Principles, Principals, and Power: Institutional Reform and Aid Allocation at the Global Environment Facility (GEF)

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Introduction

The Global Environment Facility (GEF) was designed by donor governments in the early 1990s to assist developing country efforts to address global environmental problems such as ozone depletion, climate change, and threats to biodiversity. However, given different domestic political interests, Western donors have sometimes been more interested in helping recipient countries to build such a capacity than developing countries have been in receiving such help. Developing country governments often have been more interested in achieving economic development than in contributing to global environmental goods. To the extent that recipient governments were interested in environmental aid at all, they sought to address local environmental problems such as erosion control, pollution abatement, and clean water / sewage. This preference divergence between globally-oriented donors and locally-oriented recipients explains much of the politics, the institutional design, the reform efforts, and the portfolio allocation patterns of the GEF over time.

In this paper we deduce observable implications about GEF lending using principal-agent (PA) theory (focusing on formal authority, voting rules, and the collective principal), and compare these to the informal governance approach (Stone 2011; this volume).[1] The GEF presents scholars with an interesting case to learn about multilateral assistance and the politics of international organizations (IOs). Fortuitously, the mandated social purpose and normative principles[2] of the GEF were codified by participating governments and IOs in 1990 and a pilot program went into operation in 1991. The pilot program ran for three years and disbursed more than $700 million in grants to developing countries. In 1994 the GEF member states decided to institutionalize the basic principles and purposes agreed back in 1991, but the formal rules for

[1] For more on principal-agent approaches to IOs, see Nielson and Tierney 2003; Hawkins et al 2006; Hicks et al 2008; Tierney 2008; Lyne et al 2009; Copelovitch 2010; and Schneider and Tobin 2013.

[2] Barnett and Finnemore 1999 discuss the ways in which IOs create norms, principles, and social purpose in a given issue area and then diffuse these norms to states through their discourse and actions. In this case the relevant actions involve the allocation of environmental aid to encourage sustainable development or to help a developing country to complete a project in a way that enhances the natural environment or minimizes damage to the environment.

decision making were reformed, and the location of authority shifted from IO secretariats to member states on the GEF Council, which now approves both policies and individual projects.

So, the principles, purpose, and the organizational mandate of the GEF stayed the same, but the principals and formal lines of authority/accountability shifted. This shift provides analysts with an opportunity to assess the impact of formal decision rules and an altered distribution of power within the authorizing body. PA theory suggests that when such reforms are undertaken, we should observe substantial shifts in the policies, the behavior, and the institutional choices of IOs. In contrast, the informal governance approach suggests the conditions under which powerful states will be able to realize their interests, even in the face of significant changes to formal organizational rules that nominally benefit developing countries.

Given changes in representation within the collective principal (the GEF Council) that formally strengthened the position of developing countries, led us to predict that developing countries would start to receive more of the types of aid that they prefer – that is more "brown" aid.[3] We don't observe this, at least not immediately and seamlessly. As developing countries gained formal power after 1994 we also expected the GEF Council to authorize more agents to carry out GEF projects and for the primary GEF agency (the World Bank) preferred by donor governments to implement fewer projects, representing a smaller share of allocations, after the 1994 restructuring. While we do observe the introduction of several new GEF agencies a decade after the restructuring, we do not observe any abandonment of the World Bank as an implementing agency, or even a substantial diminution of its role in designing and executing projects. Finally, our PA model suggests that more recipient countries will gain access to GEF resources, even those that cannot credibly commit to effectively use the aid for its intended purpose; we observe precisely the opposite. Recipient credibility mattered less during the pilot phase than in the post-reform era.

While recipient credibility seems to have less of an influence on the allocation of GEF projects after 1995, closer examination of the data reveals a surprising trend. Starting in 2004, the GEF demonstrably began to consider political corruption in allocating project funds. Notably,

[3] We adopt the typology of environmental impacts developed by Hicks, et al (2008), which we summarize in greater detail below.

this shift did not coincide with any major change in formal organizational structure. While it was consistent with a formal policy change that occurred in September 2005, we observe that the GEF's practice changed more than a year before the policy was adopted. A closer look at informal politics within the GEF suggests that this change in aid allocation coincided not with the adoption of policy, but with an exercise of informal power within the GEF by the United States that started in 2003. While PA theory provides a useful starting point for understanding the politics and behavior of international organizations, in this case a strict PA account is insufficient to explain the outcomes we observe at the GEF over time.

Literature Review

While the IPE and IO literatures on the allocation of multilateral assistance are voluminous, very few scholars have employed political economy models to explain the behavior of the GEF and none that we know of use systematic evidence to explain changes to the GEF's aid portfolio. Several scholars provide valuable descriptions of the politics in and around the GEF that focus our attention on divergence between developed and developing country governments (Fairman 1996; Streck 2001), the sequencing of institutional reforms (Sjoberg 1999) and the role of the GEF Secretariat after the 1994 reforms (Werksman 2004; Andler 2009). Others explain the impact of GEF projects on the ground in developing or transition countries (Gerlak 2004). Recently Andonova (2010) has employed PA theory to analyze the incentives of IO bureaucrats to act as entrepreneurs in the development of the GEF small grants program and other public-private partnerships. However, none of these authors have focused much attention on the politics and the allocation of authority within the GEF's collective principal. If principals have the authority to set policy, allocate budgets, and hire/fire IO agents, then the preferences of those principals are likely to have a major impact on the choice of agents to perform tasks and the behavior they exhibit.[4]

[4] One major exception to this trend is Urpelainen (forthcoming), who develops a formal model to illustrate the conditions under which powerful states will be able to unilaterally subvert the formal rules of the delegation contract by influencing the IO agent *outside* of the authorized avenues of the delegation contract. However, that article offers little more than anecdotes from the GEF case to illustrate the

A fully satisfying explanation would no doubt analyze the strategic interaction of both principals and agents, but there may be an empirical payoff in focusing our attention on the principal side of that relationship and modeling the politics within the collective principal as a determinant of outcomes. This strategy has produced insights when used to study other multilateral organizations.[5]

Given the dearth of research on the intra-principal politics at the GEF, we draw upon the literature on multilateral aid allocation and PA theory as applied to IOs in order to develop some expectations about behavior and change at the GEF. A growing literature conceives of IOs as the agents of principals that are corporate actors, or collective principals. The members of these decision-making bodies must overcome collective action problems in order to make policy decisions that alter the status quo or to direct their agent(s). Whether they can make a decision and what decisions they make are determined by the decision rules that channel collective choices, the preferences of individual members, and the voting power of individual members of the group. Lyne et al (2009) adopt this approach to explain the shift from agriculture and infrastructure lending toward a greater focus on social protection and education projects within a range of MDBs from 1980-2000. Copelovitch (2010) uses a similar model to explain variations in the size and composition of IMF loans over time and across space. Tierney (2008) focuses on a unit veto collective principal, the UN Security Council, to explain the behavior of weapons inspectors in Iraq. Humphrey and Michaelowa (2011) explain how variation in shareholder preferences within MDB collective principals help to explain portfolios, lending volume, and the choices of borrowers who can shop for loans at a variety of MDBs. Schneider and Tobin (2013) analyze variation within multilateral aid institutions (MAIs) to explain the allocation of individual donor governments – that is, whether a donor government will choose to delegate to a particular MAI will depend, in part, on its ability to influence decisions within the collective

equilibrium. In this work, we provide a more systematic empirical examination of the sort of informal influence described by Urpelainen.

[5] For examples see Lyne et al 2006, 2009 and Copelovitch 2010.

principal of that institution.[6] Studies of individual IOs also illustrate recent efforts to highlight the role of small states on the Asian Development Bank's Executive Board (Kilby 2011) or outliers among MDBs in terms of their adoption of international norms.[7]

The typical analytic move for these PA approaches is to specify the preferences of all (Lyne et al 2009) or a sub-set (Copelovitch 2010) of the most important members of the collective principal and then explore how variation in the voting power and preferences of those members interact with the formal decision rule to produce policy choices. Like Humphrey and Michaelowa (2011) we adopt a simplified version of this approach by assuming that there are two types of governments represented within the collective principal – donors and potential borrowers. While there is variation within both these groups on specific policy issues,[8] in general donors have much higher per capita GDP and politically relevant environmentally-oriented constituencies within their electorates that expect their governments to provide global environmental public goods. Developing country governments, on the other hand, strongly prefer economic transfers that promote economic development domestically or that can be used to pay off political supporters (Barrett 1994; Streck 2001; Hicks et al 2008). This is precisely why, since the inception of the GEF, developing countries have been pushing for the inclusion of clean drinking water and desertification as environmental issues that could be financed through this

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[6] Schneider and Tobin also theorize about the ability of potential donors to realize their outcomes at the implementation phase in addition to the decision phase. Implementation issues move the analysis beyond the intra-member politics of the collective principal.

[7] See Nielson and O'Keefe (2010) on the Islamic Development Bank where the median preference of the collective principal is much less environmentally-oriented than at most other MDBs.

[8] For example, while most developing countries are not highly motivated to attract foreign aid that will protect bio-diversity, Belize and Costa Rica, which have burgeoning eco-tourism industries, have been proponents (and enthusiastic beneficiaries) of such aid. On the donor side, in 2002-03 the U.S., U.K., and France pushed for a performance-based resource allocation framework (RAF) that would rate potential recipients on their ability to successfully implement projects; the Germans and the Dutch opposed this scheme and sided with developing countries (Hicks et al 2008).

facility. These types of "brown" environmental projects directly support national priorities for most developing countries.[9]

In this article, we compare the PA approach described above with recently-developed theories of informal governance (Stone 2011; Urpelainen forthcoming). Both Stone and Urpelainen explicitly theorize how members of a collective principal could shape the behavior of an IO agent *unilaterally and outside the formal procedures* governing the delegation contract. Both scholars suggest why and how powerful states might act outside the formal delegation contract to encourage IO behavior that is consistent with their interests.

Stone (2011) identifies three types of power that can influence IO behavior: formal control, informal influence, and structural power. *Formal control* refers to the suite of institutional rules emphasized by PA theory. A state possesses *structural power* to the extent that it can credibly threaten to exit (or partially exit) an IO. The credibility of such threats is a function of the quality of a state's outside options – the utility that a state obtains by pursuing given interests outside an IO. If an important member of a collective principal enjoys favorable outside options, that state enjoys structural power within that organization. Finally, opportunities for *informal influence* arise particularly "through participation in decision-making" and through "informal consultation with the agents who are delegated authority to make decisions" (Stone 2011, 48). The degree of informal influence that a state can exert within an IO is a function of its structural power. States with significant structural power are able to shape IO outcomes without using formal control. Indeed, as Stone (2011) notes, states sometimes exert significant informal influence on IO policy before formal decision-making even begins.

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[9] As Hicks et al (2008) explain, brown aid is environmental aid designed to protect, enhance, or remediate local environmental assets within a recipient country. Common examples include water projects, sewerage, erosion control, and abatement of air pollution with heavy particulates. The other type of environmental aid, green aid, is designed to address global or regional public goods, such as preventing ozone holes, global warming, dirty oceans, or species extinction of endangered flora and fauna. While brown aid is relatively more valuable to developing countries, the other type of assistance that is valued by developing countries includes many varieties of "dirty" and "neutral" aid, which may have properties similar to brown aid in that it can be chopped up and delivered to important political constituents and is more functional than green aid for promoting economic development. For details on this coding scheme that is employed in the empirical section of this paper, see Hicks et al 2008, chapter 2.

Informal influence is not a mystery, and its operation need not be subtle. As informal influence increases within an organization, it can even create legitimacy problems. Under such conditions, Stone argues that powerful members may try to enhance organizational legitimacy by offering formal rule concessions to weaker members. Thus, formal rules and informal influence constitute two sides of a social contract among stronger and weaker members of an organization. Weaker members enjoy a level of formal control that exceeds their power; stronger members retain the ability to exert informal influence when their core interests are engaged (Stone 2011).

Alternatives to PA and "informal" approaches come in a number flavors, and each of them could be used to help explain the outcomes described in the empirical section of this article. Closely related both to PA theory and to the concept of structural power is the perspective that IOs are often effectively controlled by a hegemonic state. There is a long tradition of empirical work along these lines, showing that the United States frequently dictates outcomes within IFIs, or shapes them in important ways (Thacker 1999; Gruber 2000; Klepak 2003; Broz and Hawes 2006). These conclusions of IR scholars are often shared by economists who study IFIs. While Fleck and Kilby (2006) conclude that American geopolitical and, especially, commercial interests shape the geographic distribution of loans from the World Bank, Kilby (2006) finds that the U.S. and Japan overwhelmingly dominate allocation by the Asian Development Bank. Similarly, Andersen et al (2005) find even stronger influence of the U.S. at the IMF and at the World Bank (2006) when they proxy U.S. interests by voting similarity within the UN General Assembly. Received wisdom among empirically-oriented scholars thus suggests that the preferences of small states will not have a significant impact on IO outcomes in general or MDB behavior in particular. Our approach in this paper assumes that voting rules, voting power, and formal lines of accountability within IOs are efficacious and thus the preferences and influence of small states should be analyzed as if they mattered, rather than assumed away.

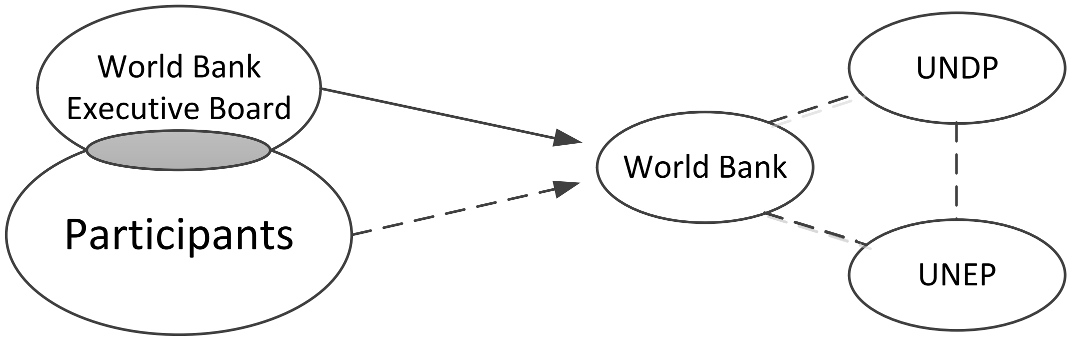
Finally, constructivist accounts of IO behavior explore the impact of normative principles (Barnett and Finnemore 2005; Weaver 2008) and causal beliefs (Chwieroth 2009) that become embedded within the organizational culture of existing international organizations. When these IOs are given new tasks, they often draw upon existing organizational scripts and routines to help them make sense of a new problem and they typically use existing tools and organizational procedures to address these new problems. When governments create new IOs to carry out some task, this may not be a central concern. However, in the case we analyze in this article the member governments have delegated planning and implementation of GEF projects to seven existing IOs that have well established organizational cultures. In fact, as we suggest below, state principals had prior beliefs about the cultures and capacities of various potential implementing agents and these beliefs drove many of the disagreements among them. Developed donor states wanted to delegate to the World Bank. Developing country governments, who were potential recipients of GEF aid, preferred delegation to UN agencies and, to a lesser extent, regional development banks.

Delegation and Agency at the GEF

On March 14, 1991, the Executive Directors of the World Bank signed Resolution 91-5. This Resolution officially created the GEF Pilot Program, a new, three-year financial mechanism that would seek to "assist in the protection of the global environment and promote thereby environmentally sound and sustainable economic development" (World Bank 1991, 1758). A World Bank managed trust fund, the Global Environment Trust (GET) was also set up as part of this arrangement.[10] The World Bank would administer the GET on behalf of "Participants," the governments which had chosen to participate in the GEF (World Bank 1991). Governance during the pilot phase was based on a loosely defined arrangement between the donors and three implementing agencies: the World Bank, the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP). These three agents were tasked with providing policy advice to recipient governments as well as designing and implementing projects by allocating money from the trust fund. Figure 1 illustrates the basic authority relationships.

[10] The Resolution also established a separate fund, the Ozone Projects Trust Fund, which was linked to the Montreal Protocol (World Bank 1991, 1763).

Figure 1: Authority Relations for GEF Pilot Phase 1991-1994



Defining the Collective Principal(s): 1991-1994

Importantly, participation in the pilot phase occurred on a voluntary basis (World Bank 1991, 1749). This makes it straightforward to establish which parties had ultimate authority over the agents. Those who contributed to the Trust Fund were the principals. By contributing (or withholding) funds, Participants could choose whether or not to delegate to the GEF. Initially, there were twenty-one donors, all contributing at least US$4 million in special drawing rights. As Sjöberg (1999, 6) points out, "all Participants should be contributors in some measure to the facility, thereby bridging the division and underscoring the essence of the GEF: collective self-help without connotations of charity." In addition, countries that organized co-financing were also considered Participants. This definition of "Participant" gave the collective principal a decidedly donor-oriented cast.

Although the Resolution stipulates that Participants would jointly review a "consistent work program [developed collectively by the agents] ... semiannually" (World Bank 1991, 1760), there was no well-defined decision-making mechanism in place. In practice, the Participants met twice a year, and decisions were taken by consensus (Reed 1993, 197). According to the Resolution: "[t]he work program will in turn determine the allocation of GEF resources to the three agencies to fund their portions of the work program, according to the activities needed to support the operations and in line with the capacity of the agencies to implement...the proposed work program and the allocation of resources will be reviewed by the participants at the semiannual meetings" (World Bank 1991, 1746).

No one Participant had more authority than any other member of the collective principal, *a priori*, but the definition of "Participants" and the consensus decision rule clearly favored donor governments. Despite the language about mutually agreed work plans, the World Bank played a commanding role among the three agents. Because the GEF pilot was an entity "of" the World Bank, the Bank's Executive Board was a collective principal of the Facility, which was subject to Bank rules and decisions (World Bank 1991, 1758). Bank staff designed the GEF Pilot Phase and it was a World Bank Board decision that established the Facility. Also, the World Bank was given the central role in the coordination of GEF activities: "The Bank, within the terms of its Articles of Agreement and of this Resolution, will cooperate with other international organizations, in particular, will make procedural arrangements for such cooperation with UNEP and UNDP" (World Bank 1991, 1763). According to Sjoberg (1999, 8), "These two roles gave the Bank a virtual monopoly on relations with the Participants."

The Participants were a collective principal of the GEF Trust Fund. However they did not govern together; this was therefore a case of two separate, but closely affiliated, principals. Formally the "Participants" made up the collective principal of the GEF, but in many cases when member governments were selecting their representatives to attend the Participants meeting, they chose the same individuals who served as their representatives at the World Bank – the Directors on the Bank's Executive Board. Therefore, we see substantial overlap between the two governing bodies as represented in Figure 1. For those governments that did not have their own EDs in Washington, they typically sent representatives from the Ministry of Finance or Development who had working relationships with people in the World Bank and who served on the Bank Board (Fairman 1996).

As a group, the Participants provided funds to the GET, and charged the three agents with the allocation of these funds and implementation of the funded projects. However, unlike project approval at all multilateral development banks, the staff within the IO agents that were designing and implementing GEF projects were not required to seek ex-ante approval from the GEF participating governments. Approving proposed projects was left to the management of the Bank, UNDP, and UNEP. This allowed staff at the World Bank, and to a lesser extent the UN agencies, to implement projects without getting prior approval from any governing board or group of member states. Such broad discretion predictably led to agent behavior that was unacceptable to many of the participating governments. For example, Sjöberg explains that UNDP initially sought as much of the GEF pie as it could consume by proposing as many projects as its staff could generate. Since donor governments believed the UNDP was a less competent agent, they pushed for quotas that would send more of the GEF projects through the World Bank. Donors succeeded during the second meeting in December of 1991 when "the Participants decided to establish an indicative guideline, whereby 70 percent were expected to be investment projects, leaving 30 percent for UNDP technical assistance projects."[11]

However, while donor governments were suspicious of the UN agencies, recipient governments were very unhappy with the role of the World Bank, and they pushed repeatedly for a restructured GEF that would strengthen the collective principal at the expense of its dominant agent, directing greater numbers of projects to the UN agencies. Recipients also pressed for greater authority within a reformed collective principal, which they argued would require changes in formal decision-making rules within the GEF. Notably, recipient governments eventually achieved most of what they desired in terms of formal, procedural reforms.

Defining the Collective Principal: 1995-present

The GEF had always existed in a state of flux, stemming from the fact that it had been established as an experimental three-year pilot project. As the principals contemplated the future of the GEF — and ways to formalize, adapt, or disband its structure — other, external forces were also at play. These, together with internal dynamics combined to catalyze the transition to a new, self-governing Facility. Specifically, there were increasing tensions between donors from the North and recipients from the global South[12] on the future of environmental aid (which reached a climax during the 1992 Rio Earth Summit); the galvanization of environmental movements and causes; and, the ability of NGOs and recipients to effectively leverage hard bargaining power.[13] In particular, recipients argued for the creation of an independent GEF with decision making rules organized along the UN agency norm of one-country, one-vote, rather than the shareholder style of decision making (one-dollar, one-vote) that was the norm in other

[11] See Sjöberg 1999.

[12] Collectively the Group of 77 "and China." (Sjöberg 1999)

[13] See Fairman (1996), Sjöberg (1999), and Andler (2009) for details on the politics and circumstances that led to the restructuring of the GEF.

major international financial institutions. Developing countries argued that the latter precluded their effective participation in the allocation process.

The transition out of the pilot phase culminated on 7 July 1994 with the signing of an agreement that instituted the new formalized governance structure of the GEF, making it an independent agency with a considerably stronger bureaucratic framework. It also reiterated GEF objectives, namely its determination to fund projects that would protect the global commons and catalyze co-financing for environmental aid; provided clearer procedures and lines of accountability; and created decision-making rules that greatly empowered developing countries.

The *Instrument for the Establishment of the Restructured GEF* (Instrument) was adopted in March 1994 by 73 member governments and the three implementing agencies.[14] The Instrument came into force on July 7, 1994.[15] While the GEF mandate — to provide additional funding to developing countries to "achieve agreed global environmental benefits" – remained essentially unchanged, the structure of the Facility was radically altered. Although the Restructured GEF does not have the same legal status as a fully independent international organization, it has nevertheless become an autonomous agency operating at the global level. Institutionally, the GEF resembles an IO: it now has a Participants' Assembly, a Governing Council, a Secretariat, and a technical advisory panel (STAP). For project implementation, however, it is still reliant on the original three agencies: the World Bank, UNDP, and UNEP. In 1999 four regional development banks were authorized as executing agencies in 2000 two additional UN agencies were authorized to execute GEF projects and in 2001 a final UN agency was so authorized.

The most striking modifications of the restructured GEF included the definition, composition, and distribution of formal authority within the collective principal. As a consequence of the Restructuring, the composition of the principal, the mechanism for decision-making, and the scope of the contract with the GEF's agents were extensively reshaped. The line

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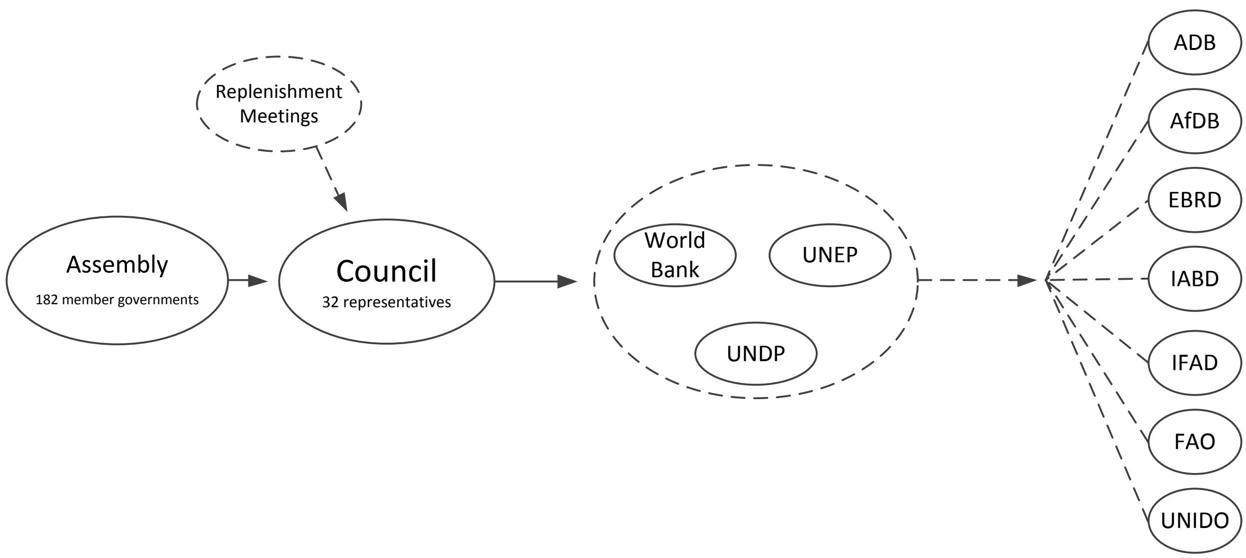
[14] Like an increasing number of IOs, the "founding members" of the GEF included both states and IOs (Johnson 2011); however, authority to re-contract is reserved for the member states acting collectively through the Parliament or the Council.

[15] The Instrument was amended on two occasions (in 2002 and 2006, respectively).

of delegation from Participants to Council to agents was clarified and strengthened. Most importantly, the reforms dramatically increased the representation of developing countries within the Council.

A key revision included in the Instrument had to do with how "Participants" were defined. During the pilot phase, the principals were the countries which had donated to the Global Environment Trust. But, under the reformed GEF the two terms, "Participants" and "donors," can no longer be used synonymously; the connotation of the former has changed. Today, any "State member of the United Nations or of any of its specialized agencies may become a Participant" (Instrument 13). The personality of the principal had changed. Membership in the GEF also increased considerably; currently, there are 182 member governments. All constituent states are represented in the Participants' Assembly, which is authorized to meet every three years (Instrument, 15). The Participants have delegated decision-making authority to the Council, the collective principal of the Restructured GEF, which contains 32 voting members and meets on a regular basis.

Figure 2: Authority Relations for GEF 1995-present



All GEF Participants are represented on the Council through a constituency system; groups are represented by a single Council Member, and generally organized according to geographic proximity. The Instrument established that there would be 16 constituencies representing developing countries, 14 representing developed countries, and 2 for economies in transition (Instrument, 15); these groupings are not static and have evolved over the years. Larger donors are typically represented by a single Member, although there are some interesting exceptions. For example Iran and China also belong to single-member constituencies despite the fact that other members who are in shared constituencies provide more money to the GEF than either Iran or China. Council Members who represent constituencies are responsible for casting the votes of all the Participants they represent (Instrument, 20).

Voting Power and the Governing Council

The Restructured GEF also established new voting rules, and a formal mechanism for decision-making, which was a dramatic change from the informal consensus system employed during the Pilot Phase. These new rules established a distinctive "hybrid" system meshing together aspects of both Bretton Woods-type institutions, where vote shares are based on a member state's financial contributions, and UN-type institutions characterized by the one-country one-vote rule. Voting procedures in the GEF are characterized by a "double-majority" regime. Votes require "both a 60 percent majority of the total number of Participants and a 60 percent majority of the total contributions" (Instrument, 20). This scheme gives both developing countries and developed country donors a veto on policies or projects that are contrary to their interests. While both observers and participants claim that, in practice, Council decisions are taken by consensus; this consensus is negotiated in the shadow of the double-majority voting rule.[16] Interestingly, voting power is defined by *cumulative* donations over the history of the GEF, allowing, in a sense, the formal power of individual donors in the collective to be "fine-tuned" by increasing donations.[17]

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[16] The Council has never voted. But, during negotiations on the adoption of the Resource Allocation Framework, or RAF, the Members came "to the brink" of a vote (Ramankutty 2011).

[17] For details see "Rules of Procedure for the GEF Council." This document, which was adopted by the GEF Council in 1994, was amended three times: in May 1999, November 2000, and November 2006. The most exhaustive revisions to Council proceedings were implemented in 1999, and had to do with guidelines concerning constituency groupings (including the procedure that would allow Participants to join or switch constituencies, and the rules for appointing or changing a constituency's representative Council Member).

The Council is charged with approving and setting policy, and overseeing the allocation of funds. This authority includes the requirement that the Council approve each Full-Sized Project.[18] Decisions are taken at official biannual GEF Council meetings. The specific roles of the Council are stated in the Instrument (15): "The Council shall be responsible for developing, adopting and evaluating the operational policies and programs for GEF-financed activities, in conformity with the present Instrument and fully taking into account reviews carried out by the Assembly." Although the Assembly of Participants has ultimate authority over the GEF, the Council is functionally the principal: all major decisions must go through the Council, including actions that revise the relationship (contract) with agents (both administrative and implementing agents). Acting together, the Council Members have the authority to terminate the contract with, or, less dramatically, withhold funding from their individual agents.

Delegation and Implementing Agencies

The three implementing agencies play similar roles as during the pilot phase: they are still expected to cooperate in preparing and presenting, in partnership with the Secretariat, a joint work program to the Council,[19] and they are in charge of implementing GEF projects (Instrument 19; 36-39). The source of authority, however, has shifted to the Council, which has more opportunities to guide or restrain their agents. As the Instrument specifies, the three agencies are "accountable to the Council for their GEF-financed activities" (19). And, the distribution of power among the three IO agents is more equitable than in the Pilot Phase; the World Bank, in particular has less discretionary power. Importantly, the system of governance that was established during the Restructuring allows the collective principal to alter the policies directing the project cycle (a right it has exercised on multiple occasions).[20] Given this authority, when the median preference of the Council changes, the Council is able to establish new policy parameters.

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[18] Costing over a million dollars.

[19] And abide by "Principles of Cooperation Among the Implementing Agencies" (Instrument 36).

[20] In 1995, the Council approved the new GEF Project Cycle (GEF/C.4/7); other changes were undertaken multiple times thereafter.

In 1999, the Council formalized an agreement, the "Expanded Opportunities Policy,"[21] that facilitated the official inclusion of other agents into GEF project implementation process. Like the Implementing Agencies, the agencies added under this policy were all pre-existing IOs and all of them (except the EBRD) were more favorable to the interests of developing countries than the World Bank.[22] At first, these were all Regional Development Banks (RDBs); the agents added in 1999 were: the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), and the Inter-American Development Bank (IADB). Two more United Nations agencies — the Food and Agriculture Association (FAO) and the United Nations Industrial Development Organization (UNIDO) — were brought into the GEF in 2000. In 2001 the International Fund for Agricultural Development (IFAD) was added as an authorized agent. Additional international agencies are currently under consideration (Ramankutty 2011).

Informal Influence: Funding the GEF

Funding at the GEF occurs in four-year cycles, or "Replenishment Periods." Contributing Participants of the GEF negotiate these Replenishments not in the GEF Assembly or Governing Council but, rather, under the auspices of the IBRD, which manages the GEF Trust Fund. Initially, the GEF Instrument established that "basic contributions" should be based on IDA 10 Basic Shares. However, GEF Replenishments have been volatile, with donors pledging variable amounts that have, in some cases, changed quite significantly over time. A Programming Document prepared by the Secretariat provides various scenarios to be funded by donors. The power dynamic present during Replenishment meetings is reminiscent of the pilot phase: it is driven almost exclusively by donors, who broadly specify the financing that will be made available for certain types of programming (not at the project level). Specific policy recommendations can also be made to the Council.

[21] GEF/C.13/3 (1999)

[22] Specifically, the Executive Boards of these RDBs had greater representation from developing countries than the World Bank Board had.

Although the Council is still the collective principal with final authority -- all "decisions taken by the replenishment process have to be considered and approved by the Council" (Castillo 14) – replenishments provide an opportunity for donors to pursue their own preferences by leveraging their financial contributions. Donors decide on broad sectoral and focal area priorities at the same time that they decide on their overall contributions to GEF replenishment. For example, donors might recommend that over the next three years the GEF should spend no more than 5 percent of its funds on desertification and/or erosion control projects (that are favored by recipients). This "recommendation" to the Council represents a threat to withdraw funding if the sectoral/focal areas targets are not adopted by the Council. As a consequence, even though the Governing Council is authorized to approve or reject the programmatic decisions made during replenishment negotiations, it is likely that the Governing Council will adopt such donor recommendations, out of concern for jeopardizing current and future replenishments. Consequently, there is, according to Castillo (13), a widespread view at the GEF that "strategic objectives and programme priorities decided by the GEF Council were largely influenced by the replenishment process negotiated by donors."

On occasion, donors have exploited their position not just to recommend but also to pressure the Council into adopting its recommendations, by threatening to withhold funds (Clémençon 2006). In these cases, individual governments have acted not as principals but external third-parties that bully the Council into approving certain policies. The in 2003 replenishment period clearly illustrated this dynamic when donors (led by the U.S.) succeeded in obtaining policy changes they desired.

Informal Influence and the Resource Allocation Framework

One of the successful "policy recommendations" emerging from members' review of GEF operations during the third replenishment period was that the GEF should follow the model of the U.S. Millennium Challenge Corporation (MCC) by adopting a performance-based allocation framework. Under this approach the GEF would consider the quality of recipient governance (in addition to environmental significance) as a primary factor in project allocation. In September 2005, following several months of heated negotiation; the GEF Executive Council endorsed the introduction of a formal Resource Allocation Framework (RAF).

The RAF was enormously unpopular among GEF recipients and, at least initially, was viewed with suspicion by several donor countries (Ramankutty 2011).[23] Nevertheless, the U.S. remained adamant that the GEF adopt a performance-based allocation system, going so far as to make thinly-veiled threats of partial withdrawal. Specifically, the U.S. threatened to reduce its contributions to the GEF by 50% starting in the fourth replenishment period, should the GEF fail to adopt such a framework. Such a move would be doubly threatening for the GEF: not only is the U.S. is one of the largest contributors to the GEF, but concerns over free-riding have led a number of other countries to benchmark their contributions to that of the U.S. (Clémençon 2006). Ultimately, the threat of partial withdrawal by the U.S. was sufficient to convince developing countries not to use their veto power in the Executive Council. At one point, the French delegate warned developing country constituencies on the Executive Council that donors successfully agreed to the fourth replenishment of the GEF Trust only after they had agreed to recommend the adoption of a performance-based allocation framework. Failure on the part of the Executive Board to implement such a "recommendation" would almost certainly jeopardize future replenishments (Fernandez 2004).

In a move that is reminiscent of Stone's (2011) "social contract of IOs," the GEF reformed the Resource Allocation Framework for the fifth replenishment period, starting in 2010. The new System for Transparent Allocation of Resources (STAR) preserved some of the rules of the old RAF, but introduced a new element to the allocation framework designed specifically to reassure developing countries. Under the RAF, project allocation was to be guided by recipients' environmental significance and quality of governance. STAR preserved those two criteria, and added a third: recipient need. Moving forward, the GEF is supposed to consider recipients' capabilities and economic need, in addition to the quality of their governance and environmental significance.

[23] In addition to push-back from recipient governments, the former CEO and Chairman of the GEF, Mohamed El-Ashry, opposed the U.S. initiative and publicly sided with the recipient governments. El-Ashry lecture on "Governance of Environmental Aid," Carnegie Endowment, Washington DC, October 2004.

Theory

A straightforward reading of principal-agent theory yields a number of clear expectations about GEF project allocation. Recall that throughout the institutional reforms described above, the GEF's mandate remained constant – to assist developing countries in managing global environmental challenges, and to assist countries in contributing to international efforts to manage global environmental threats. The most salient change brought about by the transition from the GEF Pilot to the current organization was the introduction of the GEF Council and the double-majority voting rule. In the post-reform GEF, projects require approval by participants representing three-fifths of financial contributions as well as three-fifths of representatives on the GEF council (three-fifths of whom represented developing countries or economies in transition). Prior to these formal changes, GEF operations were managed under World Bank voting rules, which gave significantly less weight to developing countries, and which certainly did not give developing countries and economies in transition an effective veto.

As many others have noted, the GEF Council has not held a formal vote since its creation, operating instead by an informal norm of consensus. However, this need not undermine the effects of institutional reform in the GEF. Staff members at the GEF and implementing agencies are well aware when designing projects for Governing Council approval that either a developed or developing country coalition could prevent approval. Project design therefore occurs in the shadow of the formal authority of the collective principal. The GEF Secretariat and implementing agency staff receive feedback from Participants throughout the project cycle, and routinely veto projects before they reach the Council (Ramankutty 2011).

A conventional PA approach suggests that as a consequence of these changes, post-reform GEF operations would more closely reflect the preferences of developing country recipients, mirroring the increased significance of those parties in the GEF's collective principal. Below, we describe a number of ways in which GEF projects vary, and how this variation is relevant to recipient country preferences. Before deducing those hypotheses, it is important to understand the measures of some variables we will use to assess these claims.

Measuring the Environmental Impact of Aid

As its name suggests, all GEF projects are supposed to yield distinct environmental benefits. Nevertheless, these benefits occur at a number of levels, some of which are of greater interest than others to developing countries. To capture this variation, we adopt the typology set forth by Hicks, et al (2008) and implemented in the AidData 2.0 research release where all projects (including GEF projects) are divided into five broad categories. These are: dirty strictly-defined (DSD), dirty broadly-defined (DBD), neutral, environmental broadly-defined (EBD), and environmental strictly-defined (ESD). Predictably, the great majority of GEF-funded projects fit into one of the last two categories and are classified as "environmental." Following Hicks, et al (2008), we adopt the additional convention of distinguishing between environmental projects whose primary purpose is to provide local or national environmental benefits (brown aid) from those that are aimed at providing global public goods (green aid). Table 1 provides definitions and examples of each type.

Table 1: Brown and Green Environmental Aid

Code	Definition	Examples
Brown	Projects that focus primarily on environmental quality in a specific country or locality.	Desalinization, Safe handling of toxics, Soil fertility, Wastewater treatment
Green	Projects that address regional or global environmental issues, and that produce benefits external to the recipient.	CO^2 & CFC emissions reductions, Nuclear safety, Recycling, Renewable Energy, Biodiversity Protection

This distinction between brown and green aid yields rather straightforward predictions. Given a choice between projects designed to provide exclusive benefits and those designed to produce positive externalities, recipients will have a clear preference for the former, since they stand to capture the entire benefit of the project.

H1a: As the voting power of developing countries within the collective principal of the GEF increases, the proportion of environmental projects directed toward "brown" (i.e., local) environmental issues will increase.

H1b: As the voting power of the developing countries within the collective principal increases, the distribution of the GEF's portfolio across focal areas favored by developing countries (desertification) will increase; focal areas less favored by recipients (e.g., biodiversity, ozone) will decrease.

Recipients have an interest not only in the allocation of aid projects, but also the ways in which projects are implemented. Although the 1994 reforms were partly designed to reduce the central role of the World Bank in GEF decision making, the Bank continued to be one of the leading implementing agencies for the GEF. We argue that, given a choice between working with the Bank or a UN agency (e.g., UNDP or UNEP), recipients will have a clear preference for the latter. It would be curious, indeed, were developing countries to fight so strongly for increased GEF independence (from the World Bank) and then express a preference for funneling GEF projects and dollars through the Bank.

In addition to looking at the negotiating positions of developing country governments and inferring their preferences, there are sound principal-agent reasons for recipients to prefer UN agencies – they have more influence on the allocation of funds by those agencies through the one-country one-vote rule structure of UN agencies. Thus, our second hypothesis concerns the effect of institutional reform in the GEF on agent selection.

H2: As the voting power of developing countries within the collective principal increases, the amount of money, the proportion of money, and the proportion of projects flowing through the World Bank will decrease.

Reversing the perspective, our final hypothesis concerns the declining influence of donors on aid allocation. Much of the political science and economic literature on foreign aid assumes that allocation is essentially donor-driven. Researchers commonly argue that allocation decisions are driven by one (or a combination) of three factors: donor self-interest, recipient need, or recipient credibility / good governance (Neumayer 2003). We have previously argued that donors will have a greater interest than recipients in promoting green aid, since they disproportionately benefit from the positive externalities that green aid generates. By the same logic, recipients will favor brown aid projects that provide exclusive domestic benefits. Our final hypothesis concerns recipient governance.

We expect that donors will be more interested than recipients to maximize the marginal benefit of GEF project dollars. Other things equal, we expect that donors will prefer to allocate GEF projects and project dollars to recipients that are perceived to be reliable (i.e., unlikely to misappropriate aid dollars) and that have the capability to implement projects competently. To be clear, we are not claiming that recipients have a preference for allocating GEF projects toward corrupt or institutionally weak governments. Our claim is simply that recipients do not share donors’ aversion to such allocation. This leads to our third hypothesis:

H3: As the voting power of developing countries within the collective principal increases, the amount and proportion of money/projects allocated to less credible recipients will increase.

In addition to these PA hypotheses, we can also deduce implications from theories of structural power and informal influence. If structural dominance approaches are correct, then the GEF should reflect U.S. dominance throughout the period under consideration. Neither the formal rule changes of the 1990s nor the replenishment politics of the 2000s should significantly affect GEF practices and allocation patterns.

The informal governance approach is similarly agnostic about the effects of the post-pilot rule changes. Such changes may have simply reflected a lack of legitimacy in the social contract of the GEF pilot. However, the informal governance model entails clear expectations for GEF practices in the 2000s. Not only should GEF allocations more closely reflect U.S. preferences, since the U.S. (and its allies) in the early and mid-2000s consciously used the replenishment process to establish the upper limit of spending within various GEF sectors. The shift in GEF practices should follow the efforts of informal influence by the U.S., rather than the adoption of the RAF itself. In other words, we should observe a shift in GEF practices even *before* the formal adoption of the RAF.[24]

Empirical Findings

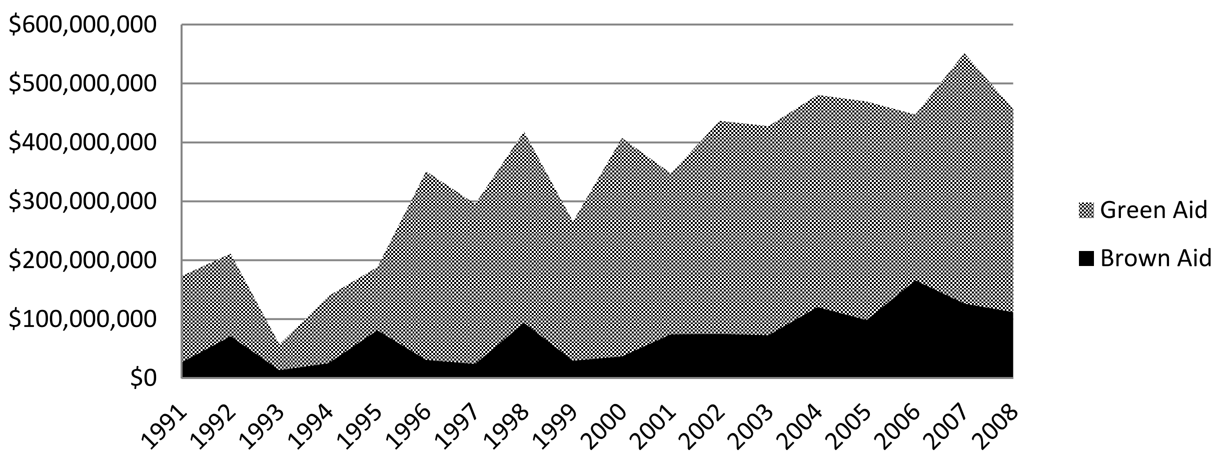
To assess these hypotheses, we updated the AidData dataset to include environmental codes for all GEF projects from 1991-2008 (Marcoux, et al 2012). Since each hypothesis corresponds to the 1994 reforms, we begin by comparing pre- and post-reform project allocation

[24] Note how this ex-ante effort by the U.S. and like-minded donors is different than the ex-post influence process explored by Kilby (2010). In Kilby's study of the World Bank he shows how the U.S. is able to use its informal and regular access to Bank staff and management to ensure that recipients favored by the U.S. are more likely to receive disbursements they were promised. For non-U.S. allies, the gap between commitments and disbursements is greater. This influence operates after the Board has approved Bank projects. The mechanism evident in our research highlights the way in which donors can wield informal influence long before projects are considered for Board approval.

by the GEF. Since GEF project development frequently occurs over two years, we use 1995 rather than 1994 as the structural break point in our allocation data.

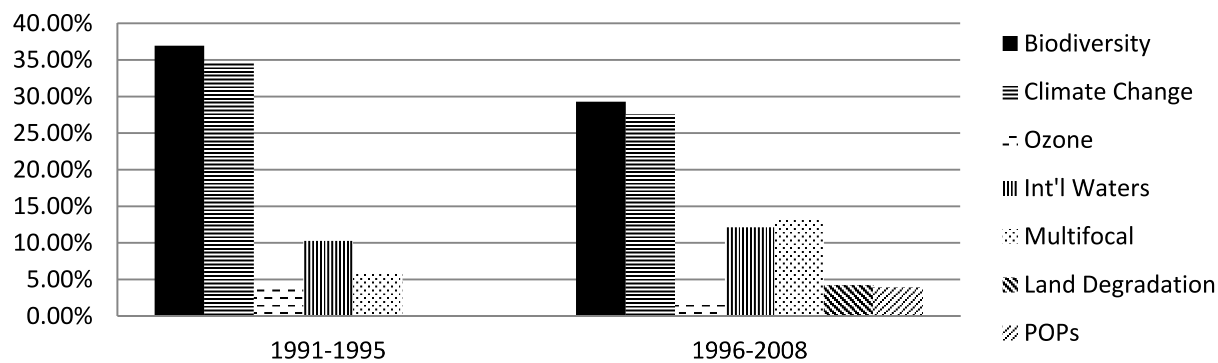
We find mixed results with respect to our first hypothesis: that the amount of “brown” environmental aid will increase as developing countries achieve greater voting power in the GEF. Recall, brown aid is environmental aid designed to address local, rather than global environmental problems. From 1991-1995, one out of five GEF projects were designed to address primarily local environmental challenges. From 1996-2008, the proportion of such brown projects increased to roughly one out of four. While this appears to be consistent with our hypothesis, two other trends prevent us from drawing such a conclusion. First, the relative increase in the number of brown projects has not been accompanied by a corresponding increase in project dollars. To the contrary, the proportion of the GEF’s portfolio dedicated to local environmental concerns actually decreased after institutional reform: from 24% during the pilot phase to 17% in the post-reform period. Since these figures may be influenced by shifts in dirty and neutral aid, we also calculated the ratio of green aid to brown during the pilot phase and post-reform. As Figure 3 shows, during the pilot phase, the GEF allocated $2.50 in green aid for every dollar in brown aid. Following institutional reforms designed to increase the voice of recipients, this ratio actually increased to 4.03.

Figure 3: Annual Project Commitments, 1991-2008



A corollary to our first hypothesis was that changes to formal voting power on the GEF Council would lead to changes in allocation among the GEF's focal areas. Specifically, PA logic predicts reduced allocation to primarily global focal areas and greater allocation to focal areas that provide more substantial local benefits.[25] Figure 4 shows the proportion of GEF Project dollars by focal area, pre- and post-reform. At first glance, the data appear to be consistent with this hypothesis. From pre- to –post reform, we observe slight declines in the proportion of annual commitments targeted for climate change and ozone depletion, and a statistically significant ($p<0.1$, two-tailed t-test) decline in the proportion of commitments for biodiversity. Each of these focal areas, we argue, represent primarily donors' priorities.[26] Post-reform, we observe the addition of two new focal areas, one of which (land degradation) strongly reflects recipients' interests. However, neither of these new focal areas accounts for a substantial proportion of GEF project commitments.

Figure 4: GEF Project Dollars by Focal Area



[25] While all six of the focal areas that are now eligible for funding through the GEF address global environmental problems, some have much more tangible local benefits than others. These local benefits are more like private goods that recipient politicians can use to promote economic development, payoff important constituents, and garner broad domestic political support (Hicks et al, chapter 3).

[26] While some biodiversity projects are aimed at preservation of local ecosystems, these entail opportunity costs from foregone development opportunities, and may therefore be a net negative from a recipient's perspective.

The timing of the adoption of these additional focal areas by the GEF also undercuts our first hypothesis. The first year in which we observe GEF commitments for land degradation was 2003, more than eight years after GEF reform and more than six years after the entry into force of the UN Convention to Combat Desertification. In contrast, we observe GEF commitments for persistent organic pollutants as early as 2001, three years before the entry into force of the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention on Prior Informed Consent. While the creation of a new focal area for land degradation may reflect the increasing influence of recipients within the GEF, the comparative history of the POPs focal area suggests that this increasing influence remains contested. Donors are finding some way to delay substantive changes demanded by recipients.

In contrast, our observations are quite consistent with the expectations of informal influence. We can view the increasing levels of green aid as a reflection of major donor interests. The increasing number (though not value) of brown projects reflects the greater desirability of these projects to recipients. Recipients are able to approve greater numbers of coveted brown projects, but this simply drives down the mean value of brown projects; donors have already set broad allocation guidelines (a budget constraint), as part of the replenishment process, and recipients are left competing for a smaller aggregate level of brown project funding.

Our second PA hypothesis concerned the effect of institutional reform on agent selection. As the voting power of developing countries increases, we expect that the proportion of GEF projects and project dollars flowing through the World Bank will decrease. Indeed, this was a major impetus for institutional reform at the GEF; recipient governments were dissatisfied with their lack of influence in World Bank decision-making, and pressed for the creation of an authorizing body in the GEF that would provide them with greater voice. We expected that this institutional change would have direct consequences on the selection of implementing agencies for GEF projects.

We find partial support for this hypothesis simply in the proliferation of implementing/executing agencies in the post-reform period. In the pilot phase, all GEF projects were implemented by the World Bank, UNDP, or UNEP (or a combination thereof). Following GEF reform, several new implementing agencies were incorporated into the project cycle, including four regional development banks in 1999 and three additional UN organizations 2000.[27]

In practice, GEF projects often specify a combination of implementing agencies for a given project. For convenience, we have chosen to compare the number of projects and project dollars for which the World Bank served as the exclusive implementing agency. We do not argue that recipient countries have no preference among the multitude of other implementing agencies. However, it is accurate to claim that recipient countries have greater representation in each of the other implementing agencies,[28] whether regional development banks or UN organizations, than they do in the World Bank. Accordingly, recipient countries have a greater preference for the allocation of projects and project dollars through these avenues than through the Bank.

However, the distribution of implementing/executing agencies among GEF projects is only partially consistent with our second hypothesis. On one hand, the proportion of projects implemented exclusively by the World Bank has declined over time. The World Bank was the sole implementing agency for 47 of 157 GEF projects (30%) from 1991-1995 and 381 of 2051 (19%) from 1996-2008. However, given the proliferation of implementing agencies over time, this is not a surprising observation. More significant is the allocation of project dollars. Using this measure, we find almost no variation in allocation of project dollars through the World Bank. As Figure 5 shows, the GEF allocated $358M out of $916M (39.1%) through the World Bank from 1991-1995 and $2.4B out of $6.2B (38.9%) from 1996-2008.[29] Clearly, the proliferation of implementing agencies in recent years has not affected the GEF's tendency to allocate project dollars through the World Bank.

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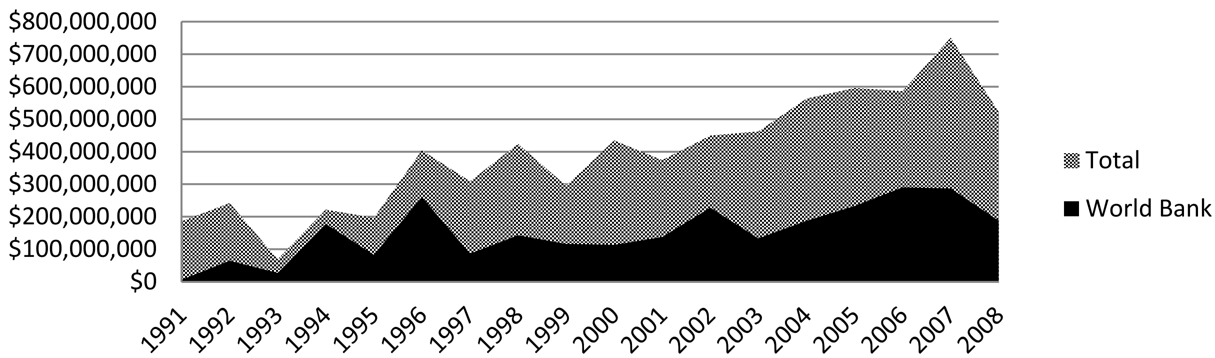
[27] These new agents are indicated at the end of the delegation chain in Figure 2 above.

[28] The one exception to this rule is the EBRD, where developing countries control a fleetingly small share of votes on the Executive Board. As at the World Bank the EBRD is dominated by the traditional donor governments.

[29] If we include projects shared between the World Bank and another implementing agency, the corresponding figures are $409M (44.7%) from 1991-1995 and $2.6B (42.0%) from 1996-2008.

In contrast, these observations are consistent both with informal influence by donor governments. In the stable percentage of GEF project dollars implemented by the World Bank, we see donors retaining a consistent level of control, even if that control does not operate through the formal delegation contract. Where we previously observed recipients approving greater numbers of brown projects, albeit at lower levels of funding, we now observe recipients increasingly approving projects to be implemented by non-World Bank agencies.   But, as before, there is little effect on the overall level of delegation to the Bank when measured by actual allocation amounts.

Figure 5: Annual Commitments by Implementing Agency



Finally, our third hypothesis was that GEF commitments to less credible recipients would increase as the voting power of developing countries on the Council increased. To evaluate this hypothesis, we constructed a cross-national-time-series dataset of GEF projects. This dataset spans 104 countries, from 1991 to 2008. Source information and descriptive statistics are presented in Table 2.

Table 2: Cross National Data Set of Recipient Characteristics: 1991-2008

Variable	Obs.	Mean	St.Dev.	Min	Max	Source
GEF Aid (log)	1872	6.41	7.17	0	18.33	AidData
Population (lag, log)	1664	16.24	1.55	12.47	20.99	WDI
CO2 emissions (lag, log)	1650	2.88	1.80	0.01	8.72	WDI
Dem. Accountability (lag)	1573	3.39	1.49	0	6	ICRG
Bureaucratic Quality (lag)	1573	1.76	0.89	0	4	ICRG
WB EB member (lag)	1836	0.18	0.38	0	1	WB
US voting affinity (lag)	1810	0.34	0.12	0.11	0.69	Gartzke
UN SC rotating member (lag)	1836	0.06	0.24	0	1	UN
US military aid	1872	0.82	1.19	0	6.96	USAID

Dependent Variable

The dependent variable in our models is the annual amount of GEF aid (in constant 2000 US dollars) to recipients. Since AidData provides comprehensive information on GEF projects, we set the dependent variable to zero in each country-year where the GEF made no project commitments.[30] Additionally, we logarithmize this measure (taking care not to lose zeroes) to reduce the influence of outliers.

Independent Variables

We are primarily concerned to assess the influence of recipient credibility. We expect that, other things equal, donors seek to maximize the environmental benefits that they can achieve per dollar spent. Accordingly, we focus on a number of recipient characteristics that are likely to influence donors' perception of a recipient's credibility to implement projects competently and in good faith. Specifically, we focus on democratic accountability and bureaucratic quality.[31] Donors may be wary of committing large sums to autocratic governments, or weak bureaucracies. We obtained these measures from the International Country Risk Guide.

Control Variables

Our primary control variable is environmental need. We expect that, other things equal, environmental aid will be allocated functionally according to environmental criteria. Recipients that have the greatest environmental needs will receive the greatest amount of environmental aid. That is, donors will allocate environmental aid to countries where it can make the largest contribution to the global public good being targeted. For example, climate change mitigation projects should go to the recipients that emit the most greenhouse gasses. We measure a

[30] For information on data coverage, data collection, and coding rules for the AidData database, see Tierney et al 2011.

[31] To check the robustness of our findings, we also estimated models using the ICRG measure of political corruption. We omit it from our main model because this measure is highly correlated with democratic accountability, and because one of the goals of the RAF (and the donors that supported the RAF) was to reward democratic governments. We find that our results hold whether we use democratic accountability or corruption.

country's environmental potential by taking its aggregate annual carbon dioxide emissions, in thousands of kilotons.[32]

We also control for recipient size; logically, it is reasonable to expect that larger countries will receive larger amounts of aid. We already include CO2 emissions, which constitute one measure of recipient size. We supplement this by controlling also for population.

Finally, we control for a number of additional confounding influences, suggested by the literature on IO control and multilateral aid allocation. If GEF allocations are driven by a dominant member, it is possible that the dominant member will use the GEF as a tool of its own foreign policy. Since the dominant member of the GEF is the U.S., we control for UN voting affinity with the U.S. and receipt of U.S. military assistance. Additionally, it is possible that those recipient governments with a position of relative power in other major international organizations will be able to capitalize on that power to leverage additional GEF aid. To control for this, we include dummy variables indicating whether recipients held a seat on the World Bank Executive Board (Kilby 2011) and the United Nations Security Council (Dreher et al 2009; Bueno de Mesquita and Smith 2010).

Discussion

Our findings are summarized below in Table 3. All models are calculated with fixed year effects and with panel-corrected standard errors.[33] Model 1 provides a baseline, entering all covariates, and including all years in our sample. Model 2 is restricted to the GEF's pilot phase. Since the project cycle for many 1995 commitments began prior to the 1994 reforms, we extend

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[32] We logarithmize this variable to reduce the influence of outliers. To be sure, there are environmental issues other than climate. We would have liked to include a measure of a country's relevance to global biodiversity, but we are not aware of a satisfactory measure that is available for our time series. Moreover, CO2 emissions are highly correlated with GDP. Since a country's ability to create environmental harm, in general, is a function of its economic activity, CO2 emissions are a particularly useful proxy for environmental significance.

[33] We use Stata 11's "xtpcse" command.

this sample from 1991-1995. Model 3 is restricted to post-reform GEF commitments, from 1996-2008. Model 4 focuses on GEF commitments following the donor-driven introduction of performance-based allocation. Finally, Model 5 is restricted to 1996-2003, after the formal rule changes of 1994 and prior to the possible exercise of informal influence over the introduction of the RAF.

To assess the accuracy of our P-A hypothesis concerning recipient credibility, we can look to the differences between Models 2-3, reflecting GEF allocations before and after the 1994 reforms. These differences reflect at best modest support for the hypothesis that recipient credibility would decline in importance. There is no reason to believe that recipient corruption had greater or lesser influence on GEF allocation before/after the 1994 reforms. In both periods, we observe a nearly identical negative relationship between recipient corruption and GEF aid (though in both samples, the effect falls short of conventional levels of significance). Our finding concerning bureaucratic quality directly contradicts the P-A hypothesis. During the pilot phase, when recipient countries had little formal power, the GEF did not discriminate against recipients with low bureaucratic capacity. Just the opposite – it appears that, during the pilot phase, the GEF may well have been motivated to provide aid to help recipient countries build capacity. After the 1994 reforms, on the other hand, we observe a positive relationship between bureaucratic quality and GEF aid, suggesting that recipient credibility actually assumed greater importance in GEF allocation *after* recipients gained greater formal power. This is not what the formal PA logic leads us to expect.

One other difference between Models 2 and 3 is worthy of note. After the pilot phase, recipient population is one of the strongest predictors of GEF aid. During the pilot phase, however, we find no relationship between population and aid receipts. Instead, recipient environmental/economic activity, reflected by CO_2 emissions, seems to be the best predictor of GEF assistance. This change is consistent with the preferences of developing country recipients, which have consistently pressed the GEF to consider poverty, in addition to economic size, in allocating project aid.

This unexpected support notwithstanding, the overall verdict for PA approaches is mixed, at best. Next, we assess the evidence for informal influence, to determine the extent to which this approach can contribute to our understanding of GEF behavior. In short, we find that the informal governance approach can contribute significantly to explaining GEF behavior.

Table 3: Linear regression, correlated panel corrected stand. errors (PCSEs)

	1	2	3	4	5
Sample	**1991-2008**	**1991-1995**	**1996-2008**	**2004-2008**	**1996-2003**
Population	1.30***	0.32	1.57***	1.88***	1.36***
	(0.15)	(0.18)	(0.15)	(0.26)	(0.15)
CO2 emissions	-0.15	0.46***	-0.32*	-0.47	-0.19*
(lag, log)	(0.13)	(0.11)	(0.15)	(0.26)	(0.09)
Corruption	-0.40	-0.48	-0.48	-0.75*	-0.33
(lag)	(0.23)	(0.27)	(0.25)	(0.38)	(0.33)
Bur. Quality	0.51*	-0.78**	0.91**	0.75	1.00***
(lag)	(0.26)	(0.31)	(0.30)	(0.56)	(0.21)
WBEB membership	0.88	1.02*	0.72	1.43	0.19
(lag)	(0.51)	(0.50)	(0.57)	(0.82)	(0.55)
UNSC membership	-0.23	1.34	-0.44	-1.85	0.28
(lag, log)	(0.64)	(1.13)	(0.69)	(1.24)	(1.01)
U.S. Military Aid	0.00	0.38	-0.10	-0.02	-0.20
(lag, log)	(0.16)	(0.40)	(0.18)	(0.23)	(0.20)
U.S. Voting Affinity	3.26	4.00	3.12	4.31	2.58
(lag)	(2.09)	(4.50)	(2.32)	(4.38)	(1.67)
Constant	-22.65	-7.38	-23.80	-25.38	-17.99
Obs.	1540	267	1273	510	763
R^2	0.21	0.15	0.14	0.13	0.16

*** p < 0.001; ** p < 0.01; *p< 0.05

Recall that our proposition concerning informal influence suggested that the formal rule changes of 1994 would be less consequential than the exercise of informal influence by the U.S.

(and allies) in the 2000s. To assess this proposition, we can compare the change from Model 2 (1991-1995) to Model 5 (1996-2003) to the difference we observe from Model 5 to Model 4 (2004-2008). The first cut point reflects a change in formal control; the second reflects the exercise of informal influence.[34]

As we noted above, there is evidence for at least one significant shift in GEF allocation from (1991-1995) to (1996-2008). GEF lending is strongly influenced by recipient size, but the way in which recipient size matters has changed. During the pilot phase, the GEF provided significantly more aid to large economies. After the pilot phase, recipient population replaced economic size as a primary determinant of GEF aid. This shift remains when we compare the pilot phase to the intermediate phase (1996-2003). Changes to formal control did induce changes in allocation practices, though not as fully as we expected.

More interesting is the change from (1996-2003) to (2004-2008). Concern for recipient credibility continued to influence GEF allocation after the U.S.'s 2003 insistence on the adoption of a performance-based allocation framework. Prior to this act of informal influence, the GEF took recipient credibility into account in a positive sense; the GEF tried to maximize environmental benefits by channeling aid to countries with high levels of bureaucratic capacity – even if those countries were not democratically governed. Beginning in 2004, however, bureaucratic quality is no longer a significant predictor of GEF aid.

Across all samples, we observe a negative coefficient for our measure of corruption. Starting in 2004, this effect is much larger in magnitude and, for the first time, becomes statistically significant at conventional levels ($p<.05$). This change is entirely consistent with the Bush administration's goal of using aid to promote a broad range of foreign policy goals. If the GEF had continued to pursue its environmental mandate, absent the political concerns of its major donors, we would expect bureaucratic quality to continue to be the top political predictor of aid. The GEF would consider recipient politics only to the extent that they influenced the likelihood of project success. Though we do not have many years to go on, it appears that the

[34] To be sure, the potential for informal influence has existed throughout the GEF's history. Here we choose to focus on what some observers describe as the most significant exercise of informal power in the GEF's history: the proposal and eventual adoption of the RAF.

GEF began to be subsumed in a larger effort to combat corruption (we find a similar effect when we substitute democratic accountability for corruption).   These findings are consistent with what the U.S., UK, and Japan were advocating during the early 2000s. These donors were not only adopting the principle of "selectivity" -- choosing recipients that have domestic institutions believed to make aid more effective -- in their bilateral aid programs, but were also advocating such policies within multilateral agencies, including the GEF.

In sum, our data lend persuasive support to the informal governance approach in this case. They do not provide support for more crude theories of structural power. The effect of U.S. military aid on GEF allocation is inconsistent across our five models, and never achieves statistical significance. U.N. voting affinity with the United States consistently yields large, positive coefficients, but with even larger standard errors. It simply does not appear to be the case that the U.S. exerts hegemonic influence on the GEF.   However, when the U.S. forms coalitions with like-minded donors and uses the levers suggested by the informal governance framework (in this case the periodic replenishment process), then the U.S. and its allies can often achieve more than the formal voting power and accountability arrangements within the institution suggest.

Finally, it appears that recipients' political power has little influence on GEF allocation. We find no relationship between having a seat on the U.N. Security Council and receiving more/less GEF aid. We do find a consistent, positive effect from having a seat on the World Bank Executive Board – not surprising given the centrality of the Bank in GEF in the allocation and implementation of GEF projects. However, this effect is only statistically significant in one of our five models – and only weakly significant at that.

To sum up, we find evidence that changes in formal control and informal influence have both influenced GEF operations. Moving forward, we suggest that students of IO continue research along both tracks, to further elaborate the scope conditions within which each set of mechanisms is operative.

Conclusions: Where to go from Here?

While a strictly formal reading of principal-agent relations provides some leverage on the changes we observe in agent selection, recipient selection, and the sectoral composition of the GEF portfolio, the formal decision making procedures within the GEF's collective principal do not tell the whole story – or, perhaps, even the most important parts. The 1994 restructuring dramatically shifted formal control in the GEF Governing Council toward developing countries. But, as with many UN agencies that employ one-country one-vote decision rules, powerful states have sought and found ways to achieve their preferred outcomes within the GEF.

The most striking and effective move by donors has been to shift the authority for some important decisions outside the ambit of the GEF Council and the GEF Assembly. Unlike the IBRD or IFC, the GEF cannot sell bonds, charge interest on loans, or invest profits in order to generate revenue. Since the GEF makes grants rather than loans, it is entirely dependent on the continued willingness of donors to give money in order to continue operations. This provides donors with a periodic opportunity to threaten to withhold resources unless the GEF Council agrees to allocation guidelines regarding focal areas, to adopt recipient allocation criteria favored by donors, and to employ a mix of IO agents that is acceptable to donors. Any satisfactory explanation of GEF operations must take into account these opportunities for informal influence.

In practice, this influence can be seen in the series of meetings surrounding the periodic replenishments of the GEF Trust Fund (usually, every four years).[35] The current replenishment (GEF-5), covers GEF operations from July 2010 through June 2014, and was negotiated over six meetings held between March 2009 and May 2010. Following preliminary discussions at the first replenishment meeting, the GEF Secretariat prepared a draft programming document, setting forth sectoral allocation guidelines. This programming document was reviewed and revised numerous times before being adopted at the sixth replenishment meeting for GEF-5. For example, while the GEF Secretariat originally proposed that $785 million be allocated to the land degradation focal area, donors ultimately settled on $400 million – and, as in previous rounds, the GEF Council approved this recommendation.

While GEF-5 provides evidence that donors can, and do, influence allocation by focal area, GEF-4 provides clear evidence that powerful donors have also influenced GEF allocation by recipient country characteristics. During negotiations surrounding the fourth replenishment

[35] Historically, GEF replenishment meetings have been closed to non-donors, although recent reforms will permit greater transparency, allowing representatives from recipient countries, IOs, and NGOs to participate – albeit as observers.

cycle, the United States pressed the GEF to adopt a "Resource Allocation Framework" (RAF) which would steer GEF commitments toward recipient countries that exhibited strong performance on several governance criteria – even at the expense of countries with greater environmental need or significance.[36] Despite widespread opposition among recipient countries (and even some donors), the threat of the U.S., U.K., and France withdrawing contributions to replenishment of the GEF Trust was ultimately sufficient to induce adoption of the RAF. Moreover, the implicit threat was strong enough to induce adoption by consensus – no formal vote was taken (Ramankutty 2011).

Following a preliminary analysis of funding patterns, agent selection, and recipient selection, we were unsatisfied with conventional principal-agent models that focus our attention narrowly on voting power and formal decision rules within the collective principal. While we expected to see recipients shaping the key decisions within the GEF Council and colluding with IO agents who share their interests, we observe only modest behavioral and institutional changes in the direction preferred by recipient country governments. Instead, donor interests continue to explain the outcomes we observe, as they did during the pilot phase. Formal rules simply don't explain as much as we might like. In order to account for these surprising findings we could look the preferences and identities of IO agents. However, we doubt this will help to explain the patterns we observe here. Replenishment politics have grown more contentious, not less, and donors have succeeded in tying both sectoral distributions of aid, and allocation rules, to funding. We find that considerations of informal influence are an essential part of any convincing explanation of GEF behavior. Moving forward, we recommend that students of IO follow Stone's (2011, 207) admonition that both mechanisms are likely to be operative in a given organization. The priority for future research, then, is not to stage contests between these mechanisms of social choice but, rather to explain how they combine to shape international organization.

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[36] For some specifications of our recipient model testing hypothesis #4, we did find corruption and bureaucratic quality to be negatively correlated with the probability of GEF allocations in the post-2005 era. Such findings are consistent with the interests of the U.S. and its donor allies. However, these findings were not robust to alternative specifications.

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