Politics and the Effectiveness of Humanitarian NGOs in Civil Conflict

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Prepared for consideration for the 2012 Political Economy of International Organizations (PEIO) conference. Working draft, please do not cite without permission.

Abstract: Is the ability of humanitarian Non-Governmental Organizations (NGOs) to effectively improve the health and welfare of aid recipients affected by the source of the organization's funding? This paper examines the effectiveness of humanitarian NGOs as a function of their funding sources, with a particular focus on civil conflict. I argue that NGOs whose revenue depends on private individual contributions suffer from accountability and coordination issues. Therefore, organizations that work with and accept funds from governments are more likely to be efficacious in improving health than those that eschew government funding. The argument is tested using original dataset of NGO programs and activities, and finds differences in the effectiveness of various types of organizations. The analysis speaks to scholars interested in governance, security studies, and foreign assistance, focusing on a stream of revenue and class of actor which have not been extensively analyzed in this manner. The findings, which can be used to improve organizational performance, are also highly salient to aid practitioners. Most importantly, the results are critical to the individuals these organizations assist, whose lives and welfare depend on effective and efficient aid.

Acknowledgements: I thank Will Daniel, Reynaldo Rojo Mendoza, and Basak Yavcan Ural for translation assistance, and Nicole Nummelin at Médecins sans Frontières', Caroline Conus at the International Committee of the Red Cross, and Frances Simpson of Oxfam for assistance in obtaining data. I also thank David Bearce, Daniela Donno, Jude Hayes, George Krause, Nita Rudra and Burcu Savun for helpful comments and suggestions. All errors remain my own.

What factors affect the ability of humanitarian NGOs to effectively deliver aid and improve the welfare of individuals threatened by humanitarian crises? Humanitarian aid has been a contentious issue in international politics almost since the dawn of the humanitarian movement. Two of the most influential figures in that movement, Florence Nightingale and Henry Dunant, founder of the International Committee of the Red Cross, had very different opinions on its appropriateness, with Dunant advocating for aid at all costs and Nightingale arguing that "voluntary efforts, which reduced the expense faced by war ministries, merely made it easier for governments to engage in wars more often and for longer" (Polman 2010, 3-4). This debate has also taken on a renewed salience in the last few years. On March 4, 2010, for example, the BBC aired a documentary by their World Service's Africa editor, Martin Plaut, which indicated that up to 95% of the approximately $100 million raised by 1985's Band Aid for the purposes of humanitarian relief in Ethiopia was actually used by domestic military groups to purchase arms and continue their military efforts. This report prompted a vociferous response from Band Aid's organizer, Bob Geldof, as well as several charitable organizations.[1] Though the BBC stood by its reporting, it ultimately issued an apology to Geldof for giving the impression that that it was Band Aid funds that were diverted. However, it also maintained the main thrust of the report, noting that "that there was evidence from a number of sources that the TPLF had diverted money intended for famine relief and that some of this was spent on weapons".[2] This was but one of an increasing chorus of inquiries and criticisms targeted at humanitarian efforts, and which has given rise to questions about the effectiveness of humanitarian aid.

[1] BBC. March 7, 2010. "BBC holds firm over Ethiopia famine funds report." Available at http://www.guardian.co.uk/media/2010/mar/07/bbc-holds-firm-ethiopia-famine-funds. Accessed August 17, 2011.

[2] BBC. November 4, 2010. "BBC apologizes to Geldof for Band Aid slur." http://www.telegraph.co.uk/news/uknews/8035539/BBC-apologises-to-Bob-Geldof-for-Band-Aid-slur.html. Accessed August 17, 2011.

This paper addresses this debate on humanitarian action by examining the issue of humanitarian NGO effectiveness during and following civil conflict. Specifically, it argues that differences in the types of accountability these NGO are subjected to by their donors will have a substantial affect on their ability to improve the welfare of those they are assisting – as well as those they are not. NGOs which receive funds from public sources, such as states, should face greater levels of accountability for the outcome of their aid efforts than organizations which receive funds primarily from private sources, such as individuals. These differences in accountability should also be reflected as differences in the effectiveness of each type of organizations, with publicly funded organizations demonstrating a greater ability to engender positive welfare changes with their aid activities than privately funded organizations. This argument is tested on an original sample of NGO activities from 2004-2007, with results that confirm the central argument reflecting aid effectiveness.

These results have substantial implications for both academics and policy NGO practitioners alike. In addition to the contribution on the literature on general aid effectiveness, the results speak to conflict scholars but analyzing a class of actor which has previously gone largely unstudied in a quantitative manner in the analysis of conflict. These results suggest that these organizations can in fact have a significant effect on the welfare of populations threatened by conflict, and lend themselves to particular policy prescriptions which can help improve the way the aid organizations are able to deliver services while minimizing the possible negative externalities associated with aid delivery. Most significantly, these policy prescriptions can have beneficial real world impacts on the health, security and general well-being of those individuals whose very lives may depend on a successful humanitarian intervention.

The paper proceeds in the following manner. The first section reviews the current literature on aid and conflict, while the second discusses how to conceptualize and measure what it means for humanitarian NGOs to be effective. The third section discusses how NGOs may be accountable to their donors, and how this accountability may differ between publicly and privately funded organizations. The fourth section tests the argument and discusses the results. The fifth section summarizes the argument and findings, offering a number of policy prescriptions, and concludes the paper.

The Contemporary Discussion on Aid and Conflict

It is clear that civil conflict is detrimental to public health. Iqbal (2010) shows a clear relationship between conflict and decreases in both the quantity and quality of life in affected countries. Ghobarah, Huth and Russett (2003) demonstrate that this effect persists even after the primary violence has ceased.

One possible palliative to the negative effect of conflict on health could be the intervention of humanitarian actors. Seybolt (2007) provides some evidence that humanitarian military interventions by states can be successful in providing assistance under certain conditions. However, there is also a clear concern that too often humanitarian aid has failed to achieve its intended outcome. Beginning primarily with the genocide in Rwanda, and reinforced by subsequent perceived failures in Somalia, Sudan, Liberia, Sierra Leone and Afghanistan, among others, there has been a question about why the international community failed "to protect the victims, to respond effectively to their needs and to navigate the political challenges involved" (Davis 2007, 1). This has echoes of the criticism of development aid put forth by Easterly (2006), who calls the fact that the West has spent $2.3 trillion on foreign aid over a period of 50 years and is yet still unable to get basic necessities such as cheap medicines and

mosquito netting to those most in need a "tragedy" (4) . The question facing humanitarians in the wake of these failures can be seen as a similar tragedy: how and why had the international community failed, despite the efforts of so many dedicated professionals and volunteers, and the expenditure of massive amount of resources?

The criticism of aid and conflict extends beyond a perceived failure to improve the lives of those in need. In many cases, aid is alleged to have actually made conflicts worse. For many years "humanitarians used to believe that only good consequences could follow from their good intentions, but this cheery and charitable outlook has yielded to the more sobering awareness that bad outcomes can, indeed, result from actions carried out by the pure of heart" (Barnett 2003, 402). Humanitarian efforts can, among other things, provide resources to armed groups (either directly or indirectly), prompt displacement of populations, perpetuate violence, and potentially aggravate and prolong conflicts, as some have argued happened in Sudan as a result of *Operation Lifeline Sudan* (Bruderlein and Dakkak 2010, 3-4). During the conflict in Rwanda, Médecins sans Frontières' (MSF) feared that they were providing medical treatment to *genocidaires* who would then return to killing, prompting the organization to withdraw lest it become unwittingly complicit in the genocide. This episode also prompted questions of "what humanitarian aid represents, and at what point it loses its sense and becomes a technical function in the service of evil" (Terry 2002, 2). Polman (2010) also uses the Rwandan example to critique many of the ways that aid organizations can fail to achieve their intended purpose of actually assisting the needy and possibly even assist domestic groups perpetuating violence, either unwittingly or with a purposefully blind eye. These concerns have led to the rise of a "Humanitarian Dilemma", a debate between the moral imperative of humanitarian organizations to provide aid to those in

need and the potential for said aid to result in negative externalities and unintended consequences (Väyrynen 1999).

Many of these arguments on the aid-conflict dynamic has been executed in the form of case studies. Goodhand (2000), who provides an excellent overview on the existing literature in this area, concludes that many of the case studies fail to suggest that aid actually worsens conflict. DeMars (1995) similarly concludes, also based on case study analysis of the Ethiopian conflict of the 1980s, that although there is evidence of resource transfer between aid groups and domestic combatants, that this aid transfer failed to affect the overall dynamics of the conflict.

There are dissenting voices to this position. There have been a number of mechanisms put forth by those who argue that aid can negatively affect conflict, and by extension detract from NGOs' ability to improve welfare among recipient populations. Luttwak argues that humanitarian action by NGOs unequivocally interferes with the natural processes of war and exacerbates conflict by creating "refugee nations" and inserting material aid that may supply active combatants (1999, 43-4). Humanitarian assistance may also free resources that would otherwise be used for non-combat purposes in a substitution effect for either rebels or governments, allowing these groups to use the resources instead to support their war efforts (See as an example Anderson 1999; Goodhand 2000).

Aid or its benefits may also be directly transferred from humanitarian agencies to combatants in the form of rents or payment for services. In the chaotic environment of a conflict zone, aid organizations may end up becoming dependent on local military forces for protection or access, a fact which can be leveraged by the belligerents for support (Le Billon 2000; MacFarlane 2001). Aid generally tends to be highly visible and predictable as well (Slim 2004, 12), thus leaving it subject to coercive action on the part of the combatants. In situations such as

the Soviet conflict in Afghanistan, aid was routinely manipulated and subjected to corruption and political favoritism. As an example, up to 40% of food aid from cross-border programs was given directly to rebels in the form of "taxation" (Goodhand 2002, 842-3). This is different than aid from governments, which Collier and Hoeffler (2002, 437) argue is "difficult for a rebel organization to capture *during* a conflict," (italics theirs) as most goes directly to government coffers and projects.

Assistance can also be indirectly transferred from aid agencies to combatants through civilian populations, where it may be collected as taxes or confiscated outright. Civilians in territory held by rebels, including those opposed to the rebel cause, may be reluctant to publicize such operations to aid agencies for fear of reprisals (Kalyvas 2006), meaning that agencies may have little control or specific knowledge regarding where these transfers are taking place. Insurgents or rebels also use their ability to blend into the population for strategic purposes (DeMars 1995, 4), making it difficult to distinguish legitimate civilian economic actors from those supporting or actively engaged in the war (Goodhand 2000, 61).

Aid can also affect the incentives for settling a conflict. Individuals who profit from the conflict, such as employees of foreign groups working in the conflict zone, or those receiving rents who face a loss of income with peace, have an economic incentive to continue fighting (MacFarlane 2001, 15; Goodhand 2000). It may also be used by rebel elites to motivate combatants to continue fighting by making continued conflict more profitable than peace (Regan and Norton 2005; Ballentine and Nitzschke 2003).

The presence of humanitarian aid may also extend conflict by affecting the likelihood that a conflict will reach what Zartman describes as a "hurting stalemate" (1995). If humanitarian

intervention alters the amount or degree of suffering experienced by one or both sides, it may alter the actors' relative valuations of the status quo and a negotiated peace.

The infusion of assistance has the ability to potentially exacerbate underlying social tensions if it is perceived to be biased in the manner in which it is distributed or causes conflict over its distribution or other resources. It may legitimize actors or processes directly involved in the conflict, and thus make them or their cause appear to be worthwhile (Anderson 1999; Le Billon 2000; MacFarlane 2001; Goodhand 2002).

Some of the indeterminacy in the literature regarding the true relationship between aid and conflict may be due to the nature of analysis. Qualitative, case-study based examinations are excellent for gaining insight into specific mechanisms and dynamics, but may miss overall trends or between-conflict similarities that a more large scale quantitative analysis can discern. That is a gap which this paper helps in part to fill, in part by testing an argument about conflict, humanitarian NGOs, and accountability to donors. This argument is presented in the following sections.

Understanding Humanitarian NGO Effectiveness

Before we can understand the determining factors into why humanitarian interventions may succeed or fail, it is important to conceptualize of how to differentiate between the two. While it may seem to be obvious at first blush, the question of how to measure and understand NGO effectiveness is thornier than one might think.

Humanitarian NGOs seek to protect and provide relief, such as access to food and medical attention, to individuals facing existential threats like civil conflicts or natural disasters. The most obvious way to measure effectiveness might seem, then, to be a simple count of how many individuals were assisted by the organization. To this end, some organizations report the

number of individuals they assisted in a particular effort.[3] Others draw attention to individuals, allowing you to "sponsor" that person with a donation.[4] This type of reporting has an intuitive appeal; the numbers are easy for the aid organization to collect and report, and easy for donors to interpret.

However, this type of reporting does not necessarily convey any information about how effectively these individuals were assisted. Merely providing services does not necessarily mean that those services had a positive impact. This can be particularly true when the services are medical in nature. Simply reporting the number of individuals treated does not convey whether their health was improved. Treating large numbers of people with ineffective drugs will do little to improve their overall health, though it would make an organization which was evaluated simply on the breadth of services seem highly competent.

A more useful measure of effectiveness would therefore include information on outcomes, rather than merely quantities. How did individuals respond to treatment, and at what cost was that treatment delivered? For example, aid agencies can evaluate how their patients responded to certain medications or immunizations, or how many individuals were still suffering from malnutrition following the establishment of a food delivery program. Various practices could be evaluated based on success rates and costs, with those programs that were both more effective and less expensive being judged to be the most effective.

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[3] Save the Children International's Annual Review for 2008, for example, states that since 2005 they have "worked to give children affect by conflict a good education. We have improved the quality of education for more than 10 million children. We have also helped more than 1 million children enroll in school, and will continue working to reach our goal of getting 3 million children into the classroom" (International Save the Children Alliance 2009, 6).

[4] For example, World Vision International has profiles of children in need of support, allowing you to sponsor them for $35 per month. [4] http://donate.worldvision.org/OA_HTML/xxwv2DoChildSearch_B.jsp?. Accessed August 17, 2011

Though the informational requirements of this approach are steeper, the basic concept is still relatively straightforward, on par with the evaluation of many different types of programs. What outcome, Y, came about as a result of input X?[5]

However, this approach is also sub-optimal when it comes to evaluating the effectiveness of humanitarian interventions. Such a process conveys a sense about the effectiveness of particular techniques or practices, but it lacks critical information which is necessary to evaluate the effect of the intervention as a whole. Specifically, only measuring the relationship between input and outcome in the population direction served by the aid activities cannot account for possible externalities which may occur as a result of the humanitarian action.

To fully capture these externalities, it becomes necessary to conceptualize effectiveness as a measure of the aid effort's effect on the entire population, and not simply those who are direct beneficiaries of aid.

To use a simple mathematical example, assume D represents the direct effect of aid, and I the externalities of the aid effort. Further, assume that Y represents the welfare of the population of a country receiving humanitarian assistance, and Y′ represents the welfare of the sub-population of that country which is the direct beneficiary of the aid activities, i.e. those who actually receive some good or service from the aid agency.[6]

Generally, the relationship between the various factors can be represented as:

$$D + I = \Delta Y$$

[5] As an example, a physician with extensive experience working with Project Hope explained to me that the organization has run numerous programs around the world aimed at promoting the use of oral rehydration therapy (ORT) as a means of reducing deaths from diarrhea. Following workshops aimed at instructing local health providers in the proper use of ORT, the workshop organizers assessed how well the participants incorporated the material presented by traveling to the remote health clinics and observing whether the necessary facilities had been established, and speaking with local residents.

[6] Though the effects are aggregated for simplicity, there can of course be multiple and opposing or complementary direct and indirect effects, each of which can contribute to the observed outcome.

This indicates that the change in general societal welfare is simply a linear combination of the direct and indirect effects of the humanitarian intervention. When D and I are both greater than zero, then the direct and indirect effects of the activity are complementary and the change in social welfare is positive. When both are less than zero, they are equally reinforcing but decrease social welfare. When one is positive and the other negative, however, then the change in social welfare is dependent upon the relative sizes of each of the two opposing factors. It is this *a priori* indeterminacy that makes this the most interesting and difficult case to adjudicate.

The issue with evaluating aid's effectiveness via either of the initial two methods, either using a simple count or only evaluating the effect of aid on Y', is that it does not fully account for the totality of the intervention's effects. Using a simple count, only the actions taken by the aid agency are observed, and Y and Y' are both unknown. In the second case, where information is gathered about the outcome of the aid effort in the treated population, the observed effect is

$$D + I = \Delta Y'$$

It is likely that explicit attribution between D and I is difficult to ascertain; however, the net effect, observed in $\Delta Y'$, gives some insight into the effectiveness of the intervention. If $\Delta Y'$ is greater than zero, then the net effect of the intervention is positive, though it is still possible that D and I may be in opposition; for instance, there may be a substantial direct benefit to recipients that is attenuated by a smaller and opposing indirect effect.

However, limiting the evaluation of the intervention's success or failure to $\Delta Y'$ is misleading. In order for this to represent the true overall effect, it must be true that the intervention has no effect upon those individuals who are not aid recipients. However, given the proliferation of studies on the externalities of aid, it seems likely that this is not the case. In fact, one might think of D as a private good, where access and consumption of the good can be

limited to particular individuals, but I is a public good – or bad, if the effects are negative. Only direct aid recipients receive the benefits of aid, but the entire society may be subjected to the negative effects of aid activities if those effects were to prolong the conflict, for example. Using a bit of algebraic manipulation, the key relationship between aid and effectiveness can be represented as:

$$D\left(\frac{Y'}{Y}\right) + I = \Delta\bar{Y}$$

This indicates that the average benefit or cost to any citizen in the affected country is a function of the relative sizes of D and I, and the percentage of the population that receives aid. In the case where D is positive and I is negative, increases in $\bar{Y}$ can be achieved by maximizing D and (Y'/Y) and minimizing I.

Given these dynamics, a true understanding of the effectiveness of humanitarian aid must incorporate a view of the general societal welfare, and not simply that of those individuals who directly benefit from the aid itself, as only the aggregated measure will properly account for negative aid externalities. Yet this is not the norm when it comes to humanitarian action. Though as discussed before humanitarianism as a whole is occasionally evaluated based on collective outcomes, individual agencies largely make arguments about their effectiveness based on measurement using one of the first two methods. Why does this disjuncture exist? I argue it exists due to the incentives facing NGOs from their donors, but that these incentives are not uniform. There is a difference in the way that public donors, such as states, hold NGOs accountable for their actions, and the way that private donors hold NGOs responsible. These and other incentives facing NGOs will affect their behavior, and by extension their effectiveness. It is these dynamics which are the focus of the following sections.

Humanitarian NGOs and Accountability to Donors

What does accountability mean in the world of humanitarian action? At its essence, we can understand accountability through the approach advanced by Edwards and Hulme (1996), who define it as "the means by which individuals and organizations report to a recognized authority (or authorities) and are held responsible for their actions" (967). This is consistent with the definition utilized by Grant and Keohane (2005): accountability occurs when "some actors have the right to hold other actors to a set of standards, to judge whether they have fulfilled their responsibilities in light of these standards, and to impose sanctions if they determine that these responsibilities have not been met" (29). For the purposes of evaluating humanitarian action, we can conceptualize accountability as the ability of a group of actors to hold NGOs accountable for the effects that their aid has on recipient populations.

Which group of actors is best suited to hold NGOs accountable? Figure 1 shows a hierarchical representation of various actors in the humanitarian system. Form this figure, there emerge three likely groups which seem possible appropriate for the task: aid recipients, other NGOs, and the donors to NGOs.

[Figure 1 about here]

Of the three, recipients are those who most directly observe the activities of the NGOs in the field. However, they are poorly suited to hold these NGOs accountable. . As Brett (1993) argues, however, aid recipients are in a highly disadvantaged position vis-à-vis aid agencies and thus in a poor position to hold them accountable. Beneficiaries "come as supplicants rather than equals and have little information about the NGOs' resources or actions. They are aware of the services that the agencies provide in their immediate areas, but not of the costs involved, the way decisions are arrived at or what is happening elsewhere" (292-293).

Another group which could hold NGOs accountable are other NGOs. This falls under the concept of "peer accountability" discussed by Grant and Keohane, where organizations serve to monitor and evaluate aspects of the operational performance of their peers and can reward effective action with cooperation, for example, or sanction poorly performing organizations by isolating them. As concern over the negative externalities of aid has increased, the number of organizations whose purpose is to improve accountability among NGOs has also increased. However, these organizations generally do not evaluate aid outcomes but other types of performance, such as how the ratio of overhead expenses to program expenses for individual charities, or how well organizations subscribe to humanitarian ideals.[7]

This leaves donors as the group most able to hold NGOs accountable for the outcome of their aid efforts. Fundamentally the donor-NGO relationship is one of principal and agent, where the donor allocates funds to their agent, the NGO, in order for the NGO to assist individuals facing threats from humanitarian crises. The primary tool donors can use to enforce accountability within this framework is the power of the purse. Grant and Keohane (2005) argue that NGOs could be sanctioned either by donors' ability to withhold funds through either "fiscal" or "market" accountability, where donors choose to withhold donations when organizations are found to not be fulfilling their assigned purpose, or simply re-allocate those funds to an alternative organization.

[7] Charitynavigator.org is one such organization. They rank charities based on a number of different criteria, such as program expenses, administrative expenses, fundraising expenses, and fundraising efficiency. They also claim to measure accountability and transparency, with the former defined as "an obligation or willingness by a charity to explain its actions to its stakeholders", and the latter as "an obligation or willingness by a charity to publish and make available critical data about the organization".[7] However, the information they use comes from the organization's website and 990 filings, which list information such as board members, privacy policy, audited financial statements, whistleblower policy and CEO compensation. (http://www.charitynavigator.org/index.cfm?bay=content.view&cpid=1093) Nowhere among the discussion of accountability, transparency, or the ranking of the charities does the ability of the organization to actually deliver meaningful and effective services come into play. Rather, the accountability is related to process and management, not effectiveness.

NGOs, like many agents, have an incentive to maintain maximum autonomy and minimize accountability (Brett 1993, 292). This incentive, coupled with the fact that the NGO market is highly competitive with many groups seeking funds and any number of potential alternatives for donors to choose if one organization appears to be ineffectual, means that each organization has a strong motivation to report only positive news and avoid anything that could reflect poorly on them.[8] If they do report information to donors, it tends to come in the form of the first two types of accountability discussed earlier: a strict count of individuals helped or monies spent, or some nominal sense of how effective the effort was at assisting direct beneficiaries. As stated before, these have the benefit of being easy to count and intuitive for donors to understand. Furthermore, these direct effects are highly observable; deliver food to a hungry individual or orthopedic services to someone with a broken leg and it's easy to see the direct benefit that individual receives. What is less obvious, though no less important, are the potential negative effects which are spread out over a more diffuse population and difficult to observe, or if observed, attribute responsibility.

Overall, however, NGOs are better off avoiding the question of output all together, and many do, at least in a quantifiable and transparent sense. Organizations instead cite the need for ever increasing amounts of aid in order to bolster donations, using figures which "may also be vastly exaggerated by the aid agencies in whose interests it is to collect money, food, and medicine" even though "massive amounts of relief aid are often delivered without any reliable information on the number of people affected by the crisis" (Väyrynen 1999, 174).

[8] This competition can also affect the way NGOs view their own responsibilities. Linda Polman, a vocal critic of the "crisis caravan", as she has deemed organizations which travel from one crisis to another, argues that the since there are so many organizations, it does not make sense for any one organization to withdraw even if it knows that it is contributing to negative externalities, since a competitor would simply step in. Furthermore, she argues that when MSF France left Rwanda, citing its concerns over contributing to the genocide, it was roundly castigated by other aid organizations, including other branches of MSF, for potentially jeopardizing future funding (2010, 37-38).

This hesitance on the part of NGOs to accurately report their overall impact suggests that the key question for the issue of donor-NGO accountability is how willing and capable the donors are in undertaking their own efforts to determine the effectiveness of the organizations to which they contribute, and how much capacity they have to actually sanction groups which are judged to be ineffective or even counter-productive. As I will argue, these factors differ between private and public donors, each of whom is the focus of the following two sections.

Private Donors

When evaluating the ability of private donors to effectively hold NGOs accountable for the quality of the outcome associated with aid efforts, three critical elements come to the fore: the donors' incentives to monitor NGO output; their ability to do so; and their ability to effectively sanction the NGO if it is determined that they are falling short in their efforts.

Since it is costly for private donors to invest the time and energy necessary to monitor the effectiveness of the organization to which they donated funds, they must have an incentive to invest these resources. This incentive is dependent upon the commodity which the donor is "purchasing" with their donation; for instance, if donors give funds in order to facilitate the operations of the NGO, then they have an incentive to monitor the value of their purchase, in the form of the NGO's output. However, what exactly are private donors seeking with their donations?

There is strong evidence to suggest that private donors are not actually donating funds to purchase better welfare for recipient populations, but instead in order to accrue personal gains for themselves, such as material benefits consisting of gifts or memberships associated with donations, or tax breaks. Andreoni introduced models of "impure altruism", wherein donors receive a private benefit from giving such as a "warm glow", or feeling of self-satisfaction from

making the donation, and demonstrated theoretically that this effect dominated altruistic giving and better explained the empirical landscape of charitable donations (1989, 1990).

Donors can also gain social benefits from their charitable acts. Harbaugh (1998b, 1998a) describes the "prestige" associated with donations that are publicized by a charity, and shows how donations increase when charities use categories of donations (such as "patron") with clearly delineated amounts, an argument receiving support in an analysis of charitable donations to a law school by alumni. Rather than simply conveying a warm glow to donors, which he describes as an intrinsic benefit, the public nature of the donation – the prestige – has additional benefits, be they social or pragmatic, such as an opportunity to increase business relationships. In a similar vein, Glazer and Konrad (1996) present evidence consistent with their argument that donations are made, in part, to publicize the wealth and status of the donor. The results of these studies, as well as others, led Vesterlund (2006) to conclude that "most empirical studies of survey or donation data find that on average the benefit appears to be private in nature" (568).

Taken together, these results suggest that private donors may be poor surrogates for individuals involved in humanitarian crises abroad. When donors primarily give aid in order to capitalize on private benefits, they receive their benefits upfront and the benefits are themselves independent of the actual provision of aid. This is not to say that donors are entirely indifferent to the welfare of those abroad, but it does suggest that private donors have little incentive to invest further time or money in pursuing information about the effectiveness of the aid organization, and additionally little incentive to withhold donations from aid organizations if they do determine that the aid is not being utilized as effectively as it possibly could be.

Even if the donors do invest the time to follow-up on the effectiveness of the organization to which they donated, their ability to do so may be limited. Private donors are severely

constrained in their ability to independently monitor the actions of humanitarian NGOs, given that many of their operations occur overseas where the individual has no ability to personally observe the efforts of the organization. This distance also means that there is "little verifiable information about its actual outcomes: those that finance humanitarian aid may be passionately concerned with human suffering, but they are a long way away from the crisis and cannot minutely follow the experiences of its victims, or imagine what they want" (Davis 2007, 10). Even the most altruistic donor may not be able, despite her best efforts, to determine how (or how effectively) her donation is actually being used in the field.

Even if all the relevant information were available to donors, they may not possess the technical expertise to accurately interpret and understand whether aid was actually effective or not. It is unrealistic to assume that the general population would have much ability to draw accurate conclusions from raw data. Certainly some individuals, whose training or interests provided them with the necessary skill-set, would be able to do so were the information available. However, this would be the exception to the rule, and most donors would have to rely on the judgment of professionals, though as Mack suggests, the professionals' reports may not be presented in a way which would allow donors to determine aid's effects.

Turning to the third component, capacity to sanction NGOs if they are found to be deficient, donors face similar challenges as in the fields of incentive and monitoring capability. Many publicly funded NGOs draw on a large pool of donors, and as the number of donors increases the impact of any individual donor decreases. Even if one donor were to withhold funds, there is a large supply of others who can pick up the slack; indeed, the 2009 Annual Report for MSF U.S. lists 19 pages of donors.

As the number of donors increase, the only way for donors to rebuke the NGO via the loss of donations would be by engaging in a joint action coordinated among a significant portion of the donor base. However, as Olson (1965) shows, this type of collective action becomes increasingly difficult as the group size increases. This leads to the conclusion that collective action of this nature is most effective in small groups; however, it is not necessary unless the size of the donor base increases. Therefore, collective donor action is least effective in the situations in which it would be most necessary.

Even if private donors were able to overcome the organizational challenges and engage in a coordinated action, their efforts may be stymied by another dynamic. Many of the larger NGOs, such as MSF and Oxfam, have both horizontal and vertical intra-organization linkages with an international section and other national sections. These sections also exchange financial resources; Oxfam UK, for instance, received nearly £23 million from other Oxfam sections in 2009, and approximately £14.6 million in 2009. It also sent out a total of approximately £4.4 million to other sections in 2009 (Oxfam Great Britain 2009, 57).

Based on this argument, it is unlikely that private donors can have much, if any, impact on the behavior of NGOs through the withholding of donations. Given that NGOs are generally the result of "entrepreneurial initiatives by activists", and are not affiliated with any individual constituency which can hold them to account, there is a dearth of alternative mechanisms by which NGOs can be held accountable (Grant and Keohane 2005, 38).

Taken together, this argument suggests that private donors face severe barriers to effective oversight of the NGOs to which they donate. The situation is different, however, when the donors are public entities, the focus of the next section.

Public Donors

Unlike individuals, who are not accountable to others for the content or quality of their aid, though they do possibly receive reputational or other social benefits for donations to charitable organizations, states are accountable to their citizens for the manner in which resources are spent. As Bruderlein and Dakkak (2010) argue, "government donor agencies are accountable to, and their monies in some degree controlled by, the legislature, and ultimately, to taxpayers and citizens. This involves earmarked funds for special projects and preset goals as part of a political accountability" (21). Therefore, donors have a greater incentive to impose accountability on NGOs to whom they donate funds or otherwise establish a relationship because the states are themselves accountable to their own citizens.[9]

States are also in a much better position to monitor NGO performance since states have more resources at their disposal and a bureaucratic structure in place which has technical expertise in aid administration. Furthermore, state aid is frequently the study of academics and other professionals, whose expertise can inform states in regards to what avenues appear to be effective and which are not.[10] Relative to private donors, then, states have more institutional expertise and greater access to epistemic communities which can help them make determinations about aid effectiveness.

States also have greater access to information about events in the field since, unlike private donors, they may have their own programs or monitors in the affected areas. Rather than having to rely on self-reported information from the aid organizations or reports on aid operations from the media, states have the capacity to independently observe and assess the

[9] However, this is not entirely beneficial, as it also provides an incentive to states to avoid publicizing the results of their assessment of NGO effectiveness, since the states don't want to be seen as having their proxies fail, or monies wasted (Bruderlein and Dakkak 2010).

[10] These analyses extend beyond simply develop aid to other types of state aid, such as democracy aid. See, for example, Finkel, Pérez-Liñán and Seligson (2007) and Savun and Tirone (2011).

outcome of aid efforts in the theatre of the humanitarian crisis, creating a large information advantage. Even if the state does not have its own monitor, it may have an operational partner that does, and who can convey information about the situation on the ground. For instance, the World Bank may have its own personnel in an area experiencing a humanitarian crisis which could provide information not only to its own decision makers, but those in specialized agencies in the United States, such as USAID.

States also possess a greater ability to sanction NGOs than do private actors. First, state donations are generally several orders of magnitude larger than private donations, so the loss of these funds would be felt more keenly than the loss of any individual private donation. This importance is further reinforced by the more limited number of public donors; the constellation of donor states and IGOs which donate to humanitarian organizations is relatively small, which increases the importance of any individual entity to recipient NGOs. Furthermore, the small number of donors helps overcome the collective action problem to make donor coordination easier. This is particularly true since many states share membership in joint intergovernmental organizations, which can regularize contact, facilitate information transmission, and under some circumstances even increase the similarity of state interests over time (Bearce and Bondanella 2007).

A state's ability to monitor and sanction NGOs is further facilitated by the state's legal authority over NGOs headquartered or otherwise operational within its borders. NGOs which were found to be violating laws on charitable fundraising, as an example, could have their charitable status revoked or other penalties imposed. Nationals who were found to be engaged in malfeasance overseas as part of an aid effort could also, under certain situations, be subject to

criminal persecution by the home country as well. States are therefore in a much more empowered position to sanction NGOs for poor performance than are private actors.

With increased incentive and ability to monitor NGO performance, as well as a much stronger ability to sanction NGOs which are found to not be fulfilling their obligations or otherwise not using aid effectively, states are in a much better position to monitor and enhance NGO effectiveness.

States also possess additional advantages which may be beneficial to humanitarian aid efforts. The first of these benefits is coordination. Seybolt (2009) argues that the current humanitarian system suffers from insufficient coordination and planning, and that the system could be improved through the creation of a network structure with vertical and horizontal linkages between states and NGOs. NGOs which choose to opt out of such a network, or otherwise eschew coordinating with states due to fears of politicization, detract from the overall effectiveness of humanitarian action and also inhibit the effectiveness of their own efforts. Coordination could also allow NGOs to benefit from the efforts of states and other entities, including in the provision of material goods, and reduce duplication of services, reducing waste and increasing the amount of resources available for distribution.

This coordination can be particularly useful as government entities possess specific technical knowledge that NGOs don't. For example, one of the reasons that USAID may choose to work with an NGO is that the NGO employs individuals with technical expertise in various health fields. USAID, by contrast, has technical expertise in project management and evaluation. Therefore, there can be a mutually beneficial relationship between the two entities as they draw on each others' strengths. The process of interacting with USAID through the proposal process

can also force an organization to more critically evaluate its own plans than it might otherwise do without the need to formally present its plan for evaluation prior to funding.[11]

The technical benefits that aid organizations can accrue from interactions with government agencies can extend beyond simple project management. Humanitarian NGOs may have excellent technical experts in the best practices regarding medical care, but states have superior information about the management of the political and socio-economic processes that can thwart aid efforts. Working with states and gaining access to this valuable knowledge should allow NGOs to reduce their negative effect on a crisis through more effective planning and awareness of other dynamics, assuming that they can reconcile these practices with the neutrality principle.

States can also help NGOs with their material needs as well. States can potentially increase funding to NGOs not only from their own coffers, but by spearheading donation efforts which encourage and facilitate private donations to NGOs.[12]

Private Donors, Public Donors, and NGO Effectiveness

The arguments presented above strongly suggest that state donors should be more capable of holding NGOs accountable for the quality of their output than are private donors. Increased NGO accountability should not only help curb potential abuses of power and reduce the negative externalities of aid, but also make aid efforts more effective, as some have argued has been the

[11] These arguments are drawn in part based on my conversation with individuals with experience working with NGOs funded by USAID.

[12] One such example is the effort which encouraged private donors to donate to the International Committee of the Red Cross by texting "Haiti" to a specified number from their mobile phone in the wake of the massive earthquake in Haiti. The mobile donation effort came about as a joint effort between the U.S. State Department, Mobile Accord/mGive Foundation, CTIA-The Wireless Assocation, and the Red Cross.[12] It was highly successful, raising over $32 million dollars from mobile users by February 11, 2010, less than a month after the earthquake, $15 million of which had already reached the Red Cross by that date. (Red Cross Raises more than $32 Million via Mobile Giving Program. Available at: http://www.redcross.org/portal/site/en/menuitem.94aae335470e233f6cf911df43181aa0/?vgnextoid=43ffe0b8da8b6210VgnVCM10000089f0870aRCRD. Accessed July 15, 2011.)

case with development aid. Easterly (2006) argues that one of the reasons development aid has not been as effective as it could – or should – be is a general lack of accountability from international donors to recipients in their local environments. Similarly, Bearce and Tirone (2010) have shown that development aid can in fact induce economic growth when aid donors can credibly threaten to hold recipients accountable for the manner in which aid is utilized, potentially punishing them by withholding future aid. When such threats are not credible, however, aid does not in fact increase growth.

When NGOs know that their operations and outcomes are being more closely monitored, and there is a credible threat that donors will pull funding if the outcomes are found to be wanting, or even counter-productive to the purposes of the aid effort, then this should provide a strong incentive to engage in more welfare enhancing activities and reduction of negative externalities associated with that. This means that there should be a direct positive correlation between NGO accountability to donors and NGO performance.

The direct relationship between accountability and performance posited here, coupled with the argument about the varying accountability between public and private donors, allows for the construction of the following hypothesis:

> **Hypothesis 1: Aid from organizations which rely primarily on publicly sourced funding should result in greater increases in public health for countries affected by civil violence than aid from organizations which rely primarily on private funding**

The next section tests this hypothesis and discusses the results.

Testing NGO Effectiveness

The empirical analysis covers the period from 2004 through 2007, although some regression analyses utilize data outside of this time period in cases where more extensive data are available. The sample contains all countries who are not members of the OECD's Development Assistance Committee.[13] The unit of analysis is country-year.

The primary data, on NGO expenditures, utilizes an entirely novel dataset on the activities and finances of three of the most prominent humanitarian NGOs: the International Committee of the Red Cross (ICRC), Oxfam International, and Médecins Sans Frontières (MSF). These three organizations possess a number of qualities which make them ideal cases for inclusion. The first is that they are among the most prominent organizations in the international landscape, among a "handful of major players…[who] dominate the international non-governmental landscape" (Stoddard 2003, 25).

Each of these organizations also employs fairly transparent reporting standards. This is a significant hurdle in the world of NGOs; many organizations either do not publish or do not themselves possess the necessary information on expenditures for specific country-years.[14]

[13] Given the structural differences between these countries and developing countries, including in the area of public health (Rudra and Tirone 2011), it would unduly bias the results to include them in the sample pool and they are therefore excluded.

[14] Two other organizations were contacted in attempts to obtain information on their activities. CARE International does not keep figures based on country-year expenditures, according to an email communication on September 27, 2010 from Cathy Rawlinson, Constituent Services Manager for CARE USA. Finally, Save The Children does not publish these types of figures and, in an email on November 4, 2010, from Brittan Horton, Manager, Operations Coordination & Regional Management, declined to provide them, instead sending regrets that senior management had determined that "at this time we are unable to provide the proper attention and time this request deserves". This comports with the general difficulty of obtaining data on the activities of these organizations, information described by Dr. Peter Walker, Director of the Feinstein International Center and Irwin H. Rosenberg Professor of Nutrition and Human Security as "almost impossible to get" (email correspondence on December 10, 2009). Even organizations whose purpose is to improve NGO accountability do not have this type of information. In an email on February 11, 2010, Colin Hadkiss, an administrator at the Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP: www.alnap.org) stated that "we do not have comprehensive data on activities of our member organizations: indeed with 62 Full Member and the wide variety of the activities…this would be a massive task". When ALNAP did ask their members for this type of information, only 22 organizations responded. Thus, despite the generally gracious and helpful responses these various organizations and individuals had to requests for information, they were unable to accommodate the request.

Finally, each of the organizations represents an "ideal" type on the spectrum of public versus private financing. For instance, in 2004 MSF had a total income of €458.13 million, of which €102.89 million came from public institutional donors, for a total of 22%. €342.84 million came from private individuals and institutions, composing approximately 75% of revenues (Médecins Sans Frontières 2004, 11).[15] The ICRC, by contrast, received total contributions of CHF 757.76 million in the same year, of which CHF 684.25 million came from governments and the European Commission (90%), CHF 44.38 million from international organizations, supranational organizations, national societies and public sources (5.9%), and just CHF 29.1 million from private sources (3.8%) (International Committee of the Red Cross 2005, 338). Oxfam International does not give specific measures of financial contributions in their annual report, but one of their largest affiliates, Oxfam U.K., does. Using Oxfam U.K. financial reports from 2001-2007, it was determined that on average approximately a quarter of funding comes from public sources, though that figure has a maximum of slightly over 50%. Therefore, Oxfam's funding profile is similar to that of MSF.

Turning to expenditures, data for the ICRC were available for the period from 2001 through 2009 in the Annual Reports for these years.[16] I was therefore able to create *ICRC Aid*, which measures the amount of ICRC in thousands of 2009 U.S. dollars.[17]

[15] The remaining 3% of income came from sources classified as "Other".

[16] Data are actually available for much earlier periods as well, but coding was begun in that year due to the limitations of the other organizations.

[17] The figures in the original reports for both the ICRC and MSF were listed in thousands of current Swiss Francs and thousands of current Euros, respectively. I deflated both into constant 2009 U.S. dollars using deflators from the "Deflators for Resource Flows from DAC Donors" published by the OECD and available at http://www.oecd.org/dataoecd/43/43/34980655.xls. These deflators were used for all conversions from current to constant values in the dataset. One possible alternative specification would be to deflate the measures by population to measure aid on a per-capita basis. However, while this is customarily done in studies on financial flows such as Official Development Assistance, it seems less relevant in this case. Civil conflicts and disasters may be highly localized, and therefore the actual number of citizens affected may fall short of the entire population. Deflating the aid measure by population may therefore understate the true relationship of aid relative to the number of beneficiaries, and therefore the aid measures here reflect total expenditures rather than per-capita flows.

The information for MSF was not as straightforward. MSF only began publishing consolidated financial reports beginning in 2004.[18] For 2003 and earlier, MSF international only released an "Activity Report" which detailed the nature of operations in individual countries, but did not always relay expenditures for the combined MSF national sections. Therefore, the MSF data was collected beginning in 2004. *MSF Aid* measures the amount of MSF expenditures in a given country-year in thousands of constant 2009 U.S. dollars.

The final aid organization, Oxfam, made data available for Fiscal Year 2001/2002 through 2006/2007.[19] This information was entered into the dataset as *Oxfam Aid,* which measures Oxfam expenditures in thousands of constant 2009 U.S. dollars.[20]

Given the need for aggregated measures of public welfare to properly assess aid effectiveness, the dependent variables are two measures of public health: *Life Expectancy* and *Infant Mortality*. *Life Expectancy* is a measure of "the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life."[21] As such, it is a projection over time of the health conditions facing citizens in the current period. Data for *Life Expectancy* come from the United Nation's *Human Development Reports.*[22] *Infant Mortality* is a more immediate measure, and also has additional benefits. Infant

[18] This was communicated in a phone discussion with Scotti McLaren, International Finance Officer at MSF, on August 6, 2010.

[19] Financial information was sent in response to an emailed query by Francis Simpson on July 18, 2008. The figures were listed in current US dollars, and were transformed into thousands of constant 2009 U.S. dollars via the process outlined in Footnote 17. To create annual measures from the Fiscal Year data, I calculated the aid spending for a given year as half of the current year's spending plus half of the following year's spending. For example, spending in 2004 was calculated as one half of the 2003/2004 figure and one half of the 2004/2005 figure. For the first and final years of the time-series, the entire fiscal year figure was assigned as the value for the calendar year.

[20] Each of the aid organizations only lists countries in which they were active in that year, meaning that only country-years for which expenditures were greater than zero are provided. In order to avoid selection issues, I therefore coded all country-years included in the sample but which are not listed as having receiving aid from that organization in that year as having received zero aid.

[21] Description taken from the "Notes" section of the World Bank's WDI, accessed April 4, 2011.

[22] http://hdr.undp.org/en/statistics/data/. Accessed June 23, 2011.

mortality is "a sensitive measure of many other conditions – including access to clean water and sanitation…prenatal and neonatal health services, caloric intake, [and] disease" (Ross 2006, 861), making it a good measure of overall health and access to needed health infrastructure which aid organizations can help provide. Information for infant mortality rates comes from the World Bank's WDI, and represents the number of infants dying before age one (per 1,000 births).[23]

Given the relationship between humanitarian crisis, NGO activity and public health, two measures of different types of crises are used in the statistical analysis: conflicts and natural disasters. There are a number of variables which measure civil conflict. The first is *Civil Conflict (Current)*, a dichotomous measure which assumes a value of 1 if there is a civil conflict which has a minimum of 25 and a maximum of 999 battle deaths in a given year. *Civil War (Current)* is a similarly dichotomous measure which represents the presence of civil violence which has exceeded 1,000 battle deaths since its inception. *Conflict (Current)* indicates whether there is any ongoing violence which exceeds 25 battle deaths in the country-year, including both civil conflicts and civil wars. Finally, *Civil Conflict (Prior), Civil War (Prior),* and *Conflict (Prior)* equal "1" if there is a positive observation for the relative indicator in the preceding five years.[24] Each of the conflict measures are taken from the Peace Research Institute of Oslo's (PRIO) Armed Conflict database, version 4-2009 (Gleditsch et al. 2002). Each of the conflict variables are also interacted with the various aid measures to assess the interactive effect between conflict and aid.

[23] Accessed April 4, 2011.

[24] In order to construct the 5-year measure, data on conflict was obtained through 1995. Therefore, the observation for 2004 reflects the period from 1999-2003, the observation for 2005 the period for 2004-2004, and so forth.

To control for other types of crises which could also affect health, data on natural disasters were obtained from the Emergency Events Database, EM-DAT, maintained by the WHO's Collaborating Centre for Research on the Epidemiology of Disasters (CRED).[25] Disasters are included if they fall into one of the following categories: drought; earthquake; extreme temperature; flood; mass movement (dry); mass movement (wet); storm; volcano; and wildfires. *Disasters (Current*) is a count of the number of geological disasters in the specified categories within the country-year, while *Disasters* (*Prior*) is a total of disasters for the preceding three years.

Additional regressors are drawn from other studies examining the relationship between civil conflict and public health, specifically Iqbal (2010) and Ghoborah et al. (2003). These variables can be loosely group in one of the three following categories: economic, demographic, and political.

The first of the economic variables is related to the level of economic development, which has been shown in numerous studies to affect public health. The level of economic development is measured here with *GDP per capita* in constant 2000 U.S. dollars, using data taken from the World Bank's World Development Indicators (WDI), from which *GDP Growth*, the yearly percentage increase in GDP, is also taken. In addition to level of development, the openness of a country's economy to international trade has also been shown to affect health (Owen and Wu 2007; Rudra and Tirone 2011). Therefore, in line with Iqbal (2010) a measure of the country's openness to international trade, *Openness,* is included. *Openness* measures the level of imports and exports as a percentage of GDP in constant terms with data from the Penn World Tables (Heston, Summers, and Aten 2011). This variable is also interacted with *GDP per*

[25] EM-DAT: The OFDA/CRED International Disaster Database – www.emdat.be, Université Catholique de Louvain, Brussels (Belgium). Accessed January 23, 2011.

capita to create *GDP per capita X Openness*. Finally, to capture the domestic government's commitment to health and measure available resources available, *Public Health Expenditures* measures government spending on health as a percentage of all government expenditures. Data for *Public Health Expenditures* come from the World Bank's WDI.[26]

Two demographic measures are also included. The first is *Population (logged)*, which is the natural log of the population, taken from the World Bank's WDI.[27] Additionally, as Ghoborah, Huth and Russett (2003, 191) argue, "a more knowledgeable population is likely to be more knowledgeable of health risk factors, to support greater investments and expenditures, and to utilize health-care services." As such, *Education*, a measure of the expected number of years of education a citizen will receive, is also included, with data from the United Nation's *Human Development Reports*.[28]

A number of studies have also highlighted the relationship between a country's regime type and health (As an example, see Ross 2006; Rudra and Tirone 2011). Therefore, the Polity IV project's *Polity* measure, the 21-point scale running from -10 to 10, with lower values indicating greater levels of autocracy and higher values greater democracy, is also included (Marshall and Jaggers 2002).[29]

Table 1 provides descriptive statistics for the primary variables utilized in the analysis.

[Table 1 about here]

A few pre-estimation diagnostic tests indicated that there was at least first-degree autocorrelation within the data, although it rejected the hypothesis that *Life Expectancy* or *Infant Mortality* exhibited a unit root. However, there is evidence that these variables may be subject to

[26] Accessed June 16, 2011.
[27] Accessed June 16, 2011.
[28] http://hdr.undp.org/en/statistics/data/. Accessed June 23, 2011.
[29] Polity IV v2010. Available at http://hdr.undp.org/en/statistics/data/. Accessed June 16, 2011.

a positive time-trend, so each of the fully specified models below include a count variable accounting for elapsed time to control for any trending that may be present.

Given the continuous dependent variable, pooled Ordinary Least Squares (OLS) regression would be a suitable estimator. However, the presence of autocorrelation can present difficulties in the estimation of the standard errors. Therefore, the an AR(1) correction is included in the estimations.

In addition to serial-correlation, spatial correlation can also make the estimation of accurate standard errors problematic. It is theoretically likely within this data, given the tendency for natural disasters to strike multiple countries at once or for civil conflicts in one country to affect a neighbor, that there would be some degree of spatial correlation present. One way of correcting for this spatial correlation is the use of panel-corrected standard errors (Beck and Katz 1995), and this is the option chosen for this analysis. Therefore, the models are estimated via pooled OLS utilizing panel-corrected standard errors with a panel-specific AR(1) correction unless otherwise specified.

Furthermore, it is important to consider the fact that NGO responses are not randomly determined and to account for factors which may cause responses of one of the aid organizations to deviate from the others. For instance, if one organization were to systematically choose countries that are in greater danger than others, the structural differences between the organizations' method of case selection could result in biased estimates unless these factors were properly controlled for.[30]

[30] Fortna (2004) highlights this dynamic in her assessment of the effectiveness of peacekeeping operations. She controls for the factors which make peacekeeping more or less difficult in order to properly determine the effectiveness of the operations. Failure to do so would result in peacekeeping efforts appearing to be unsuccessful given the propensity for peacekeepers to monitor situations which are most likely to relapse into violence.

Figure 2 presents diagrams detailing NGO response by health indicator and region. Each point shows an instance where a single aid organization was present in order to see how the three may differ in their response.[31] If the organizations' response profiles were similar, one would expect to see fairly close clustering of aid missions. However, from these diagrams it is clear that this is not the case. Rather, Oxfam appears to choose particularly challenging environments, at least in terms of the current level of health. For both life expectancy and infant mortality they tend to cluster towards the countries which exhibit poor health performance. MSF demonstrates similar tendencies in regards to life expectancy, but tend to operate in countries with average or better than average infant mortality. Finally, ICRC appears to end up in countries which have higher levels of life expectancy but lower levels of infant mortality. With regards to spatial dispersal, MSF and Oxfam both show tendencies to operate in Asia and Africa. To remedy this situation, the dependent variables are differenced so that the measure reflects the future two-year change in life expectancy or infant mortality.[32] Regional dummies for Africa, Asia and the Middle East are also included as regressors.

Finally, it is possible that some factors not included in the model estimates may influence public health. In order to account for the unobserved factors, the models are estimated with fixed effects using a Least Squares Dummy Variables (LSDV) approach, wherein a dummy variable for each country in the analysis is included to account for country-specific time-invariant characteristics.[33] The coefficients on both the regional dummies and country-dummies are omitted from the tables due to space considerations.

[31] Instances where two or more organizations were present in a country year were omitted.

[32] Therefore, for aid observed in year t_0, the dependent variables is measured as $(t_2\text{-}t_0)$

[33] The ability to include country-dummy fixed-effects is enhanced by the absence of a lagged dependent variable. As Nickell (1981) showed, the presence of a lagged dependent variable with fixed effects can induce a bias in the order of 1/T. This is not a particularly troubling value in long time series, but can be problematic in a short time series such as the one utilized here.

[Table 2 about here]

Table 2 presents the results of estimations on current conflicts, which include *Conflict (Current)*, *Civil Conflict (Current)*, and *Civil War (Current)*. *Conflict (Current)* includes both civil conflicts and civil wars. To test Hypothesis 1, each of these variables is also interacted with each of the aid variables in different model specifications. Furthermore, to control for previous conflicts, the indicator for each of the variables in the last five years are also included as regressors, as is a variable indicating the presence of an international conflict in the last five years, *International Conflict (Prior)*.[34] The interactive measures are accounted for by *ICRC X Conflict, MSF X Conflict, and Oxfam X Conflict,* each of which is the aid variable interacted with the corresponding conflict measure for each model. For space considerations only the aid, conflict and interaction variables, along with the time trend, are presented. Control variables are shown in Table 3.

[Table 3 about here]

As detailed by Brambor, Clark and Golder (2006), accurate interpretation of the estimated interactive effect requires construction of the appropriate marginal effect and corresponding standard error. Additionally, as Berry, Golder and Milton (2010) argue, true understanding of the full effect of either of the constituent terms in the interaction require the calculation of not only the conditional coefficient which represents the direct marginal effect of the variable, but also the conditional effect of the variable it conditions. As an example, in the models above ICRC aid enters the model twice. It has its independent effect (when conflict equals zero), as well as its presence in the interaction. Thus, it affects the model through its independent effect, its conditioned marginal effect (ICRC aid + ICRC aid X Conflict) and also its

[34] There are no active international conflicts during this period, negating the need for a current measure of international conflict.

moderating effect on conflict (Conflict + ICRC aid X Conflict). Thus, aid as a component of the interaction term has two possible pathways by which it might affect life expectancy, in addition to its effect independent of conflict.

In order to fully capture these interactive effects, Table 4 presents the conditional coefficients, standard errors (for the direct marginal effect), and statistical significance of the conditional coefficients for each of the models in Table 2. Interpretation of these conditional coefficients is made easier by seeing them in a more standard format, with the coefficient above and standard error below.

[Table 4 about here]

In Model 1, the marginal effect of ICRC aid, conditional on conflict, is positive and statistically significant at the 99% level, with a coefficient of 0.00000079. This suggests that at the ICRC aid mean of $5,119,880, life expectancy increases by 0.004 years. However, it does not have a statistically significant conditioning affect upon conflict, as each of the calculated marginal effects (at the 10^{th}, 25^{th}, 50^{th}, 75^{th} and 90^{th} percentiles of ICRC aid in the dataset) reaches statistical significance. Therefore, the only conditional effect of ICRC aid upon life expectancy in the model is through its positive and significant conditional marginal effect.

In accordance with Hypothesis 1, ICRC aid is positive and beneficial to health. However, there is a relational component to the hypothesis which predicted that aid from the ICRC would be more beneficial than aid from MSF and Oxfam. This is supported by the estimates, which indicate that each of the latter two organizations are detrimental to life expectancy, rather than beneficial but less effective than aid from the ICRC. The negative and statistically significant coefficients on MSF X Conflict and Oxfam X Conflict suggest that aid from these organizations, in the presence of a current civil conflict or civil war, reduces life

expectancy rather than increasing it. For MSF, the coefficient of -0.0000017 and average aid allocation of $2,048,620 indicates that at for the average country experiencing a conflict, MSF activity reduces life expectancy by 0.003 years. Neither variable has an offsetting conditional effect on conflict and its relationship with life expectancy.[35]

Among the control variables, as might be expected higher levels of GDP per capita increases life expectancy, as do higher levels of democracy. Conversely, higher levels of education and the passage of time both reduce life expectancy, which may be an indication of some degree of attenuation as life expectancy increases overall.

Moving to Model 2, which estimates the effect of a current civil conflict (more than 25 battle deaths in the current year but less than 1,000 in that year or cumulatively), the marginal effect of ICRC aid conditional on civil conflict is statistically insignificant, suggesting that ICRC aid has no effect upon life expectancy.[36] However, it does have a statistically significant moderating effect on civil conflict, which is to increase conflict's impact upon life expectancy from a loss of 0.0072 years at the 50th percentile of aid to 0.027 at the 90th.[37] This suggests, in opposition to other estimates, that ICRC aid may decrease life expectancy by exacerbating the negative effects of conflict at high levels of aid. Among the other aid measures, MSF fails to achieve statistical significance, while Oxfam decreases life expectancy conditional on conflict but does not affect conflict's relationship with life expectancy.

Finally, in Model 3, ICRC aid is once again positive and significant, both in its estimated effect conditional on civil war, as well as its conditioning effect on civil war. In the presence of a civil war ICRC aid increases life expectancy by 0.0000011 years (per marginal increase in aid),

[35] The full marginal effect of conflict is Conflict + (Conflict X ICRC) + (Conflict X MSF) + (Conflict X Oxfam), which is not tested in this table.

[36] Model 8 is estimated with a general, rather than panel-specific, AR(1) correction.

[37] An F-test confirmed that these values are statistically different from one another.

while it also increases life expectancy associated with civil war, from 0.021 years at the 75th percentile to aid to 0.036 years at the 90th percentile. Therefore, ICRC aid is doubly beneficial in the case of civil war. Once again, MSF and Oxfam aid are detrimental to life expectancy, as each assumes a negative conditional coefficient and statistical significance at the 99% level.

To summarize the results of Models 1 through 3, they are generally in accordance with Hypothesis 1 in that ICRC aid is once again more beneficial than MSF and Oxfam aid, with the exception of Model 2. It appears that the estimated effects for ICRC in Model 1 are related to civil war rather than civil conflict, given the results of 2 and 3 , which is mildly surprising given that the challenges to be overcome in a more intense civil war versus a conflict. However, this held for MSF as well, though again their effect was negative for health.

These results do not hold, however, when the dependent variables switches to infant mortality. Table 5 shows the estimated conditional coefficients for the models of current conflict using infant mortality as the dependent variable, while the control variables are included in Table 6.

[Tables 5 and 6 about here]

As with life expectancy, the interactive effect of aid and conflict is most accurately understood using the conditional coefficients and standard errors of the appropriate constituent and interactive variables. These values are presented in Table 7.

[Table 7 about here]

Based on these results, each organization appears equally ineffectual in their ability to reduce infant mortality following a civil conflict of any intensity. The general result is one of statistical insignificance, suggesting that aid activities have no statistically discernable effect upon infant mortality. The one exception is Oxfam, which has a positive and significant

coefficient for conflicts of any type as well as civil wars, suggesting that Oxfam aid given during these crises increases infant mortality during the following two years.

Of the control variables, once again GDP per capita is beneficial for health, as is openness to international trade. Larger populations appear to suffer from poorer health outcomes, as increases in population increase infant mortality rates.

Two additional analyses were conducted in order to assess the robustness of these results, though the results are not shown here for space considerations. The first test was to use measures of aid per capita, rather than overall aid measures, as representations of aid. However, this did not affect the general results. In order to further account for the fact that MSF and Oxfam may be choosing harder cases – as one might presume from the clustering exhibited in Figure 2 – I included the alternative health measure as a control in the estimation of public health. That is, when life expectancy as the dependent variable, infant mortality was included as a control. The intuition is that countries that perform poorly on one metric should perform similarly poorly on the other. Therefore, if it is true that one organization systematically chooses more difficult cases than another, this should help control for this selection and remove it as a potential source of bias. However, including the alternative health measure in the models failed to substantively change the results.

Overall, Hypothesis 1 – that publicly funded organizations should be more effective than their privately funded counterparts during active civil violence – has some support when it comes to life expectancy, but little relative to infant mortality. Aid from the publicly funded organization – the ICRC - appears to be beneficial for health, while that from private organizations, MSF and Oxfam, reduces life expectancy.

Conclusion

What factors affect the ability of humanitarian NGOs to effectively deliver services and improve the welfare of those they serve? The argument here suggests that donor funding is one source of variations in NGO effectiveness. There are a number of potential negative externalities which may emanate from humanitarian action, each of which can detract from the overall effectiveness of an aid effort by reducing the welfare of the recipient population at large. Therefore, only evaluating the effect of NGOs on those who directly receive aid may be a misleading measure of the overall effectiveness of the aid effort.

The composition of donor funding should affect NGO performance with respect to the aggregate measure of national welfare due to associated differences with accountability. Organizations which receive aid from states face greater levels of accountability, as well as other benefits, which can increase the direct benefit conveyed to aid recipients and reduce negative externalities visited upon recipients and non-recipients alike. Organizations which receive primarily private funds, however, face lower levels of accountability, which can translate into greater levels of inefficiency and increased negative externalities, both of which can detract from aid effectiveness.

The statistical results support this argument. Looking at aid from three prominent humanitarian NGOS – the International Committee of the Red Cross (ICRC), Médecins sans Frontières' (MSF), and Oxfam International – the performance of aid from the publicly funded ICRC was superior to that of the MSF and Oxfam, each of which rely primarily on private funding. Furthermore, aid from the latter two organizations actually tended to reduce health outcomes, suggesting that perhaps the negative consequences of aid distribution and activities

suggested by scholars of aid and conflict may be more pronounced with these types of organizations.

These negative effects, and the results regarding aid effectiveness overall, suggest a number of potentially interesting lines of inquiry moving forward. For scholars of international political economy who examine aid effectiveness, one such question might be to examine which factors on the ground which may influence aid effectiveness. What types of conditions make negative consequences more pronounced, and how can the conditions be ameliorated? For those who study conflict, the interplay between NGOs and overall conflict dynamics can help understanding of what factors may extend conflicts or otherwise make them more difficult to resolve, or otherwise alter the domestic landscape of civil conflict. The presence of privately funded NGOs, who deliver significant aid but, as this argument suggests, are largely unaccountable to their donors or other entities, should be a concern for those who focus on reducing the severity and duration of conflicts. Fruitful analyses for scholars of international organizations may be ways in which accountability of these organizations can actually be increased in order to improve their performance.

One policy prescription which can be drawn from this analysis is along these lines. Accountability of NGOs might be increased by centralization and bureaucratization of humanitarian aid. For instance, the creation of an international organization which received and distributed aid intended for humanitarian relief might reduce some of the coordination and incentive issues associated with private donations. This central organization could, over time, develop institutional expertise in aid evaluation on par with that of states, and it would not require legal authority to enforce accountability or good behavior. The financial resources it could make available would provide NGOs with an incentive to cooperate.

Regardless of the means by which it is achieved, it is important that accountability and aid effectiveness is increased. There are significant opportunity costs associated with inefficient aid, and in cases where aid is actually detracting from recipient welfare, rather than increasing it, difficult choices may have to be made about whether it would be better to avoid taking any action at all. The best way to avoid having to make a choice between taking no action or engaging in aid which may turn out to be a pyrrhic victory is to ensure that aid is delivered in an effective and efficient manner. This would not only improve the ability of humanitarian NGOs to deliver on their mission, but it can have real and substantial real-world benefits for those whose lives or well-being are threatened by humanitarian crises.

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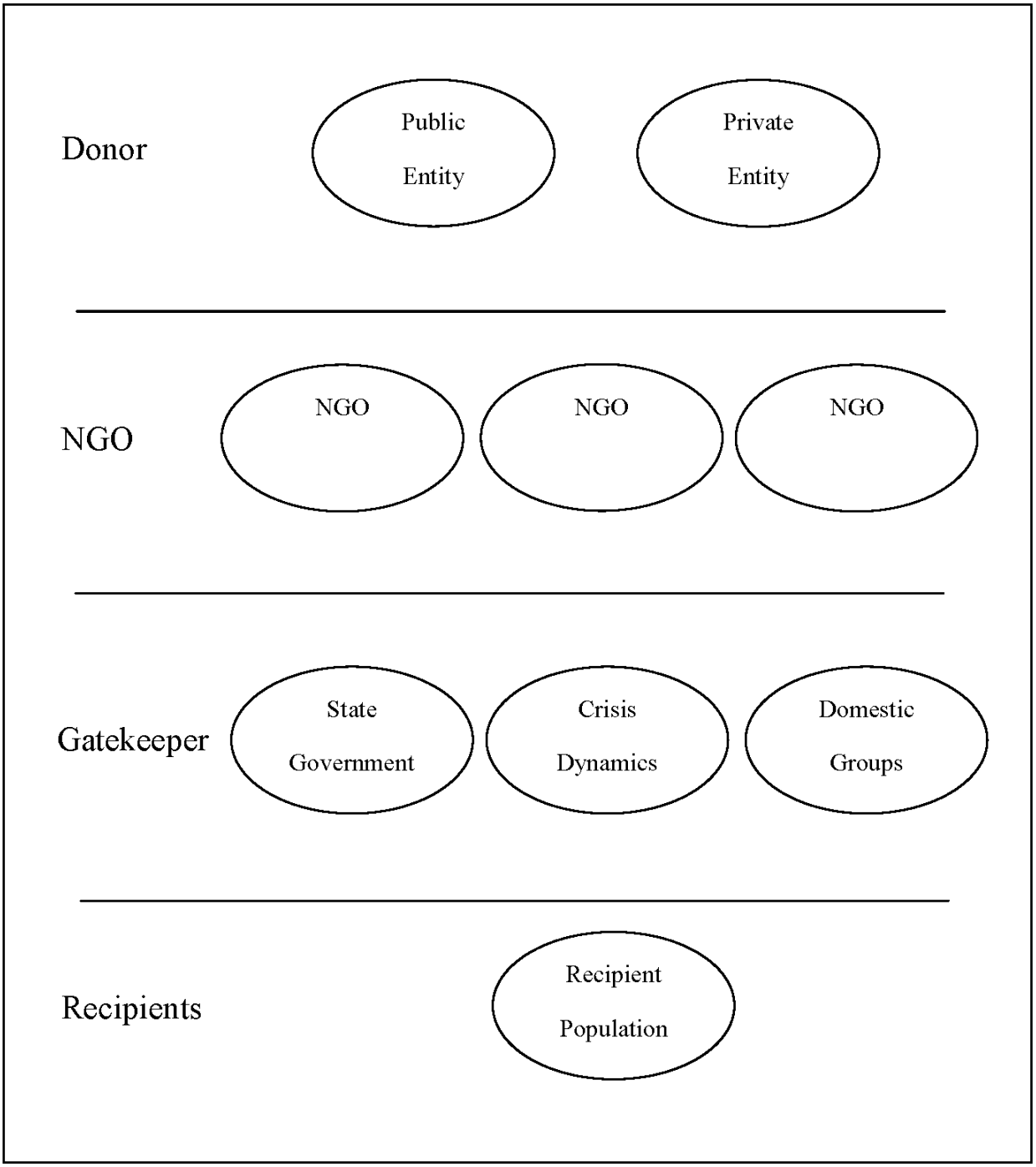
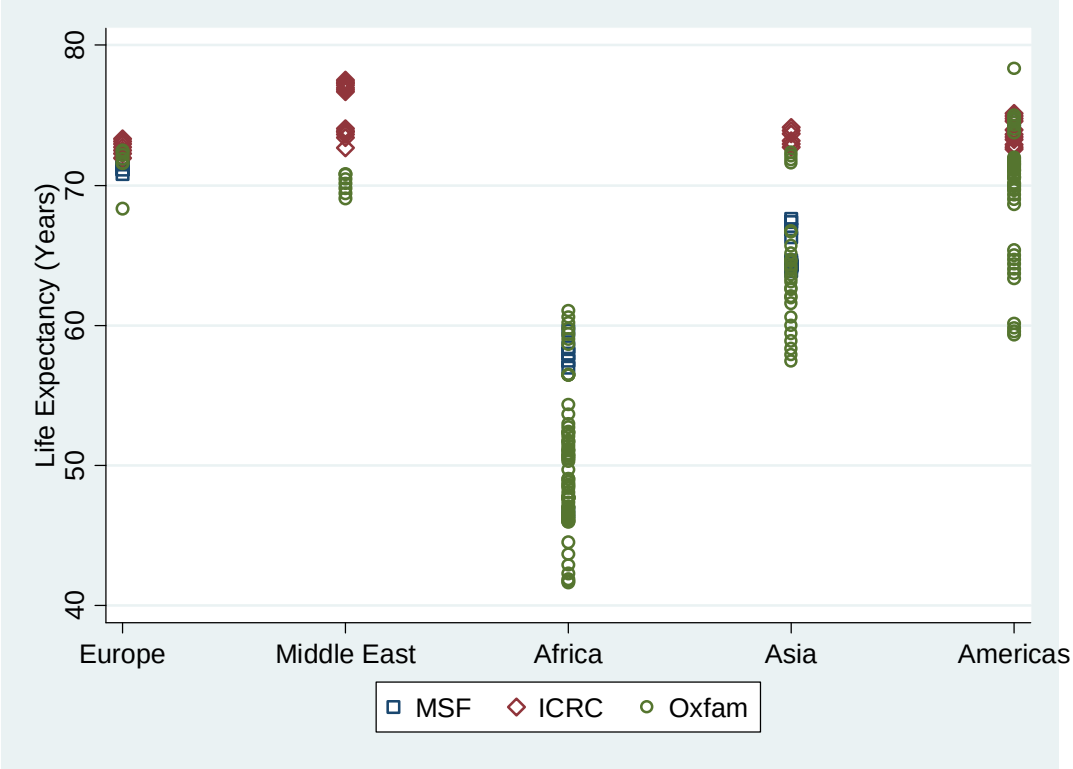


Figure 1. Actors in the Humanitarian System

	N	Mean	Min	Max
Life Expectancy	676	66.44	41.28	82.18
Infant Mortality	503	38.72	1.40	139.80
ICRC Aid	734	5119.88	0	160,381.90
MSF Aid	734	2048.62	0	61,843.30
Oxfam Aid	770	2286.79	0	50,611.02
Conflict (Current)	766	0.11	0	1
Conflict (Prior)	766	0.19	0	1
Civil Conflict (Current)	766	0.09	0	1
Civil Conflict (Prior)	766	0.18	0	1
Civil War (Current)	766	0.09	0	1
Civil War (Prior)	766	0.14	0	1
Disasters (Current)	766	1.64	0	37.00
Disasters (Prior)	763	4.61	0	91.00
GDP Growth	666	6.14	-6.47	46.50
GDP per capita	655	5976.53	85.82	106,466.10
Openness	659	95.55	1.77	441.22
Public Health Expenditures	652	10.61	0.77	41.66
Population (logged)	727	8.09	2.35	14.09
Polity	542	2.40	-10.00	10.00
Education	581	6.76	1.03	12.12

Table 1 Descriptive Statistics, 2004-2007



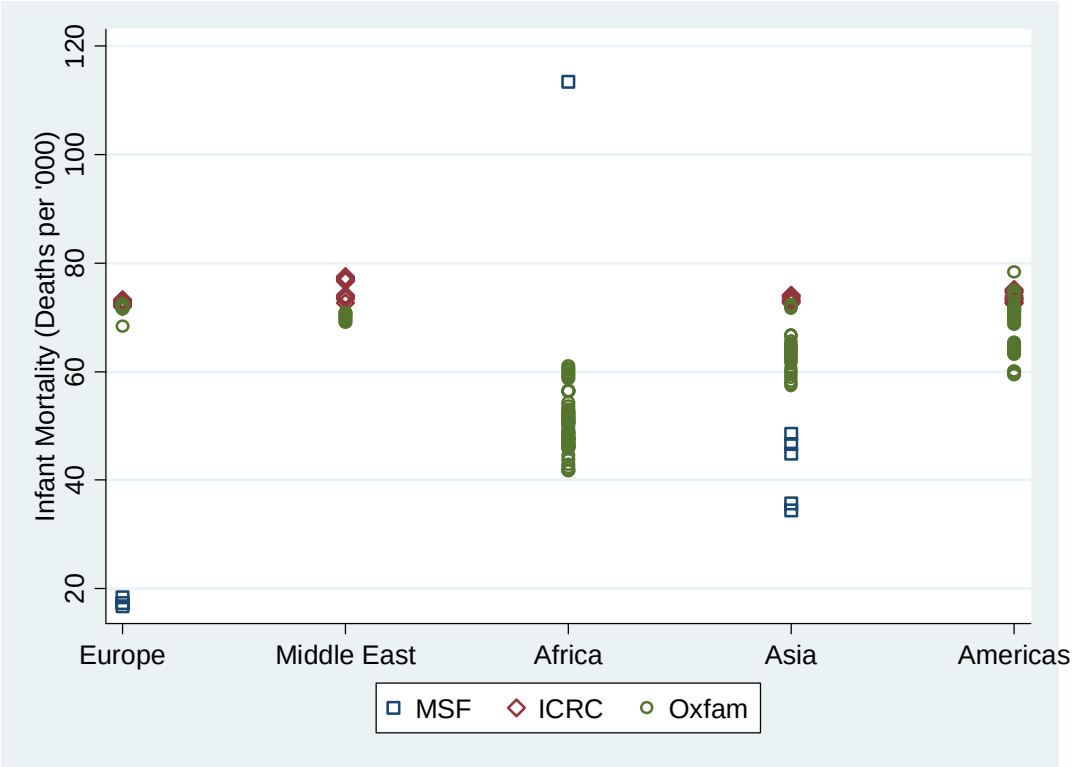


Figure 2. NGO Response by Health Indicator and Region

	(1) Current Conflict	(2) Current Civil Conflict	(3) Current Civil War
ICRC Aid	1.96e-07	9.61e-07***	3.88e-07
	(6.72e-07)	(2.90e-07)	(5.03e-07)
ICRC X Conflict	5.88e-07	-6.75e-07*	7.41e-07*
	(7.13e-07)	(3.63e-07)	(3.98e-07)
MSF Aid	-1.55e-06	-2.05e-06**	-1.25e-06
	(1.10e-06)	(8.85e-07)	(7.84e-07)
MSF Aid X Conflict	-1.72e-07	1.24e-06*	-1.86e-06***
	(9.06e-07)	(6.72e-07)	(6.03e-07)
Oxfam Aid	-2.93e-06***	-2.82e-06***	-2.96e-06***
	(4.22e-07)	(3.69e-07)	(2.30e-07)
Oxfam Aid X Conflict	-1.49e-07	9.20e-07**	-3.16e-07
	(9.58e-07)	(3.79e-07)	(4.37e-07)
Conflict (Prior)	-0.0227***		
	(0.00834)		
Conflict (Current)	0.00590		
	(0.00720)		
Civil Conflict (Prior)		-0.0212**	-0.0159**
		(0.00852)	(0.00754)
Civil War (Prior)		0.0159*	0.0110
		(0.00823)	(0.00740)
International Conflict (Prior)		-0.0191	0.0491
		(0.0618)	(0.0354)
Civil Conflict (Current)		-0.00227	0.00130
		(0.00372)	(0.00540)
Civil War (Current)		0.00207	0.00791
		(0.00477)	(0.00801)
Disasters (Current)	0.00101**	0.000973**	0.000916*
	(0.000440)	(0.000422)	(0.000531)
Disasters (Prior)	0.00131***	0.00104***	0.00101***
	(0.000301)	(0.000228)	(0.000325)
Time Trend	-0.00438***	-0.00404***	-0.00449***
	(0.00100)	(0.000824)	(0.00127)
Constant	0.436*	0.600*	
	(0.250)	(0.313)	
Observations	489	489	489
R-squared	0.750	0.742	0.740
Number of Countries	127	127	127
Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1			

Table 2. Life Expectancy and Current Conflict (Primary Variables)

	(1)	(2)	(3)
	Current Conflict	Current Civil Conflict	Current Civil War
GDP Growth	-0.000134	-7.93e-06	-0.000409
	(0.000453)	(0.000505)	(0.000486)
GDP per capita	7.12e-06***	7.74e-06***	7.72e-06***
	(2.04e-06)	(2.12e-06)	(2.16e-06)
Openness	-0.000120	-9.30e-05	-5.17e-05
	(9.79e-05)	(9.15e-05)	(6.94e-05)
GDP per capita X Openness	-2.99e-09	-4.18e-09	-4.03e-09
	(3.01e-09)	(3.90e-09)	(4.10e-09)
Public Health Expenditures	-0.000415	-0.000329	-0.000391
	(0.000400)	(0.000432)	(0.000417)
Population (logged)	-0.0235	-0.0354	-0.0250
	(0.0285)	(0.0277)	(0.0335)
Polity	0.000822*	0.000672	0.000857
	(0.000495)	(0.000493)	(0.000549)
Education	-0.0198**	-0.0214***	-0.0212***
	(0.00819)	(0.00626)	(0.00672)

Table 3. Life Expectancy and Current Conflict (Control Variables)

	(1)	(2)	(3)
	Current Conflict	Current Civil Conflict	Current Civil War
ICRC X Conflict	0.00000079***	0.00000029	0.0000011***
	(0.00000021)	(0.00000018)	(0.00000033)
MSF X Conflict	-0.0000017***	-0.00000081	-0.0000031***
	(0.00000061)	(0.00000064)	(0.0000009)
Oxfam X Conflict	-0.0000031***	-0.0000019***	-0.0000033***
	(0.0000006)	(0.00000054)	(0.00000037)
Conflict X ICRC			
10th Percentile	0.0069	-0.0034	0.0092
25th Percentile	0.0078	-0.0045	0.01
50th Percentile	0.0102	-0.0072*	0.013
75 Percentile	0.016	-0.014**	0.021**
90th Percentile	0.028	-0.027**	0.036**
Conflict X MSF			
10th Percentile	0.0058	-0.0015	0.0068
25th Percentile	0.0057	-0.0008	0.0057
50th Percentile	0.0054	0.0011	0.0029
75 Percentile	0.0047	0.0065	-0.0052
90th Percentile	0.0036	0.014	-0.017*
Conflict X Oxfam			
10th Percentile	0.0059	-0.0021	0.0078
25th Percentile	0.0058	-0.0015	0.0077
50th Percentile	0.0056	-0.0002	0.0072
75 Percentile	0.0049	0.0042	0.0057
90th Percentile	0.0043	0.0076	0.0045
*** p<0.01, ** p<0.05, * p<0.1			

Table 4. Conditional Coefficients, Life Expectancy and Current Conflict

	(4) Current Conflict	(5) Current Civil Conflict	(6) Current Civil War
ICRC Aid	-4.74e-06***	-3.66e-06***	-4.38e-06*
	(1.45e-06)	(9.67e-07)	(2.33e-06)
ICRC X Conflict	2.96e-06	3.17e-06**	4.14e-06
	(2.23e-06)	(1.58e-06)	(3.47e-06)
MSF Aid	1.13e-05**	8.53e-06	1.40e-05**
	(4.74e-06)	(5.47e-06)	(6.63e-06)
MSF X Conflict	-8.77e-06***	-5.73e-06*	-1.65e-05*
	(2.18e-06)	(3.29e-06)	(8.67e-06)
Oxfam Aid	7.43e-06*	6.64e-06**	6.50e-06**
	(4.36e-06)	(3.19e-06)	(3.24e-06)
Oxfam X Conflict	1.60e-06	-4.29e-06	4.40e-06
	(5.78e-06)	(9.37e-06)	(3.53e-06)
Conflict (Prior)	0.177***		
	(0.0329)		
Conflict (Current)	0.0408		
	(0.0630)		
Civil Conflict (Prior)		0.116**	0.128***
		(0.0518)	(0.0296)
Civil War (Prior)		0.0421	0.00838
		(0.0422)	(0.0384)
International Conflict (Prior)		1.060***	-8.239***
		(0.319)	(1.027)
Civil Conflict (Current)		0.0642	0.0427
		(0.0631)	(0.0581)
Civil War (Current)		-0.0105	-0.0215
		(0.0364)	(0.0627)
Disasters (Current)	0.00571**	0.00566***	0.00603**
	(0.00232)	(0.00186)	(0.00271)
Disasters (Prior)	0.00828***	0.00813**	0.00744**
	(0.00296)	(0.00316)	(0.00336)
Time Trend	0.00239	0.00359	0.00270
	(0.00662)	(0.00899)	(0.00739)
Constant	-14.38***		
	(3.569)		
Observations	376	376	376
R-squared	0.651	0.650	0.650
Number of Countries	127	127	127
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 5. Infant Mortality and Current Conflict (Primary Variables)

	(4)	(5)	(6)
	Current Conflict	Current Civil Conflict	Current Civil War
GDP Growth	-0.00430	-0.00398	-0.00503
	(0.00360)	(0.00352)	(0.00427)
GDP per capita	-6.85e-05***	-6.93e-05***	-6.27e-05***
	(1.38e-05)	(1.71e-05)	(1.48e-05)
Openness	-0.000692*	-0.000854*	-0.000658
	(0.000416)	(0.000486)	(0.000423)
GDP per capita X Openness	3.60e-08	4.47e-08*	2.68e-08
	(2.71e-08)	(2.60e-08)	(2.83e-08)
Public Health Expenditures	-0.0125	-0.0125	-0.0119
	(0.0101)	(0.0102)	(0.0101)
Population (logged)	1.462***	1.421***	1.385***
	(0.228)	(0.249)	(0.234)
Polity	-0.000650	-0.00157	-0.000940
	(0.00136)	(0.00117)	(0.000941)
Education	-0.0375	-0.0516	-0.0485
	(0.149)	(0.126)	(0.149)

Table 6. Infant Mortality and Current Conflict (Control Variables)

	(4)	(5)	(6)
	Current Conflict	Current Civil Conflict	Current Civil War
ICRC X Conflict	-0.0000018	-0.00000049	-0.00000024
	(0.0000016)	(0.0000021)	(0.0000019)
MSF X Conflict	0.0000025	0.0000028	-0.0000025
	(0.0000038)	(0.0000033)	(0.000006)
Oxfam X Conflict	0.000009***	0.0000034	0.000011***
	(0.0000035)	(0.0000076)	(0.0000028)
Conflict X ICRC			
10th Percentile	0.046	0.07	-0.014
25th Percentile	0.051	0.075	-0.0078
50th Percentile	0.062	0.087	0.0087
75 Percentile	0.093	0.12*	0.052
90th Percentile	0.151	0.18*	0.133
Conflict X MSF			
10th Percentile	0.036	0.061	-0.031
25th Percentile	0.03	0.057	-0.041
50th Percentile	0.017	0.049	-0.066
75 Percentile	-0.021	0.024	-0.138
90th Percentile	-0.076	-0.013	-0.242
Conflict X Oxfam			
10th Percentile	0.041	0.063	-0.021
25th Percentile	0.042	0.061	-0.018
50th Percentile	0.044	0.055	-0.012
75 Percentile	0.052	0.034	0.009
90th Percentile	0.058	0.018	0.026
*** p<0.01, ** p<0.05, * p<0.1			

Table 7. Conditional Coefficients, Infant Mortality and Current Conflict