid-recipients that joined the pro-bloc as well as the median normalized aid flow from the anti-whaling bloc. There is a strong suggestion that Japanese aid increase after the switch, while aid from the anti-whaling donors appears to drop off. While this is certainly indicative, an event-study analysis like this cannot be pushed very far in these data because of the inherent limitation that many instances of joining the pro-bloc occurred in the last three years of available voting data. The sample therefore rapidly shrinks when one moves more than two years out from the event, and one is quickly left with a handful of cases. Given the data structure, figure 3 should therefore be viewed as suggestive only, and the main analysis is in the regressions that follow.

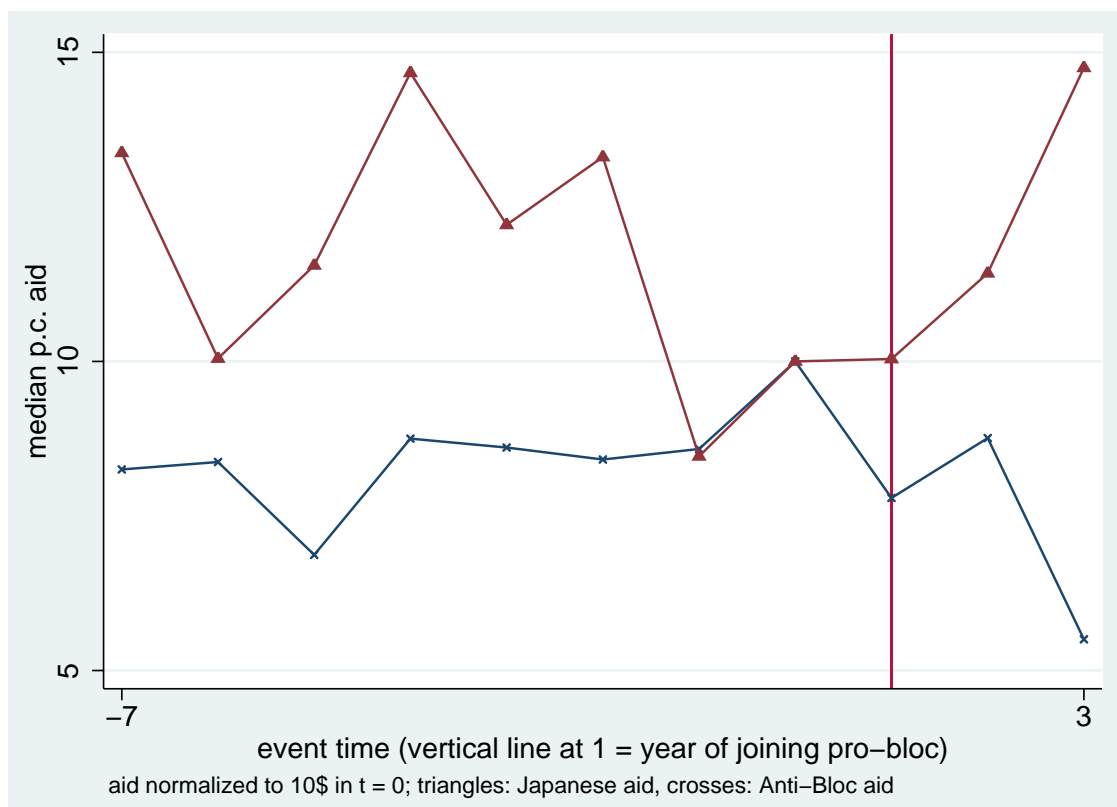
Before proceeding to the regressions, figure 4 shows aid flows for the four aid-recipients who are jointly (i.e. for the pro-whaling and anti-whaling response combined) most influential in estimating the coefficient on  $\text{Pro-Bloc}_{it}$  in column 5 of table 6: Antigua & Barbuda, Dominica, Grenada, and Saint Kitts & Nevis.<sup>21,22</sup> The pattern that stands out most clearly in figure 4 is a significant increase in aid by Japan after each country joined the pro-whaling bloc. The patterns on anti-whaling donors’ aid is more mixed. Only Dominica exhibits an obvious drop in anti-whaling aid after joining the pro-bloc. For Grenada and Antigua anti-whaling aid did not drop off at all in the two years after joining the pro-bloc. For Saint Kitts & Nevis, the decrease in the flow of

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<sup>21</sup>Jointly most influential in this context means the most instances of high  $Dfbetas$  for both the pro-whaling and the anti-whaling coefficients in column 5 of table 6.

<sup>22</sup>All four of these initially had high levels of per capita aid from the three anti-whaling bloc for idiosyncratic reasons: All four are former British colonies. Dominica and Grenada were also French colonies before becoming British colonies. In addition, Grenada received high U.S. aid after its U.S.-led invasion in 1983.

Figure 3: Foreign Aid Response to Joining the Pro-Bloc



aid after joining the pro-bloc (year 1 in figure 4) appears like a mere continuation of a negative pre-trend.

Turning to regressions, I now replace  $\text{Vote-Pro}_{it}$  (the greyed cells in table 2) with  $\text{Pro-Bloc}_{it}$  (every year after || in table 2) in specification (2). The results are reported in table 6. Interestingly, table 6 delivers stronger results than table 5, implying that a comparison of years before and after a country joined the IWC's pro-whaling bloc (table 6) appears to be more sharp and perhaps more meaningful than a comparison of years where a country voted with Japan relative to all other years including those where it voted neutral or did not attend (table 5). This makes sense in light of the relatively slow-moving nature of aid flows and the seemingly idiosyncratic occurrences of non-attendance or neutral voting.<sup>23</sup>

Having established in table 6 that  $\text{Pro-Bloc}_{it}$  is a meaningful measure of voting bloc affiliation, I now turn to studying the dynamics around the years  $\text{Pro-Bloc}_{it}$  turns to 1. This is done in

<sup>23</sup>For example, the Solomon islands join the pro-bloc in 1993 but vote neutral in 1994, do not attend in 2001, and again vote neutral in 2006.

Figure 4: Aid Response to Joining the Pro-Bloc: Four aid-recipients

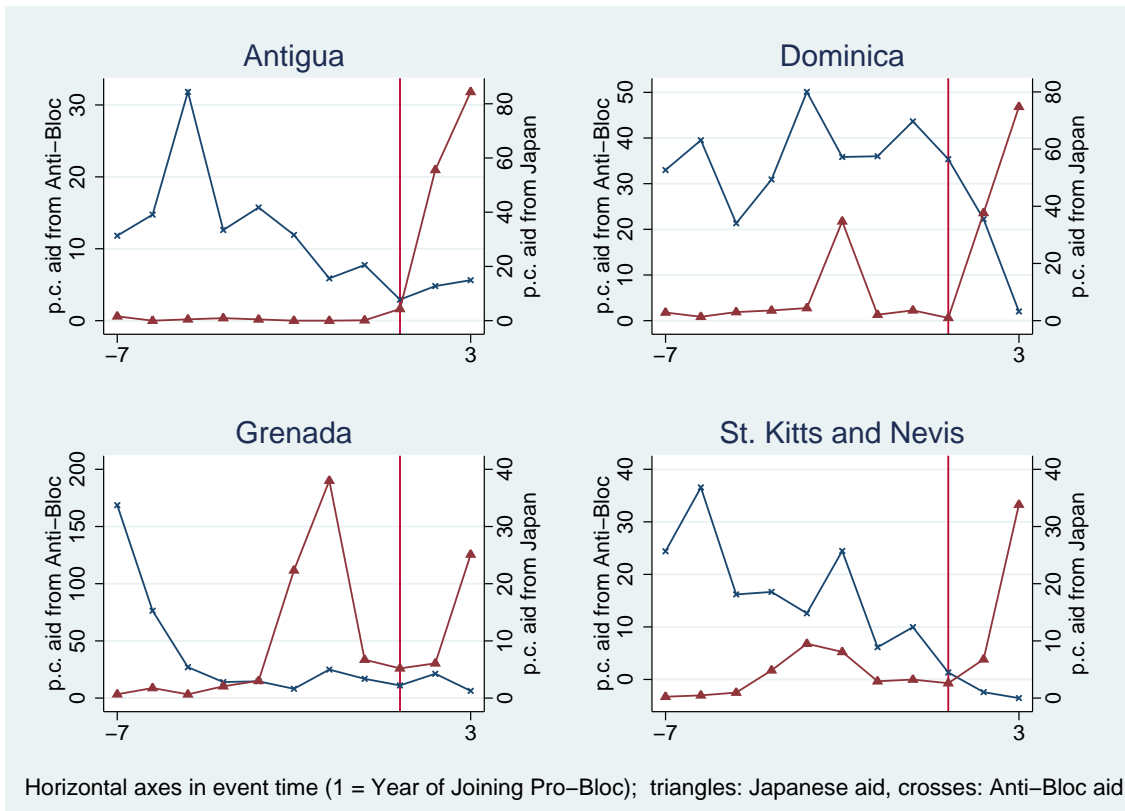


Table 6: Using Pro-Bloc<sub>it</sub> instead of Vote-Pro<sub>it</sub>

|  | (1)                              | (2)                    | (3)                   | (4)                    | (5)                    | (6)                    |
|--|----------------------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|
|  | <b>Dependent: ODA per capita</b> |                        |                       |                        |                        |                        |
| <b>Pro-Bloc<sub>it</sub> * (Donor: Pro<sub>j</sub> = 1)</b>  | 12.842**<br>(2.481)              | 12.842**<br>(2.500)    | 13.045**<br>(2.591)   | 12.999***<br>(2.982)   | 13.313***<br>(3.073)   | 13.376***<br>(3.096)   |
| <b>Pro-Bloc<sub>it</sub> * (Donor: Anti<sub>j</sub> = 1)</b> | -13.005***<br>(-3.350)           | -13.005***<br>(-3.376) | -9.899***<br>(-2.656) | -10.871***<br>(-2.946) | -10.539***<br>(-2.958) | -9.117***<br>(-2.852)  |
| <b>Observations</b>  | 3,980                            | 12,552                 | 12,382                | 12,382                 | 12,382                 | 12,080                 |
| <b>R<sup>2</sup></b>   | 0.601                            | 0.684                  | 0.687                 | 0.696                  | 0.702                  | 0.681                  |
| <b>Pro-Bloc<sub>it</sub> * (Donor: U.K.)</b>                 | -15.324**<br>(-2.625)            | -15.324***<br>(-2.645) | -13.059**<br>(-2.562) | -12.600***<br>(-2.744) | -13.798***<br>(-2.955) | -13.520***<br>(-3.337) |
| <b>Pro-Bloc<sub>it</sub> * (Donor: U.S.A.)</b>               | -13.406<br>(-1.508)              | -13.406<br>(-1.519)    | -10.103<br>(-1.230)   | -13.554<br>(-1.588)    | -11.384<br>(-1.470)    | -7.833<br>(-1.047)     |
| <b>Pro-Bloc<sub>it</sub> * (Donor: France)</b>               | -10.284<br>(-1.488)              | -10.284<br>(-1.499)    | -6.488<br>(-0.995)    | -6.418<br>(-0.950)     | -6.405<br>(-0.993)     | -6.012<br>(-0.951)     |
| <b>R<sup>2</sup></b>   | 0.798                            | 0.798                  | 0.764                 | 0.780                  | 0.791                  | 0.798                  |

Notes: This table exactly replicates table 5, but uses Pro-Bloc<sub>it</sub> instead of Vote-Pro<sub>it</sub>. While the effect of Vote-Pro<sub>it</sub> in table 5 is estimated relative to years of non-membership, non-attendance and neutral voting, the effect of Pro-Bloc<sub>it</sub> here is a within-country comparison of years after joining the pro-bloc (years after “||” in table 2) with years before that. Standard errors are clustered at the recipient level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Online Appendix B table 4 reports the same results for the log of aid.



specification

$$\begin{aligned}
 \text{ODA}_{ijt} = & u_{ij} + u_{jt} + \sum_{k=-5}^{\geq 3} (\gamma_{1,k}\text{Pro}^j + \gamma_{2,k}\text{Anti}^j)\text{Join-Pro}_{i,k} \\
 & + \beta_j \mathbf{X}_{ijt} + \mathbf{T}_{ijt} + \epsilon_{ijt},
 \end{aligned} \tag{4}$$

which also estimates the lead- and lag-structure going back five years before a country joined Japan's bloc. For example, Grenada joined the pro-bloc in 1993 so that in 1988  $\text{Join-Pro}_{i,k=-5} = 1$ , in 1993  $\text{Join-Pro}_{i,k=0} = 1$ , and in *every* year after 1995  $\text{Join-Pro}_{i,k \geq 3} = 1$

Table 7 reports the results from estimating specification (4). For Japan, there is no evidence of increases in aid in the years leading up to entry into the pro-bloc. Indeed, the first significant increase in aid can be seen one year after joining the pro-bloc. This suggests that if Japan entices voting for the pro-bloc at all, it does so using primarily the promise of *future* increases in aid payments. The effect is larger in the second year after joining (18 dollars) but thereafter remains constant. This is consistent with the coefficient in column 5 of table 6 (13 dollars) which should be an average of the four coefficients on  $\text{Join-Pro}_{i,k=0}$ ,  $\text{Join-Pro}_{i,k=1}$ ,  $\text{Join-Pro}_{i,k=2}$ , and  $\text{Join-Pro}_{i,k \geq 3}$  in column 1 of table 7.

For the anti-whaling donors, the picture looks very different. Column 2 shows evidence of significant negative pre-trends starting about three to four years before countries join the pro-bloc. These pre-trends are idiosyncratic to individual countries because they are identified conditional not only on parametric controls but also on donor-specific year fixed effects and donor-specific regional trends. They suggest that it may be in particular those countries who experience decreasing aid from the anti-whaling donors that join the pro-whaling bloc, although the results cannot speak to whether this happens on Japan's enticement or not. Given that countries which joined the pro-whaling bloc experienced significant decreases in aid in the three to four years before, the average of the coefficients  $\text{Join-Pro}_{i,k=0}$ ,  $\text{Join-Pro}_{i,k=1}$ ,  $\text{Join-Pro}_{i,k=2}$ , and  $\text{Join-Pro}_{i,k \geq 3}$  is actually more negative than the 10 dollar reduction in column 5 of table 6.

Columns 3–5 of table 7 break the anti-whaling response down by donor. By construction, Japan's response is again equal to that of the pro-bloc in column 1, and therefore not reported a second time. The pre-trends appear to be driven by aid from both the U.K. and the U.S., while the results for France are individually overall weaker. In column 6, I include an explicitly mod-

Table 7: Dynamics

|                                   | Japan                | Anti                   | UK                     | USA                  | France              | Anti               |
|-----------------------------------|----------------------|------------------------|------------------------|----------------------|---------------------|--------------------|
|                                   | (1)                  | (2)                    | (3)                    | (4)                  | (5)                 | (6)                |
| Dependant:                        | odapc                |                        |                        | odapc                |                     | odapc              |
| <b>Join-Pro<sub>i, k=-5</sub></b> | 7.002<br>(0.908)     | -2.702<br>(-0.335)     | -7.084<br>(-1.260)     | 9.477<br>(0.450)     | -6.141<br>(-0.941)  | -1.283<br>(-0.168) |
| <b>Join-Pro<sub>i, k=-4</sub></b> | -4.157<br>(-1.097)   | -6.942<br>(-1.614)     | -6.260<br>(-1.103)     | -6.544<br>(-0.769)   | -4.952<br>(-0.786)  | -3.870<br>(-0.851) |
| <b>Join-Pro<sub>i, k=-3</sub></b> | -0.063<br>(-0.019)   | -8.634**<br>(-2.219)   | -9.810*<br>(-1.748)    | -12.503*<br>(-1.657) | -2.754<br>(-0.399)  | -4.229<br>(-0.831) |
| <b>Join-Pro<sub>i, k=-2</sub></b> | -0.402<br>(-0.114)   | -12.138**<br>(-2.509)  | -9.217<br>(-1.355)     | -16.193*<br>(-1.715) | -6.540<br>(-0.721)  | -4.556<br>(-0.659) |
| <b>Join-Pro<sub>i, k=-1</sub></b> | -0.017<br>(-0.004)   | -12.212**<br>(-2.546)  | -7.281<br>(-1.195)     | -16.530*<br>(-1.691) | -8.613<br>(-0.991)  | -2.628<br>(-0.305) |
| <b>Join-Pro<sub>i, k=0</sub></b>  | 6.060<br>(1.115)     | -12.007***<br>(-2.852) | -11.997*<br>(-1.748)   | -14.922*<br>(-1.690) | -4.941<br>(-0.757)  | -0.396<br>(-0.040) |
| <b>Join-Pro<sub>i, k=1</sub></b>  | 9.345***<br>(2.684)  | -14.455**<br>(-2.282)  | -17.752**<br>(-2.067)  | -12.694<br>(-1.360)  | -8.720<br>(-0.642)  | -0.797<br>(-0.070) |
| <b>Join-Pro<sub>i, k=2</sub></b>  | 18.151***<br>(2.653) | -17.604***<br>(-2.789) | -23.414**<br>(-2.553)  | -11.486<br>(-1.148)  | -11.217<br>(-0.985) | -0.990<br>(-0.083) |
| <b>Join-Pro<sub>i, k≥3</sub></b>  | 18.492***<br>(2.806) | -19.487***<br>(-3.005) | -19.331***<br>(-2.624) | -19.528<br>(-1.406)  | -11.460<br>(-1.161) | 6.262<br>(0.309)   |
| Incl. Pretrend                    | No                   |                        |                        | No                   |                     | Yes                |
| <b>R<sup>2</sup></b>              | 0.833                |                        |                        | 0.834                |                     | 0.834              |

*Notes:* This table tests dynamics around the time aid recipients join Japan's bloc. For example, for Grenada,  $\text{Join-Pro}_{i, k=-5} = 1$  in 1988,  $\text{Join-Pro}_{i, k=0} = 1$  in 1993, and  $\text{Join-Pro}_{i, k \geq 3} = 1$  in every year after 1995. (See table 2.) This table reports on three separate regressions. Columns 1 and 2 report coefficients from one regression, for the pro-whaling and anti-whaling blocs separately. Columns 3–5 report on a separate regression, with the anti-whaling response broken down by donor. (Japan's response is by construction again equal to that of the pro-bloc in column 1.) Column 6 reports the anti-whaling coefficients of a third regression where a donor-specific linear pre-trend is allowed for each anti-whaling donor. (See text for details.) All regressions include the full set of controls (except the KOX index), donor-specific year fixed effects, and donor-specific region-quartics. Standard errors are clustered at the recipient level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Online Appendix B table 5 reports the same results for the log of aid.

eled (donor-specific) pre-trend, constructed as a cumulative variable that takes value 1 four years before a country joins the pro-bloc, then increases by one each year; formally  $\min\{0, (\text{year} + 5 - \text{switch-year})\}$ .<sup>24</sup> As may be expected given the patterns in column 2, this explicitly modeled pre-trend wipes out the negative effect of joining the pro-bloc for anti-whaling donors' aid. Column 6 means that while overall aid reductions from anti-whaling donors may partly reflect a punishment, they cannot be distinguished statistically from the mere continuation of idiosyncratic pre-trends. By contrast, Japanese aid goes up only after – and therefore most likely in response to – countries start voting with Japan. The patterns are therefore strongly suggestive of “vote buying” by Japan, which may also be targeting countries who have recently experienced reduced aid flows from anti-whaling donors. It is worth noting that the pre-trend does not wipe out the negative effect on anti-whaling aid when focusing only on the more restrictive sample of IWC members only, i.e., the sample used in table 4.<sup>25</sup> Thus, the overall evidence does suggest *some* punishment by the anti-whaling donor in addition to the apparent selection on the negative pre-trends into voting pro.

## 6 Conclusion

Taking advantage of the unique context of the dispute over whaling in the IWC, this paper provides evidence that major aid donors change their aid disbursements in response to membership and voting behavior in international organizations (IOs), even for an IO of small economic significance like the IWC. In the specific context studied here, Japan increases her aid when countries vote with her voting bloc. By contrast, the U.K., U.S., and France do not appear to reward voting for their bloc, but to punish voting against their bloc. This paper is the first to show clear evidence that major donors adjust their aid payments in response to how countries *vote* in IOs. It is also important in that it finds these patterns not only for the already well-studied U.S. aid flows, but also for the three next-biggest donors France, Japan and the U.K. All four appear willing to adjust their aid flows to respond to voting behavior in IOs. The distortions in aid flows and their economic consequences are unlikely to be large in the particular context studied here, because most of the

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<sup>24</sup>This could be done in many ways, a linear trend that starts in the first year in which column 2 shows a significant pre-trend is merely the most obvious one.

<sup>25</sup>Online Appendix B table 6 replicates table 4, adding the same explicit pre-trend described above.

affected aid recipients are small. But the distortions may be quite large in the aggregate if this behavior is pervasive throughout IOs. Aid flows aside, evidence of a willingness by small countries to sell their votes suggests that the one-country-one-vote rules common in IOs may not be the ideal mechanism for arriving at international agreements. Instead, double-majority rules (which take into account votes of delegates as well as the size of the populations they represent) such as those adopted in the European Union in 2007 in the *Treaty of Lisbon* might be preferable.

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**Online Appendix**

**to**

**“Foreign Aid and Voting in International Organizations:  
Evidence from the IWC”**

## Online Appendix A A Model of Vote-Buying with Entry and Exit

**Setup:** In the following model, members in a committee or IO vote on a single issue. Two competing lobbies, *Pro* and *Anti*, can reward and punish them for their votes. Members are indexed by a number  $z$  on  $[0, 1]$ . Each member can take one of three actions: voting in favor of the proposal, not attending, or voting against the proposal. These actions are denoted by  $P, N, A$ . There is a participation cost  $c_p$ , so that equilibrium-abstainers do not attend.<sup>26</sup> Following the setup in Groseclose and Snyder [1996] and Dekel et al. [2008], members get direct utility from voting but do not care about the outcome. This is a reasonable assumption if members are legislators, who care primarily how their actions appear in the eyes of their constituencies. Constituency preferences are assumed to take on three discrete values,  $\{V, 0, -V\}$ . Constituencies with preference 0 are indifferent about the issue. When constituency preference is  $-V$ , the legislator gets payoff  $-V$  from voting in favor of the issue and  $V$  from voting against it. The participation cost  $c_p$  is less than  $V$  so that constituency pressure is sufficient to justify attendance. Lobby *Pro* wants to see the proposal passed and lobby *Anti* wants to prevent this. For tractability, I make two simplifying assumptions: First, *Pro* begins, *Anti* moves second, and then countries make their attendance and voting decisions. This sequential structure is common in the theoretical vote-buying literature (Groseclose and Snyder [1996], Dekel et al. [2008]). I secondly assume that only *Pro* can pay positive bribes, while *Anti* is politically constrained to only punish. This assumption reflects the fact that, in the data, all movement by aid recipients is *towards* the pro-whaling bloc.<sup>27</sup> *Anti* can punish  $z$  only if it votes against its own constituency's preference, and punishment means reducing some pre-existing transfers from *Anti* to aid recipient  $z$ .<sup>28</sup>

**Optimal bribe schedule:** Starting from a situation with no bribes, countries with constituency preference  $V$  attend and vote in favor, indifferent countries do not attend, and countries with preference  $-V$  attend and vote against the proposal. I denote these sets by  $\{P(0), N(0), A(0)\}$ . *Pro* can bribe on three margins: It can bribe a country to switch from the anti-whaling into the pro-whaling bloc, to exit (from voting against to abstention), or to enter (from abstention to voting in favor). Suppose *Pro* targets a voteshare  $k$ . If  $k > \frac{p(0)}{p(0)+a(0)}$ , then *Pro* needs to bribe, and it chooses an optimal vector of bribes  $x$  so that  $\frac{p(x)}{p(x)+a(x)} = k$ .<sup>29</sup> The costs of bribing a country vary across the three margins, depending on (i) whether  $z$  votes against its preference, (ii) whether  $z$  incurs attendance cost  $c_p$  and (iii) on  $y(z)$ , the punishment  $z$  incurs for accepting a bribe from *Pro*. The benefits also vary across the three margins. To see this, assume that *Pro* reaches the target  $k$  by bribing  $b^1$  countries that otherwise would not to attend (from  $N(0)$  into  $P(x)$ ),  $b^2$  countries to switch blocs (from  $A(0)$  into  $P(x)$ ), and  $b^3$  countries to exit (from  $A(0)$  into  $N(x)$ ). In that case,

$$k = \frac{p(0)+b^1+b^2}{p(0)+a(0)+b^1-b^3}.$$

This formulation shows that different actions impact *Pro*'s coalition size differently: Switchers raise only the numerator, entrants raise the numerator but also the denominator, and exits only lower the denominator. This makes a switcher  $1/k$  times as valuable as an exit and  $1/(1-k)$  times

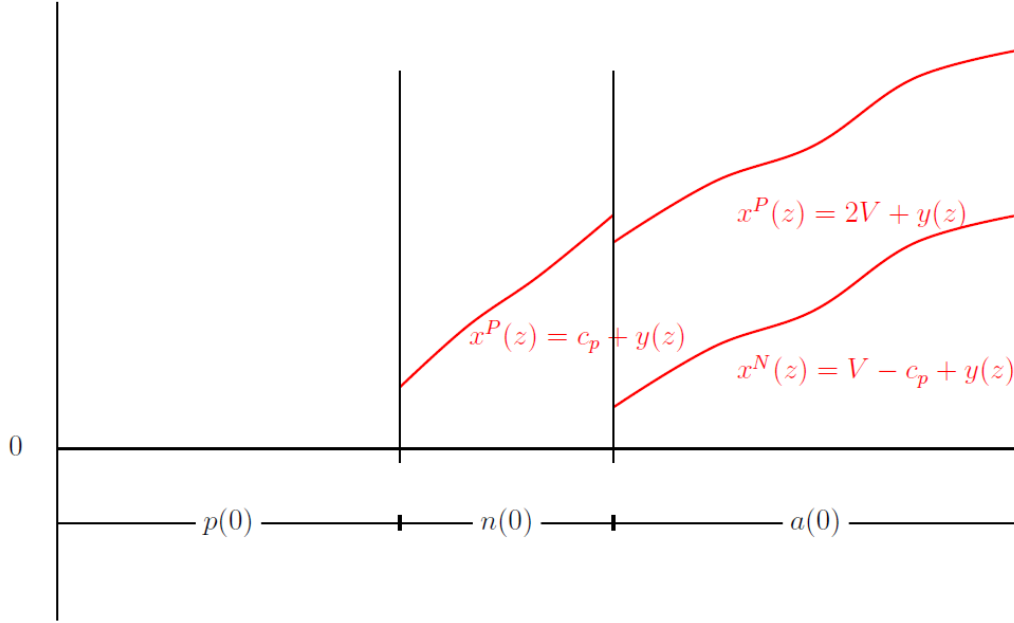
<sup>26</sup>I think of all aid recipient countries as members, some of whom will not attend the meeting in equilibrium. Abstention, non-attendance and non-membership are therefore synonymous in the model (as well as in the data).

<sup>27</sup>In Groseclose and Snyder [1996] and Dekel et al. [2008] the second lobby can counter-bribe before members vote. However, non-attendance is not an option in those papers. With non-attendance, there are three bribe-margins, which makes the model quickly intractable with two bribing lobbies.

<sup>28</sup>This means *Anti*'s actions are a punishment for corruption, and countries with bigger aid flows have more to lose from being corrupt. There could be existing transfers from *Pro*, but they do not matter because *Anti* does not bribe.

<sup>29</sup>Countries that do not receive aid can be introduced here by simply adding two parameters  $\hat{p}, \hat{a}$  such that the share of votes in favor of the issue is  $\frac{p(0)+\hat{p}}{p(0)+\hat{p}+a(0)+\hat{a}}$  without bribes.

Online Appendix Figure 1: Optimal Bribes



more valuable than a new entrant.<sup>30</sup> if the target is  $k = 0.5$ , as the evidence suggests may be the case in the IWC, switchers are twice as valuable as entrants and exits. *Pro's* bribe schedule is an offer  $x^P(z)$  to legislators in  $N(0)$  and two offers  $(x^P(z), x^N(z))$  to legislators in  $A(0)$ , where the superscript denotes  $z$ 's action. To compensate countries (for voting against their preference, for getting punished by *Anti*, and for attendance costs), *Pro* sets  $x^P(z) = c + y(z)$  for countries (in  $N(0)$ ) that would otherwise abstain, and  $x^P(z) = 2V + y(z)$ ,  $x^N(z) = V - c + y(z)$  for countries (in  $A(0)$ ) that would otherwise vote against the proposal. Figure 1 shows these bribe schedules, ranking agents by  $y(z)$  within their preference sets  $N(0)$  and  $A(0)$ . At the margin, relative bribes have to equate their relative contributions to  $k$ , so that  $\frac{1}{1-k}x^P(z^1) = x^P(z^2) = \frac{1}{k}x^N(z^3)$  where  $z^1, z^2, z^3$  are the marginal (highest-indexed) bribed countries.

The model [generates several insights](#) First, bribes may be paid not only for joining the pro-bloc but also for leaving the anti-bloc (into abstention).<sup>31</sup> Second, bribes by the pro-whaling lobby are larger when punishments  $y(z)$  by the anti-whaling lobby are larger.

## Online Appendix B Additional Evidence and Robustness

<sup>30</sup>This can be seen by solving  $b^2(b^1, b^3) = k[a(0) - b^3] - (1 - k)[p(0) + b^1]$ .

<sup>31</sup>Related to this, the model predicts that bloc-switchers are  $\frac{1}{1-k}$  times as valuable as new entrants into the pro-whaling bloc (or a country leaving the anti-bloc), and should therefore receive higher bribes. While I do find evidence for this, this is essentially a cross-sectional prediction and with the very small cross-sectional sample in table 2 needs to be treated with caution.



Online Appendix Table 1: Influential Observations in Table 4

|     |                                     | Japan | UK | USA | France |
|-----|-------------------------------------|-------|----|-----|--------|
| AAB | <b>Antigua &amp; Barbuda</b>        | 5     | 1  |     |        |
| BLZ | <b>Belize</b>                       |       |    | 1   |        |
| CAO | <b>Cambodia</b>                     |       |    |     | 1      |
| CDI | <b>Cote d'Ivoire</b>                |       |    |     | 2      |
| DMA | <b>Dominica</b>                     | 5     | 7  | 1   | 7      |
| GAB | <b>Gabon</b>                        |       |    |     | 4      |
| GRN | <b>Grenada</b>                      | 3     |    | 11  | 1      |
| KBI | <b>Kiribati</b>                     | 1     | 1  |     |        |
| MAA | <b>Mauritania</b>                   |       |    |     | 2      |
| MSI | <b>Marshall Islands</b>             |       |    | 1   |        |
| NAU | <b>Nauru</b>                        | 1     |    |     |        |
| PAN | <b>Panama</b>                       |       |    | 2   |        |
| SEN | <b>Senegal</b>                      |       |    |     | 1      |
| SKN | <b>St. Kitts-Nevis</b>              | 2     | 1  | 7   |        |
| SLU | <b>St. Lucia</b>                    | 3     | 2  | 1   | 6      |
| SOL | <b>Solomon Islands</b>              | 2     | 9  |     |        |
| SVG | <b>St. Vincent &amp; Grenadines</b> | 1     |    |     |        |

*Notes:* This table lists the most influential observations for each donor's coefficient in table 4, by donor across columns. Influence is measured by the Dfbeta criterion.

Online Appendix Table 2: Replicating in-text table 5 for log(aid)

|  | (1)                        | (2)                 | (3)                 | (4)                  | (5)                  | (6)                  |
|--|----------------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
|  | <b>Dependent: log(ODA)</b> |                     |                     |                      |                      |                      |
| <b>Vote-Pro<sub>it</sub> * (Donor: Pro<sub>j</sub> = 1)</b>  | 0.845***<br>(3.032)        | 0.845***<br>(3.060) | 0.657**<br>(2.423)  | 0.719***<br>(2.795)  | 0.833***<br>(3.403)  | 0.844***<br>(3.178)  |
| <b>Vote-Pro<sub>it</sub> * (Donor: Anti<sub>j</sub> = 1)</b> | -0.265<br>(-1.484)         | -0.265<br>(-1.498)  | -0.294*<br>(-1.782) | -0.334**<br>(-2.251) | -0.306**<br>(-1.990) | -0.293**<br>(-2.097) |
| <b>Observations</b>  | 3,236                      | 10,501              | 10,416              | 10,416               | 10,416               | 10,251               |
| <b>R<sup>2</sup></b>   | 0.815                      | 0.779               | 0.797               | 0.805                | 0.813                | 0.813                |
| <b>Vote-Pro<sub>it</sub> * (Donor: U.K.)</b>                 | -0.280<br>(-1.156)         | -0.280<br>(-1.165)  | -0.342<br>(-1.593)  | -0.291<br>(-1.294)   | -0.353<br>(-1.612)   | -0.322<br>(-1.547)   |
| <b>Vote-Pro<sub>it</sub> * (Donor: U.S.A.)</b>               | -0.250<br>(-0.648)         | -0.250<br>(-0.653)  | -0.289<br>(-0.745)  | -0.522<br>(-1.584)   | -0.428<br>(-1.364)   | -0.420<br>(-1.447)   |
| <b>Vote-Pro<sub>it</sub> * (Donor: France)</b>               | -0.262<br>(-1.164)         | -0.262<br>(-1.173)  | -0.253<br>(-1.255)  | -0.241<br>(-1.214)   | -0.177<br>(-0.923)   | -0.181<br>(-0.957)   |
| <b>R<sup>2</sup></b>   | 0.610                      | 0.610               | 0.679               | 0.688                | 0.697                | 0.701                |

Notes: This table exactly replicates table 5, using log(aid) as the outcome instead of per capita aid. Standard errors are clustered at the recipient level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Online Appendix Table 3: Coefficients on Controls

| Controls:                        | log(GDP)              | log(Pop)              | Freedom House:      |                      | UN G.A. Voting      |                     | Imports by Donor    | KOF Index |
|----------------------------------|-----------------------|-----------------------|---------------------|----------------------|---------------------|---------------------|---------------------|-----------|
|                                  |                       |                       | Political Rights    | Civil Liberties      | Agreement           | Agreement           |                     |           |
| <b>Dependent: ODA per capita</b> |                       |                       |                     |                      |                     |                     |                     |           |
| Japan                            | 0.607<br>(0.710)      | -12.421**<br>(-2.001) | -0.347<br>(-1.157)  | -0.283<br>(-0.596)   | 0.009<br>(0.604)    | 1.057<br>(0.826)    | -0.129<br>(-1.241)  |           |
| U.K.                             | -3.533**<br>(-2.500)  | -7.747<br>(-0.573)    | -1.074<br>(-1.511)  | 0.966<br>(0.700)     | 0.086*<br>(1.830)   | 3.150*<br>(1.883)   | 0.789*<br>(1.941)   |           |
| U.S.A.                           | -7.432**<br>(-2.586)  | 6.001<br>(0.404)      | 1.635<br>(1.311)    | -1.781<br>(-1.482)   | 0.087<br>(0.456)    | 0.134<br>(0.283)    | 0.254*<br>(1.682)   |           |
| France                           | -1.219<br>(-0.888)    | -10.345<br>(-0.679)   | -0.960<br>(-1.408)  | 1.044<br>(1.129)     | 0.006<br>(0.159)    | 0.729<br>(1.253)    | 0.461**<br>(2.152)  |           |
| <b>Dependent: log(ODA)</b>       |                       |                       |                     |                      |                     |                     |                     |           |
| Japan                            | 0.246<br>(1.000)      | 1.042<br>(0.873)      | -0.026<br>(-0.418)  | -0.204**<br>(-2.530) | 0.007*<br>(1.756)   | 0.345<br>(1.272)    | 0.032*<br>(1.809)   |           |
| U.K.                             | -0.362*<br>(-1.768)   | 0.976<br>(0.795)      | -0.031<br>(-0.573)  | -0.024<br>(-0.359)   | 0.005<br>(1.272)    | 0.157<br>(1.615)    | 0.032**<br>(2.174)  |           |
| U.S.A.                           | -0.495***<br>(-2.944) | 1.790*<br>(1.838)     | -0.100*<br>(-1.964) | -0.079<br>(-1.256)   | 0.009<br>(1.244)    | 0.241***<br>(4.457) | 0.052***<br>(3.603) |           |
| France                           | -0.097<br>(-0.915)    | 0.149<br>(0.214)      | -0.059<br>(-1.507)  | -0.022<br>(-0.398)   | 0.005***<br>(2.664) | 0.257***<br>(4.596) | 0.007<br>(0.620)    |           |

Notes: This table reports the coefficients on the control variables from a single regression: table 5 column 6 in the top panel, and from online appendix table 2 column 6 in the bottom panel. Standard errors are clustered at the recipient level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Online Appendix Table 4: Replicating in-text table 6 for log(aid)

|  | (1)                        | (2)                 | (3)                 | (4)                 | (5)                 | (6)                  |
|--|----------------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
|  | <b>Dependent: log(ODA)</b> |                     |                     |                     |                     |                      |
| <b>Pro-Bloc<sub>it</sub> * (Donor: Pro<sub>j</sub> = 1)</b>  | 1.049***<br>(3.215)        | 1.049***<br>(3.244) | 0.816**<br>(2.501)  | 0.910***<br>(2.947) | 1.075***<br>(3.635) | 1.100***<br>(3.338)  |
| <b>Pro-Bloc<sub>it</sub> * (Donor: Anti<sub>j</sub> = 1)</b> | -0.205<br>(-1.057)         | -0.205<br>(-1.066)  | -0.242<br>(-1.334)  | -0.308*<br>(-1.851) | -0.277<br>(-1.541)  | -0.271<br>(-1.640)   |
| <b>Observations</b>  | 3,236                      | 10,501              | 10,416              | 10,416              | 10,416              | 10,251               |
| <b>R<sup>2</sup></b>   | 0.815                      | 0.779               | 0.797               | 0.805               | 0.813               | 0.813                |
| <b>Pro-Bloc<sub>it</sub> * (Donor: U.K.)</b>                 | -0.378<br>(-1.367)         | -0.378<br>(-1.378)  | -0.446*<br>(-1.836) | -0.398<br>(-1.580)  | -0.494*<br>(-1.946) | -0.471**<br>(-1.990) |
| <b>Pro-Bloc<sub>it</sub> * (Donor: U.S.A.)</b>               | -0.054<br>(-0.128)         | -0.054<br>(-0.129)  | -0.072<br>(-0.166)  | -0.380<br>(-1.006)  | -0.282<br>(-0.776)  | -0.275<br>(-0.804)   |
| <b>Pro-Bloc<sub>it</sub> * (Donor: France)</b>               | -0.146<br>(-0.492)         | -0.146<br>(-0.496)  | -0.164<br>(-0.612)  | -0.167<br>(-0.628)  | -0.063<br>(-0.245)  | -0.074<br>(-0.292)   |
| <b>R<sup>2</sup></b>   | 0.610                      | 0.610               | 0.679               | 0.688               | 0.697               | 0.701                |

Notes: This table exactly replicates table 6, using log(aid) as the outcome instead of per capita aid. Standard errors are clustered at the recipient level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Online Appendix Table 5: Replicating in-text table 7 for log(aid)

|                                     | Japan               | Anti                 | UK                   | USA                | France             |
|-------------------------------------|---------------------|----------------------|----------------------|--------------------|--------------------|
|                                     | (1)                 | (2)                  | (3)                  | (4)                | (5)                |
| Dependant:                          | log(ODA)            |                      | log(ODA)             |                    |                    |
| <b>Join-Pro<sub>i, k = -5</sub></b> | 0.721***<br>(2.794) | -0.088<br>(-0.714)   | -0.256<br>(-1.153)   | -0.214<br>(-1.009) | 0.180<br>(0.947)   |
| <b>Join-Pro<sub>i, k = -4</sub></b> | 0.421<br>(1.286)    | -0.038<br>(-0.279)   | -0.194<br>(-0.835)   | -0.170<br>(-0.682) | 0.227<br>(1.095)   |
| <b>Join-Pro<sub>i, k = -3</sub></b> | 0.522<br>(1.563)    | 0.065<br>(0.395)     | -0.224<br>(-0.653)   | 0.007<br>(0.032)   | 0.390<br>(1.615)   |
| <b>Join-Pro<sub>i, k = -2</sub></b> | 0.511*<br>(1.665)   | -0.133<br>(-0.666)   | -0.649<br>(-1.619)   | -0.127<br>(-0.434) | 0.351<br>(1.312)   |
| <b>Join-Pro<sub>i, k = -1</sub></b> | 0.434<br>(1.332)    | -0.098<br>(-0.572)   | -0.272<br>(-0.815)   | -0.006<br>(-0.020) | 0.008<br>(0.033)   |
| <b>Join-Pro<sub>i, k = 0</sub></b>  | 0.631<br>(1.637)    | -0.289<br>(-1.550)   | -0.740**<br>(-2.346) | -0.281<br>(-0.925) | 0.143<br>(0.484)   |
| <b>Join-Pro<sub>i, k = 1</sub></b>  | 1.215***<br>(3.641) | -0.093<br>(-0.317)   | -0.734<br>(-1.196)   | -0.116<br>(-0.271) | 0.532<br>(1.358)   |
| <b>Join-Pro<sub>i, k = 2</sub></b>  | 1.677***<br>(4.002) | -0.041<br>(-0.173)   | -0.586<br>(-1.603)   | 0.319<br>(0.796)   | 0.061<br>(0.158)   |
| <b>Join-Pro<sub>i, k ≥ 3</sub></b>  | 1.722***<br>(4.350) | -0.519**<br>(-2.092) | -0.594*<br>(-1.928)  | -0.824<br>(-1.144) | -0.251<br>(-0.792) |
| <b>R<sup>2</sup></b>                | 0.833               |                      | 0.834                |                    |                    |

Notes: This table replicates table 7, using log(aid) as the outcome instead of per capita aid. Standard errors are clustered at the recipient level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Online Appendix Table 6: Replicating in-text table 4 with an explicit pre-trend

| Dependent:   | ODA per capita |          |           | log(ODA) |          |          |
|--|----------------|----------|-----------|----------|----------|----------|
|  | (1)            | (2)      | (3)       | (4)      | (5)      | (6)      |
| <b>voteshare<sub>it</sub>* (Donor: Pro<sub>j</sub> = 1)</b>  | 14.727*        |          |           | 0.634*   |          |          |
|  | (1.797)        |          |           | (1.834)  |          |          |
| <b>voteshare<sub>it</sub>* (Donor: Anti<sub>j</sub> = 1)</b> | -5.910         |          |           | 0.084    |          |          |
|  | (-1.463)       |          |           | (0.269)  |          |          |
| <b>Vote-Pro<sub>it</sub>* (Donor: Pro<sub>j</sub> = 1)</b>   |                | 8.740**  | 9.168**   |          | 0.167    | 0.497*   |
|  |                | (2.140)  | (2.177)   |          | (0.955)  | (1.969)  |
| <b>Vote-Pro<sub>it</sub>* (Donor: Anti<sub>j</sub> = 1)</b>  |                | -3.396*  | -5.235**  |          | -0.056   | -0.133   |
|  |                | (-1.774) | (-2.335)  |          | (-0.361) | (-0.881) |
| <b>Observations</b>  | 1,136          | 1,136    | 1,684     | 869      | 869      | 1,343    |
| <b>R<sup>2</sup></b>   | 0.773          | 0.772    | 0.719     | 0.858    | 0.857    | 0.862    |
| <b>voteshare<sub>it</sub>* (Donor: U.K.)</b>                 | -10.001        |          |           | 0.196    |          |          |
|  | (-0.913)       |          |           | (0.310)  |          |          |
| <b>voteshare<sub>it</sub>* (Donor: U.S.A.)</b>               | -3.205         |          |           | -0.220   |          |          |
|  | (-1.638)       |          |           | (-0.483) |          |          |
| <b>voteshare<sub>it</sub>* (Donor: France)</b>               | -4.523         |          |           | 0.185    |          |          |
|  | (-1.017)       |          |           | (0.487)  |          |          |
| <b>Vote-Pro<sub>it</sub>* (Donor: U.K.)</b>                  |                | -3.485   | -11.237** |          | 0.357    | 0.038    |
|  |                | (-0.828) | (-2.199)  |          | (1.379)  | (0.135)  |
| <b>Vote-Pro<sub>it</sub>* (Donor: U.S.A.)</b>                |                | -0.806   | -1.875*   |          | -0.449** | -0.360   |
|  |                | (-1.230) | (-1.709)  |          | (-2.068) | (-1.197) |
| <b>Vote-Pro<sub>it</sub>* (Donor: France)</b>                |                | -5.897   | -2.592    |          | -0.234   | -0.155   |
|  |                | (-1.572) | (-0.679)  |          | (-1.237) | (-0.794) |
| <b>R<sup>2</sup></b>   | 0.773          | 0.773    | 0.720     | 0.858    | 0.858    | 0.862    |

Notes: This table replicates table 4, including the same explicit pre-trend as in column 6 of table 7. This table shows that the pre-trend does not wipe out the negative coefficient on  $\text{Vote-Pro}_{it}$  – particularly in column 3 – when only within-variation in voting inside the sample of IWC members is considered. This is important because it strengthens the evidence that the anti-whaling bloc does punish countries for switching into voting with the pro-whaling bloc. Standard errors are clustered at the recipient level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .