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WHY PAY NGOS TO INVOLVE THE COMMUNITY?

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**ABSTRACT:** We examine the case for donors providing financial incentives to, i.e. subsidizing, NGOs to increase community participation. We show that the introduction of such a 'participation subsidy' may reduce beneficiary welfare. Thus, eliminating community participation from the set of conditions for funding an NGO may in fact benefit target communities. We show how our theoretical analysis may be operationalized by applying it to data from the NGO sector in Uganda. Our empirical findings appear to reject the case for providing a participation subsidy in that context.

**Keywords:** Regulation of non-governmental organizations, developing countries, community participation, Uganda

JEL classification: I38, L31, L38

# Warum sollte man zahlen NGOs finanzieren, um die Gemeinschaftsbeteiligung zu stärken?

Wir hinterfragen die Aussage, dass Spender den NGOs finanzielle Mittel bereitstellen, d.h. sie subventionieren, um die Bürgerbeteiligung (community participation) zu stärken. Wir zeigen, dass die Einführung einer solchen "Beteiligungssubvention" die Wohlfahrt der Begünstigten verringern kann. Die Herausnahme der community participation aus den Bedingungen für die finanzielle Förderung einer NGO kann tatsächlich Zielgruppen nützen. Wir zeigen, wie unsere theoretische Analyse operationalisiert werden kann, indem sie auf Datenmaterial aus dem NGO-Sektor

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in Uganda angewendet wird. Unsere empirischen Ergebnisse scheinen den Argumenten für die Bereitstellung einer Beteiligungssubvention in diesem Zusammenhang zu widersprechen.

# ¿Por qué subvencionar a las ONG para implicar a la población?

Los autores examinan el caso de los donantes que ofrecen ayudas financieras, es decir, de los que subvencionan a las organizaciones no gubernamentales con la finalidad de incrementar la participación de la comunidad. Los autores ponen de manifiesto que la introducción del denominado "subsidio a la participación" puede reducir el bienestar de los beneficiarios. Por lo tanto, eliminar la participación de la comunidad del conjunto de las condiciones de financiación de una organización no gubernamental, puede en realidad ser beneficioso para determinadas comunidades. Los autores ponen de manifiesto cómo su análisis teórico puede ser operativo, tal y como muestran los datos de las organizaciones no gubernamentales en Uganda. Parece que sus resultados empíricos rechazan la provisión de subsidios a la participación en este contexto.

# Pourquoi payer les ONG pour faire To join the community la communauté?

Les auteurs examinent le cas de donateurs offrant des primes financières, c'est-à-dire subventionnant des organisations non gouvernementales (ONG) afin d'accroître la participation de la communauté. Les auteurs montrent que l'introduction d'un tel «subside à la participation» peut réduire le bien-être des bénéficiaires. Dès lors, éliminer la participation de la communauté de l'ensemble des conditions de financement d'une ONG peut en réalité être bénéfique pour des communautés cibles. Ils montrent comment leur analyse théorique peut être mise en pratique en l'appliquant à des données d'ONG en Ouganda. Leurs résultats empiriques semblent être contre l'octroi de subsides à la participation dans ce contexte.

## 1 Introduction

Community participation is often celebrated in the popular as well as academic discourse, and is widely viewed as a requirement for successful poverty-relief projects. Indeed, community-based development has arguably become a 'central tenant of development policy' (Mansuri and Rao, 2012: ix). Botchway notes that participation is often assumed to be 'good by definition' (2001: 135) and the term has gained 'unprecedented visibility and respectability' (2001: 148), often represented as the 'magical missing ingredient' (2001: 149) for development projects.

The concept proceeds from the premise that permanent improvements in living standards are seldom attainable without the involvement and cooperation of beneficiaries. De Berry (1999) suggests that the participatory approach 'credits people with the ability, even in the most extreme circumstances, to engage with the issues that face them'. Accordingly, the beneficiary is to be given more information, responsibility and decision-making power in diverse project areas, including its focus, the targeting of beneficiaries, the implementation strategy, and assessment. While the approach is widely considered best practice, it is not clear that it deserves these accolades. Evidence on its performance is scant, and there exists a lack of thorough and systematic evaluations with counterfactuals.<sup>1</sup> The empirical literature on community participation acknowledges that there may be a large gap between the idealized textbook representation of the concept and non-profit organizations' experiences with it. Case studies show that, for a variety of reasons, textbook benefits do not always materialize.

At an *a priori* conceptual level, the difficulty is the following. Participatory processes are known to be expensive and time-intensive. Non-governmental organizations (NGOs), who are typically the implementing agencies for development projects at the ground level, may quite plausibly be less than perfectly altruistic. Thus, even if there exists the possibility of significant gains from community participation per se, NGOs who are self-seeking (at least to some extent) may divert some grant resources to their own consumption, say as higher managerial perquisites, including leisure, rather than expending them on increasing beneficiary participation and thus beneficiary welfare.<sup>2</sup> A moral hazard problem therefore exists with regard to the level of community participation chosen by imperfectly altruistic NGOs. Donors can seek to reduce this moral hazard problem, i.e., ensure greater community participation, by using their financial leverage. Specifically, they can make financial payments contingent on ensuring greater participation, thereby, in effect, subsidizing participation. When the level of participation is open to independent verification by donors at low cost, so that the participation conditionality is indeed enforceable, such participation subsidies will increase the extent of community participation in developmental projects and may conceivably reduce fund diversion to NGOs' own consumption, relative to the case under a common lump-sum grant to all NGOs.

Costs of ensuring participation are however difficult to independently assess, let alone verify. Donors are unlikely to have access to the kind of detailed micro-level and village or community-specific information that is required to reliably estimate these costs. NGOs themselves, who can indeed reliably assess these costs, have an incentive to over-report them to donors, so as to increase their grant revenues in case donors opt for a participation subsidy. Thus, in practice, donors are likely to *overshoot*, i.e., subsidize participation at a rate *greater* than its marginal cost. This will induce NGOs

See Mansuri and Rao (2012) for a detailed discussion. There are many case study reports, but because case studies are based on small samples that are not representative, they cannot be used to shape policy and to inform best practices (Isham et al. 1995). There are only a few larger sample studies examining participation in infrastructure projects. These find that there are demonstrated benefits to the community participation approach (Isham et al. 1995, Isham and Kahkohnen 2002, Khwaja 2004). Isham et al. (1995) examine data from 121 rural water projects and find that community participation improves project outcomes. Examining 123 infrastructure projects in the north of Pakistan, Khwaja (2004) finds a positive role for participation, but only for non-technical decisions. Although causality is not conclusive, both of these studies go to some length to argue that the most plausible direction of causality is that participation influences outcome. Isham and Kahkohnen (2002) report that effective participation is reliant on a community's ability to organize and mobilize itself.

<sup>2</sup> On the issue of fund diversion by NGOs to managerial consumption, see Burger et al. (2014), Aldashev and Verdier (2010), and Castaneda et al. (2008).

to increase participation to excessive, i.e. inefficiently high, levels. Beneficiary welfare will fall if the extent of overshooting is sufficiently high.

An additional difficulty arises if some NGOs are perfectly altruistic, i.e. they divert nothing to own consumption. For such NGOs, any *positive* subsidy rate generates excessive participation. Consequently, welfare of communities served by such NGOs would fall under any subsidy rate whatsoever, unless the total revenue received by such an NGO happens to rise, relative to that under a common lump-sum grant. Given a fixed donor budget, however, this would happen only if perfectly altruistic NGOs implemented greater participation under a subsidy than imperfectly altruistic ones. However, there does not appear to be any obvious reason why this must be so if the subsidy rate at least covers the marginal cost: in that case, there is no financial penalty incurred by choosing higher levels of participation. Consequently, it seems intuitively plausible that any subsidy that at least covers the marginal cost of participation may reduce the welfare of communities served by perfectly altruistic NGOs.

Assuming, realistically, that donors cannot *a priori* distinguish among perfectly and imperfectly altruistic NGOs, the upshot of the above discussion is that an adverse selection problem may conceivably complicate the case for a participation subsidy even when the subsidy rate is relatively close (or indeed *exactly equal*) to the marginal cost. Imposing such subsidy rates may increase the welfare of communities served by imperfectly altruistic NGOs, but reduce that of communities served by perfectly altruistic ones. The aggregate effect on beneficiary welfare thus becomes ambiguous. If the latter type sufficiently predominates, a participation subsidy may reduce beneficiary welfare in the aggregate even if it *exactly covers* the marginal cost.

Thus, in sum, the very use of their financial leverage by donors to reduce the moral hazard problem faced by selfish NGOs is likely to distort the incentives facing all NGOs and may additionally generate an adverse selection problem. It is therefore not self-evident that such use should, in general, be expected to improve beneficiary welfare.<sup>3</sup>

The purpose of the present paper is to develop and examine this intuition, regarding the ambiguous nature of the relationship between donor emphasis on community participation and beneficiary welfare, at both theoretical and empirical levels. We first set up a simple theoretical framework to motivate and organize our subsequent empirical investigation. We consider a population of NGOs, which differ in the weight put on own (retained) profit, relative to beneficiary welfare. The magnitude of this weight (i.e., an individual NGO's *type*) is private knowledge: it is known only to the NGO itself. Beneficiary welfare depends positively on both community participation and actual project expenditure (which is a monetary aggregate of all other inputs that improve the well-being of intended beneficiaries). NGOs can increase participation by incurring some constant (positive) marginal cost. Donors may incentivize costly community participation by providing a payment per unit of participation implemented, i.e. a *participation* 

<sup>3</sup> There is the additional issue of internal conflicts of interest within beneficiary communities. While the literature often exhibits a tendency to romanticize poor communities as internally undifferentiated entities easily capable of articulating common interest and exhibiting common agency, the reality of power and identity schisms within such communities may make collective decisions/actions incoherent, inefficient or normatively problematic. We abstract from the political economy of internal decision-making within poor communities in this paper.

*subsidy* at a constant rate (which at least covers the marginal cost of ensuring participation). They may alternatively offer a lump-sum grant identically to all NGOs, which entails the same aggregate expenditure by donors.

We first consider NGOs which are less than perfectly altruistic, i.e., which divert positive amounts to their own consumption. We show that the following holds for this class of NGOs. Under a lump-sum grant, more selfish NGOs will implement less community participation than less selfish ones, but the opposite holds under a participation subsidy. In either case, beneficiary welfare is monotonically decreasing in the degree of selfishness of NGOs. Furthermore, we characterize the exact necessary and sufficient parametric configurations under which a shift to a balanced budget participation subsidy from a transfer regime of lump-sum grants would induce every NGO in our class to reduce beneficiary welfare, regardless of the exact extent of its selfishness. This necessary and sufficient condition turns out to involve a particularly simple relationship between the subsidy rate and the marginal cost of participation. As suggested by the intuitive argument outlined above, a participation subsidy increases beneficiary welfare if and only if its rate is not 'too much in excess' of the marginal cost: we provide an exact specification of this bound. We subsequently extend the model to permit some NGOs to be perfectly altruistic: i.e., to divert nothing at all to own consumption, and show that, for such NGOs, any participation subsidy rate that at least covers the marginal cost reduces beneficiary welfare. It follows that, in an NGO population with both perfectly and imperfectly altruistic NGOs, any subsidy rate that at least covers the marginal cost of participation may reduce beneficiary welfare in the aggregate. If the subsidy rate is sufficiently in excess of the marginal cost, this would hold irrespective of the composition of the NGO population. Otherwise, this would happen when the former type dominates in the population to a sufficient degree, as suggested by our intuitive formulation.

Our theoretical analysis generates a simple empirically testable necessary condition for the existence of a participation subsidy rate not less than the marginal cost that would improve beneficiary welfare. This is essentially the requirement that, under an identical lump-sum grant to all NGOs, the participation level implemented should fall appreciably with the extent of an NGO's selfishness. Using a representative sample of non-profit organizations in Uganda, we proceed to examine whether this necessary condition holds for this sample.

Uganda is an interesting case to consider in this regard. The country has a long history of self-help organizations dating from pre-colonial society, where strong networks existed among clans and family members. However, after independence, most of these grassroots self-help organizations were either centralized or wiped out by the government in power. Conditions for NGOs improved dramatically when Yoweri Museveni came to power in 1986. Under Museveni's more tolerant regime, the NGO sector expanded rapidly, with growth partly being fuelled by a significant rise in unemployment, which helped to boost the attractiveness of starting an NGO (see Nyangabyaki et al. 2004). This expansion however has been associated with increasing evidence of large scale corruption and fund diversion in the NGO sector, leading to more emphatic demands for regulation (see Burger et al. 2014).

Our necessary condition involves a parameter relating the level of participation chosen by an NGO to the extent of its selfishness, characterized by our theoretical analysis. We develop a direct measure of an NGO's selfishness, based on survey responses from client communities. We also develop a composite measure of the extent of community participation. Examining the revenue data provided by the NGOs, we find that their revenue structure is better characterized as a lump-sum transfer, rather than as involving a participation subsidy. We then proceed to estimate the relationship between the level of community participation implemented and the extent of NGO selfishness as perceived by their client communities, according to the measures developed by us. We find that the condition that we have identified as necessary, for a participation subsidy to improve beneficiary welfare, appears to be violated by the data. Specifically, the level of participation implemented does not appear to be significantly related to NGO selfishness, as perceived by the client communities. Thus, our empirical analysis, informed by our theoretical formulation, appears to reject the policy case for any participation subsidy whatsoever, in favour of the status quo regime of lump-sum grants, in the context of our data-set.

Section 2 lays out the analytical model. Section 3 discusses our data-set, while our empirical results are presented in Section 4. The final section draws conclusions.

## 2 The theoretical framework

We now proceed to lay out our theoretical framework. We develop our benchmark model in Section 2.1 below. We discuss theoretical extensions in Section 2.2. Section 2.3 specifies how our theoretical analysis may be used to organize and illuminate empirical investigations.

#### 2.1 The benchmark model

Let T be a finite set of NGOs, all of whom receive funds from a donor to implement some developmental project. Consider a representative member of this set: the NGO  $i \in T$ . Let  $\pi_i$  represent the payoff to the NGO i, and let  $[b(p_i) + v(e_i)]$  represent the gain to beneficiaries served by this NGO in the target community, where  $p_i$  measures the level of community participation implemented, and  $e_i$  is the actual expenditure on the project incurred (on all inputs other than community participation), by the NGO i. Assume v(0) = 0, v' > 0, v'' < 0, and that  $\lim_{e \to 0} v'(e)$  is finite. Assume further that the benefit to the target community from participation is given by the quadratic form:

$$b(p_i) = Ap_i - \frac{\beta p_i^2}{2}; \tag{1}$$

with  $A, \beta > 0$ .

The NGO *i* has a budget,  $R_i = \rho + rp_i$ , where  $\rho > 0$  is some lump-sum payment to the NGO by the donor and  $rp_i$  represents NGO revenue conditional on ensuring community participation at level  $p_i$ ;  $r, p_i \ge 0$ . The NGO has to spend some amount  $cp_i$  on ensuring participation at level  $p_i$ : c > 0; furthermore, [either r = 0 or  $(r - c) \ge 0$ ].

Thus, r = 0 represents the special case of a *pure lump-sum* payment contract between the donor and all NGOs, while  $(r - c) \ge 0$  represents the case of a *participation subsidy* contract, whereby greater participation generates larger donor grants for an NGO, and the marginal subsidy at least covers the marginal cost of ensuring participation. Net monetary benefit from community participation to the NGO is then given by:

$$N(p_i) \equiv (r-c) p_i. \tag{2}$$

Let  $\theta_i$  be a *selfishness* parameter representing the relative weight put by the NGO *i* on retained profit,  $m_i; \forall i \in T, \theta_i \in [\underline{\theta}, \overline{\theta}]$ , and  $0 < \underline{\theta} < \overline{\theta} < \lim_{e \to 0} v'(e) < \infty$ . The NGO's utility is given by:

$$\pi_i = b(p_i) + v(e_i) + \theta_i m_i.$$
(3)

Thus, NGOs may possibly vary among themselves in terms of their commitment to the communities they purport to serve. A lower value of  $\theta_i$  implies a higher commitment to the community, i.e. a lower level of selfishness. The NGO maximizes its utility specified by (3), subject to the budget constraint:

$$\rho + rp_i = m_i + e_i + cp_i. \tag{4}$$

The idea that we seek to capture through this formulation is the following. A donor with a given grant budget, say G, faces a large number of NGOs who may vary in terms of their selfishness, i.e., the relative weight they put on fund diversion (retained profit) vis-à-vis the gain to the intended beneficiaries. The degree of selfishness is captured by the parameter  $\theta$ , which takes values within the interval  $[\underline{\theta}, \overline{\theta}]$  according to some cumulative distribution  $F(\theta)$ . The exact degree of selfishness (i.e. the exact value of  $\theta$ ), or equivalently the *type*, of an individual NGO is however private knowledge: a priori, it is known only to the NGO itself. The distribution  $F(\theta)$  is common knowledge. Since the donor does not know an individual NGO's type, she offers a generic contract identically to all NGOs she faces (i.e., all the NGOs in the set T), which can either be a pure lump-sum contract (r = 0) or incorporate a participation subsidy ( $r \ge c$ ). Given total grant budget G, which one of these two alternative contractual forms would generate higher total gain for the intended beneficiaries, i.e. a higher value of the term  $\sum_{i \in T} [b(p_i) + v(e_i)]$ ?

To answer this question, we first need to characterize the responses of NGOs to alternative contractual forms. Dropping the subscript i for notational simplicity, and rewriting (3) using (2) and (4), we have:

$$\pi = b\left(p\right) + v(\rho + N(p) - m) + \theta m.$$
(5)

From (5), we have:

$$\frac{\partial \pi}{\partial p} = b'(p) + N'(p)v'(e), \qquad (6)$$

$$\frac{\partial \pi}{\partial m} = \theta - v'(e) \,. \tag{7}$$

In turn, (6) and (7) yield:

$$\frac{\partial^2 \pi}{\partial p^2} = b^{''}(p) + N^{''}(p)v^{'}(e) + \left(N^{'}(p)\right)^2 v^{''}(e); \tag{8}$$

$$\frac{\partial^2 \pi}{\partial m^2} = v''(e) \,. \tag{9}$$

Since (recalling (1) and (2), b'' < 0, N'' = 0, v' > 0, v'' < 0, from (8) and (9) we have:  $\frac{\partial^2 \pi}{\partial p^2}$ ,  $\frac{\partial^2 \pi}{\partial m^2} < 0$ . Hence the NGO's maximization problem has a unique solution.

Recall now that, by assumption,  $\infty > \lim_{e \to 0} v'(e) > \overline{\theta}$ . It is then evident from (6) and (7) that all NGOs must spend a positive amount on actual project expenditure (i.e. e > 0) in equilibrium. Intuitively, an NGO which actually spends nothing on projects will simply fail to provide any discernible physical output whatsoever. Formally, this is built into our model by the assumption that v(0) = 0. Such NGOs would find it very difficult to justify continuation of their funding to donors, and are likely to lose their funding. Thus, in real-world policy contexts, where, typically, funds are released by donors in instalments, it appears unlikely that NGOs which spend nothing at all on projects will survive for any extended period.

For the sake of both realism and clarity of exposition, we first address NGOs for whom an interior solution holds, i.e., on those NGOs which divert a positive amount to self-consumption *and* choose a positive level of participation. In practice, since NGOs typically need to pay at least some minimal financial compensation to even the most altruistic members of their staff, and incur recurring overhead costs, the former seems a very plausible minimal requirement. Thus, in practice, most, perhaps even all, NGOs are likely to be *less than perfectly* altruistic. The latter requirement is intuitively justified by the consideration that at least some minimal feedback from intended beneficiaries in terms of timing, location, etc. usually makes a significant difference to the extent to which the target community ends up actually using the services/facilities generated.<sup>4</sup> For such imperfectly altruistic NGOs, the following must hold.

**Observation 1.** Given a donor contract, consider the class of all imperfectly altruistic NGOs. Within this class, actual spending on projects and beneficiary welfare levels will both be lower if the NGO is more selfish. Given a participation subsidy r > c, participation will be higher if the NGO is more selfish; the opposite holds if the donor makes a pure lump-sum payment. All NGOs will choose identical participation levels if r = c. Under a participation subsidy  $r \ge c$ , a higher subsidy rate implies lower beneficiary welfare for every imperfectly altruistic NGO.

*Proof of Observation 1.* Assuming an interior solution in both self-consumption and participation level, from equations (6) and (7), we get the equilibrium conditions:

<sup>4</sup> Formally, the former condition must hold when NGOs are sufficiently self-seeking; i.e., when the lower bound on NGOs' degree of selfishness,  $\underline{\theta}$ , is sufficiently high. It is evident from (6) that the latter condition must always automatically hold in equilibrium under a participation subsidy. By (6) and (7), it will hold in equilibrium under a lump-sum transfer if  $A > c\overline{\theta}$ ; i.e., if the marginal product of participation (in terms of beneficiaries' welfare) at zero level of participation is higher than its opportunity cost.

$$b'(p) = -N'(p)v'(e); (10)$$

$$\theta = v'(e). \tag{11}$$

Combining the first order conditions (10) and (11), we have:

$$b'(p) = -N'(p)\theta.$$
<sup>(12)</sup>

Using (12), and recalling (1) and (2), we get:

$$\frac{\partial p}{\partial \theta} = -\frac{[r-c]}{b''(p)} = \frac{[r-c]}{\beta}.$$
(13)

It follows from (13) that, when donors provide a participation subsidy r > c, more selfish NGOs (those who put higher weight on retained profit) will choose *higher* levels of community participation. If r = c, participation levels must be identical across NGO types. However, in either case, as  $\theta$  rises, v'(e) must rise (recall (11), so that more selfish NGOs choose *lower* levels of project expenditure. Now recall that, from (2) and (12),

$$\dot{b}(p) = -(r-c)\theta. \tag{14}$$

Since, given  $r \ge c$ , (14) implies the equilibrium marginal product of participation must be non-positive for all NGOs regardless of their type, beneficiaries must be worse off if served by a more selfish NGO (despite participating more when r > c), under a participation subsidy.

Now consider the case where there is no participation subsidy (r = 0): NGOs only receive some positive identical lump-sum,  $\rho$ , from the donor. Then, from (13),  $\frac{\partial p}{\partial \theta} = \frac{-c}{\beta}$ . Since  $c, \beta > 0$ , it follows that more selfish NGOs will choose *lower* participation rates. As before, (11) implies that more selfish NGOs will choose *lower* levels of project expenditure; by (14), therefore, beneficiary welfare will fall monotonically with the level of selfishness as well.

Noting that, for every imperfectly altruistic NGO, project expenditure is independent of the subsidy rate by (11), The last claim in Observation 1 follows immediately from (14).

From a policy perspective, the natural question to ask now is: which contractual form leads to higher aggregate beneficiary welfare? To examine this issue, we need to compare a participation subsidy  $(r \ge c)$  with a pure (and identical) lump-sum payment (r = 0) to every NGO, which keeps *total* payment to NGOs constant. Assume that all NGOs are in an interior solution under both policy regimes, so that (10) and (11) hold. The following must then hold.

**Observation 2.** Suppose all NGOs in T are imperfectly altruistic under both a participation subsidy with  $r \ge c$  and a pure lump-sum transfer. Then, irrespective of an NGO's type, its beneficiaries are worse off under the former unless  $r \le 2c$ ; its beneficiaries are better off under the former iff r < 2c.

*Proof of Observation 2.* First notice that, by (11), the policy shift cannot alter project expenditure (e). Now let  $p_L$  be the participation level the representative NGO would

choose under the status quo pure lump-sum payment regime (where r = 0). Then, from (1) and (14),

$$p_L = \frac{A - c\theta}{\beta}.$$
(15)

Since  $\theta$  takes at most the finite value  $\overline{\theta}$ , the lower the value of  $\frac{c}{\beta}$ , the closer  $p_L$  is to  $\frac{A}{\beta}$ . Let  $p_S$  be the participation level chosen by the representative NGO under the participation subsidy regime, for some  $r \ge c$ . Using (1),

$$b(p_S) - b(p_L) = (p_S - p_L) \left( A - \frac{\beta}{2} (p_S + p_L) \right).$$
(16)

Recall that, by (11), project expenditure is identical under the two policy regimes. Hence, beneficiaries are better off under the participation subsidy iff  $b(p_S) > b(p_L)$ . Since (by (1) and (14),  $p_S > p_L$ , it follows from (16) that:

$$b(p_S) > b(p_L) \text{ iff } \left[\frac{2A}{\beta} > (p_S p_L)\right].$$
 (17)

Now, from (1), (14) and (15),

$$p_S + p_L = 2\left[\frac{A}{\beta} - \frac{c\theta}{\beta}\right] + \frac{r\theta}{\beta}.$$
(18)

Combining (17) and (18) we have:

$$b(p_S) > b(p_L)$$
 iff  $r < 2c$ ; and  $b(p_S) < b(p_L)$  iff  $r > 2c$ . (19)

Observation 2 follows immediately from (19).

For an imperfectly altruistic NGO, the extent of actual spending on projects (e) is uniquely determined by its type (recall (11)), which the donor cannot ascertain *a priori*. Thus, subsidizing participation reduces fund diversion to self-consumption by such an NGO. From the perspective of beneficiaries' welfare, therefore, the optimal strategy involves the choice r = c, which ensures the participation level,  $\frac{A}{\beta}$  (recall (1) and (12)), which in turn maximizes the gain to beneficiaries from participation. Any subsidy rate greater than the marginal cost, *c*, induces excessive participation: the marginal benefit from participation turns negative beyond that point.

In actual practice, donors typically cannot directly measure the cost incurred by NGOs in ensuring participation with any degree of reliability, because they lack the requisite local information. As noted earlier in Section 1, NGOs have a financial incentive to over-report these costs, which is likely to impart an upward bias to donors' estimates. Hence, in reality, donors are likely to overshoot (set r > c and thereby induce excessive participation), generating welfare losses for beneficiaries. Now, by (15), without participation subsidy (r = 0), the closer the parameter c is to 0, the closer an NGO's voluntary choice of the participation level is to the optimal level  $\frac{A}{\beta}$ . Hence, intuitively, the less likely it appears that donors would be able to improve beneficiaries' welfare by providing a participation subsidy, and therefore the stronger the *a priori* presumption

in favour of a lump-sum payment to NGOs. Observation 2 formalizes this intuitive understanding. For the empirically realistic case of less than perfectly altruistic NGOs, it specifies the exact range within which the participation subsidy rate must lie if beneficiaries are not to be made worse off thereby. The smaller the marginal participation cost, the narrower this range. Thus, intuitively, the greater the likelihood that donors would end up choosing a subsidy rate outside this range in practice, and therefore make intended beneficiaries worse off, if they were to implement a participation subsidy.

Lastly, notice that, from (14)–(16) and (18) that:

$$b(p_S) - b(p_L) = \frac{r\theta^2}{2\beta}(2c - r).$$
 (20)

By Observation 2, a participation subsidy with r < 2c would improve the welfare of beneficiaries. However, by (20), the higher the value of  $\beta$ , i.e. the higher the rate at which the marginal benefit from participation falls, the lower this gain. Indeed, the gain may be made arbitrarily small, i.e. arbitrarily close to 0, by choosing a suitably high value of the parameter  $\beta$ . It follows that even a relatively high marginal cost of participation, c, does not by itself imply that the gains from switching to a participation subsidy would be large; for this to happen, the marginal benefit from participation must fall relatively slowly as well. The RHS of (20) is maximized at r = c. Hence, the maximum possible gain from switching to a participation subsidy is:

$$\Delta \bar{b} = \frac{c\theta^2}{2} \left(\frac{c}{\beta}\right). \tag{21}$$

It follows from (21) that, regardless of the magnitude of the marginal cost of participation, the maximum possible gain from switching to a participation subsidy can be arbitrarily small: the parameter  $\frac{c}{\beta}$  simply needs to be suitably close to 0. Conversely, a high value for the parameter  $\frac{c}{\beta}$  does not, by itself, suffice to ensure that the gains from switching would be large.

In highlighting the centrality of the parameter  $\beta$ , the above analysis serves to clarify an issue that appears to lie at the heart of the policy discourse justifying the imposition of community participation conditionalities on NGOs. The argument typically appears to be that, while the costs of implementing participation are significant, the gains from doing so are large enough to outweigh them. However, unless incentivized by donor conditionalities, NGOs are likely to choose inefficiently low levels of community participation. An assumption of NGO selfishness is implicit in this argument, since, as we shall show below, perfectly altruistic NGOs would choose the optimal level of community participation under a lump-sum grant. Second, the argument requires the marginal cost of ensuring participation to be significant, since otherwise even imperfectly altruistic NGOs have no incentive to choose inefficiently low participation under a regime of lump-sum transfers. We have incorporated this assumption in our analysis. The key issue however is the following: the gains from participation may be large in the aggregate, yet decline very sharply, and thus get altogether exhausted (in the sense of the marginal product of participation reaching 0) at low levels of participation. Recalling (1), it is evident that a high value of the parameter A generates this possibility when conjoined with a high value of the parameter  $\beta$ . If this is indeed the case, as our analysis shows, the participation level implemented even by an imperfectly altruistic NGO

without any financial inducement may be very close to the optimal. Hence, recalling (21), even the optimal participation subsidy would generate only minor welfare gains for client communities. Conversely, an argument in favour of a participation subsidy implicitly embodies the claim that the gains from increased participation fall slowly, i.e., they remain positive even at high levels of participation (low  $\beta$ ). Why this should necessarily be the case is however the core empirical question, which the existing literature does not even appear to articulate, let alone resolve.

# 2.2 Extension: perfectly altruistic NGOs and partial compensation

The theoretical case for a participation subsidy gets even more tenuous if we extend the model by supposing that at least some NGOs are *perfectly altruistic*, i.e., they are better off by diverting nothing to own consumption. Formally, this can be accommodated by the additional assumption that, at least for some NGOs, the weight on own consumption,  $\theta$ , is 0. For such NGOs, assuming positive participation levels, we have the equilibrium conditions (10) and:

$$\theta < v'(e). \tag{22}$$

Since (10) holds, it is evident that any participation subsidy r > 0 would reduce beneficiary welfare unless the NGO's total revenue is higher under the participation subsidy, relative to the lump-sum grant. Notice now that all perfectly altruistic NGOs must choose identical participation levels and must therefore have identical budgets under the former scheme, while all NGOs receive identical lump-sum amounts under the latter scheme anyway. Since the donor's total budgetary outlay must be identical under the two schemes, evidently, therefore, *any* participation subsidy would reduce beneficiary welfare when the NGO population consists *exclusively* of perfectly altruistic NGOs.

Suppose now that the NGO population consists of positive proportions of both perfectly altruistic and imperfectly altruistic NGOs. Then an additional difficulty emerges with a participation subsidy, summarized and highlighted by the following.

**Observation 3.** Let the proportion of perfectly altruistic NGOs in the population of all NGOs be  $n, n \in [0, 1]$ . Then,

- (1) all beneficiaries are worse off under a participation subsidy with r > 2c, compared to a pure lump-sum transfer which entails identical total expenditure by the donor;
- (2) beneficiaries served by an imperfectly altruistic NGO are better off, but those served by a perfectly altruistic NGO worse off, under a participation subsidy with  $r \in [c, 2c)$ , compared to a pure lump-sum transfer which entails identical total expenditure by the donor.

*Proof of Observation 3.* It is obvious from (10) that any participation subsidy would reduce the welfare of beneficiary communities served by a perfectly altruistic NGO unless such an NGO achieves a higher revenue under the participation subsidy, compared to what it receives under the lump-sum transfer. We first show that this cannot be the case.

Consider a participation subsidy  $r \ge c$ , and let the project expenditure levels chosen by a perfectly altruistic NGO, F, and an imperfectly altruistic one, M, be, respectively,  $e_F$ ,  $e_M$ . We first show that:

$$e_M < e_F. \tag{23}$$

Suppose  $e_M \ge e_F$ . Then  $v'(e_M) \le v'(e_F)$ , so that, by (10),  $b'(p_M) \ge b'(p_F)$ , which implies  $p_M \le p_F$ . Since an NGO *i*'s revenue is given by:  $R_i = \rho + rp_i$ , it follows that  $R_M \le R_F$ . Now,  $e_i + m_i = \rho + (r - c) p_i$ , so that:

$$(e_M - e_F) + (m_M - m_F) = (r - c)(p_M - p_F) \le 0.$$

Since  $(e_M - e_F) \ge 0$  by assumption, this implies  $(m_M \le m_F)$ . However, by definition, M, the imperfectly altruistic NGO, must spend a positive amount on own consumption  $(m_M > 0)$ , while F, the perfectly altruistic one, must spend nothing  $(m_F = 0)$ . We therefore have a contradiction, which establishes (23). Together, (10) and (23) imply:  $p_M \ge p_F$ , so that  $R_M \ge R_F$ . Since total donor expenditure remains constant under the subsidy and the lump-sum schemes, this implies perfectly altruistic NGOs cannot have higher revenue under the former. Hence, beneficiary communities served by perfectly altruistic NGOs will suffer a welfare reduction under the participation subsidy.

Recall now that beneficiary communities facing imperfectly altruistic NGOs are worse off under a participation subsidy when r > 2c, but better off when  $r \in [c, 2c)$ , and that this holds irrespective of the income effect (Observation 2). Observation 3 follows.

When greater participation does not cause net financial loss  $(r \ge c)$ , imperfectly altruistic NGOs will choose at least as much participation as perfectly altruistic ones, thereby receiving at least as much revenue as the latter under a participation subsidy (indeed, strictly more if r > c). Since the lump-sum contract and the participation subsidy altruistic NGO must receive at least as much revenue under the lump-sum contract as under the participation subsidy. Thus, the net *income effect* of any shift from a lump-sum contract to a participation subsidy with  $r \ge c$  is *non-positive* for all perfectly altruistic NGOs (indeed, strictly negative if r > c). For perfectly altruistic NGOs, the *substitution* effect of any shift from a lump-sum contract to a participation subsidy with  $r \ge c$  is *non-positive* for all perfectly altruistic NGOs (indeed, strictly negative if r > c). For perfectly altruistic NGOs, the *substitution* effect of any shift from a lump-sum contract to a participation subsidy contract to a participation subsidy creates a distortion and thereby generates a deadweight loss. Hence, such a shift, by itself, would reduce the welfare of beneficiary communities served by such NGOs. Since the income effect is non-positive, the overall effect must be negative as well.

Thus, the upshot of Observation 3(ii) is that, for the range of subsidy rates  $r \in [c, 2c)$ , an adverse selection problem is generated by a (balanced budget) participation subsidy. Compared to a lump-sum transfer scheme which involves the same total spending by the donor, beneficiaries are better off under the participation subsidy if they happen to be served by an imperfectly altruistic NGO, but are worse off if they happen to be served by a perfectly altruistic one. The aggregate impact on beneficiary welfare is therefore ambiguous, depending on the exact distribution of NGO types in the population. The aggregate impact would be negative if perfectly altruistic NGOs predominate to a sufficient degree.

An analogous ambiguity arises for a subsidy rate which does not fully compensate for costs of ensuring participation, i.e., for  $r \in (0, c)$ . It can be easily seen that such subsidy rates improve beneficiary welfare, regardless of NGO type, when all NGOs are imperfectly altruistic. Conversely, as has been noted above, such subsidy rates reduce beneficiary welfare, relative to a (balanced budget) lump-sum transfer, when all NGOs are perfectly altruistic. With a mixed NGO population, however, the effect becomes *a priori* indeterminate for perfectly altruistic NGOs.

To see this, first note that the substitution effect, in itself, reduces beneficiary welfare. It can be shown that, when  $r \in (0, c)$ , imperfectly altruistic NGOs choose lower participation levels than perfectly altruistic ones. Thus, a shift to a participation subsidy increases the revenue of every perfectly altruistic NGO; for such NGOs, the income effect is therefore positive. Thus, the net effect of the shift to a participation subsidy, on welfare of beneficiary communities served by perfectly altruistic NGOs, becomes indeterminate *sans* additional assumptions regarding the distribution of NGO types and the form of the relationship between direct project expenditure and beneficiary welfare (i.e. the nature of the function v(.)). The aggregate effect consequently becomes indeterminate as well.

## 2.3 Implications

The theoretical considerations elucidated above suggest the following strategy for organizing empirical analysis. Suppose, from data generated by a group of NGOs which do not currently receive any participation subsidy from donors, we empirically estimate the relationship between the level of community participation implemented by an NGO, and some reasonable measure of its degree of selfishness, in accordance with equation (15) above. Since the degree of selfishness cannot be directly observed, this requires one to devise a suitable empirical proxy on the basis of an NGO's observed behaviour. Suppose further that the estimation exercise produces a *statistically insignificant* relationship. This would lead us to conclude that  $\frac{c}{6} \cong 0$ .

Now recall that, by (20) above, the maximum possible welfare gain for beneficiaries served by imperfectly altruistic NGOs under a participation subsidy is attained by equating the subsidy rate with the marginal cost (i.e., by putting r = c), with the magnitude of the gain given by (21) above. It follows from (21) that the magnitude of the gains from *any* positive participation subsidy is negligible for beneficiary communities served by imperfectly altruistic NGOs if  $\frac{c}{\beta} \cong 0$ . On the other hand, by Observation 3, any participation subsidy that at least covers the cost of participation (i.e. any  $r \ge c$ ) reduces the welfare of beneficiary communities served by perfectly altruistic NGOs. It follows that, when  $\frac{c}{\beta} \cong 0$ , no participation subsidy that at least covers the cost of participation and involves the same donor outlay as a lump-sum grant can appreciably increase beneficiary welfare in the aggregate over the latter contractual form, regardless of the distribution of NGO types in the population. Under the additional, empirically plausible, assumption that the proportion of perfectly altruistic NGOs is negligible, this claim extends to any positive subsidy rate whatsoever.

Thus, assuming that the proportion of perfectly altruistic NGOs is negligible, the *necessary and sufficient* condition for a case for a participation subsidy is a positive estimate of  $\frac{c}{\beta}$ . Notice however that this remains a weak case without prior knowledge of the marginal cost of participation: we would *not* be able to directly identify a

welfare improving subsidy rate from the data, but merely argue that such subsidy rates *exist*. This is so because we would not be able to separately estimate the value of the marginal cost of participation, c, from equation (15) alone; hence, we would not be able to use Observation 1 to empirically identify the interval of welfare-improving subsidy rates, even if the population only contained imperfectly altruistic NGOs. Furthermore, even a high positive estimate of  $\frac{c}{\beta}$  would not necessarily imply large potential gains from switching to the optimal participation subsidy. Equation (21) implies that a high estimated value of  $\frac{c}{\beta}$  does not, by itself, let us infer a high value for such gains (nor, therefore, their *practical importance*); this requires suitably high values for the unobserved

#### 3 Data

parameter c as well.

The study uses a representative 2002 survey of the Ugandan NGO sector, which incorporates two modules: (i) an NGO questionnaire to collect information on the organization's structure, finances and activities, and (ii) a community focus group interview to explore how the organization is perceived by community members. By capturing both community perceptions and organizational characteristics, the survey enables researchers to postulate links between community perceptions, such as the value added by the organization, and self-reported organizational features such as the organization's size and its skilled workforce.

The first survey module (NGO questionnaire) has a sample of 298 observations. The Ugandan register of non-governmental organizations was used to construct the sampling frame. It has 255 questions covering funding, ownership, expenditure, assets and governance.

The data was captured at an organizational level and not at a project level. Some organizations claimed to not have financial information available, and in other cases where the information was available, the book-keeping system appeared to be unreliable. Due to the intricate accounting involved in allocating overheads to projects, it is expected that information availability and quality would have been substantially worse at a project level. It is also likely that a project-level approach may not be feasible for studying Ugandan non-profit organizations due to the lack of regard for specialization and focus within these organizations. Barr et al. (2005) find that many Ugandan NGOs seem to 'do it all', listing a vast array of activities and 'focus areas' that they are involved in. Due to the organization-level approach of the survey, the sample consequently includes a wide variety of NGO subsectors.

The second survey module is a community focus group. In each community visited, six to ten focus group participants were recruited via a community leader. Communities were identified by asking the NGOs surveyed to identify a number of parishes where they worked. In this way, parishes were matched to NGOs. The community focus groups collected information on the focus group members' perceptions regarding poverty in their community, community needs, and those who help the community meet these needs. It also asked more detailed questions about the perceived contribution of one specific NGO working in the parish. Given the large literature on elite capture within community participation projects (see for example Ban et al. 2012, Platteau and Abraham 2002) it is worth noting that to control for participant characteristics information was collected

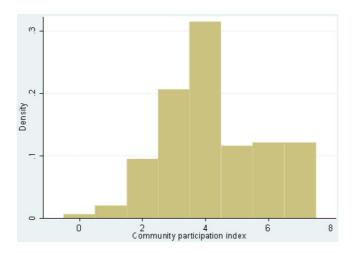


Figure 1 – Histogram of community participation index.

on a number of variables including education levels of the participants, their employment status and whether they were affiliated with the district office.

The first module of the survey (NGO questionnaire) can be matched to 207 of the 268 observations from the second module (community focus groups). There were also cases where some NGOs were linked to more than one community. To avoid problems with error terms 28 duplicates were eliminated randomly, reducing the sample to 186 observations.

Barr et al. (2005), and Barr and Fafchamps (2006) provide more information regarding the survey questionnaire and focus group interviews respectively.

## 4 Empirical specification

In light of our theoretical investigation in Section 2 above, the first step in our empirical analysis is to examine whether there is evidence that the NGOs in our sample face significant financial incentives from donors to increase community participation.

We measure community participation by creating an index based on adding seven binary variables, namely whether the NGO asked the community about their needs prior to the project (as reported by the community), whether the NGO asked the community for feedback after or during the project (again reliant on community focus groups), whether the NGO manager was appointed democratically, whether the NGO had a physical presence in the community (reported by the community), whether the NGO had a membership system, whether a vote of board was required before adding new activities and whether host communities were involved in the actual delivery of services or the execution of projects. As anticipated, there is a large degree of variation across the 8-point scale of the index (Figure 1). The variable has a mean value of 4.2 with a minimum of 0 and a maximum of 7. We find no evidence of a robust and positive relationship between this measure of community participation and the revenue of the NGOs: the correlation coefficient is -0.091 and not significant. As a further check, we examined the relationship between community participation and grant success (for those NGOs that applied for grants) and found no evidence of a significant positive relationship. This also holds true when we limit our sample only to NGOs that have grants or that have received grants in the past. Contrary to what we would have expected based on donors' publicly declared support for community involvement in NGO project (e.g. Mansuri and Rao 2012), we find no evidence to confirm that NGOs receive a significant and positive return (r) on involving the community in their projects. We therefore conclude that a pure lump sum contract (with r set to 0) is the most apt description of the typical relationship between community participation and revenues.

To confirm the sign and gauge the magnitude of  $b(p_i)$  under a lump sum payment scenario, we attempt an empirical estimation of the algorithm for beneficiary welfare presented in Section 2 earlier:

$$W = b(p_i) + v(e_i),$$

where W represents beneficiary welfare and effective project expenditure,  $e_i$ , is proxied via a range of NGO input variables, the human capital of the manager and community needs. The analysis in Section 2 suggests that under the lump sum payment scenario the selfishness parameter,  $\theta_i$ , will negatively affect the likelihood of an NGO engaging in community participation,  $p_i$ , with this effect dependent on the empirically unobserved  $\frac{c}{\beta}$  term (recall Observation 1 and equation (15) above). It also postulates that greater selfishness will reduce beneficiary welfare by reducing project expenditure (Observation 1). Hence we add the selfishness parameter to our list of expenditure proxies.

Our next step is to find a continuously measurable empirical proxy of the beneficiary welfare since the latter is not directly observable in itself. It is notoriously difficult to find suitable *material* indicators to assess the value added by pro-poor development projects. Development projects often have numerous aims and objectives, and these are frequently intangible or hard to measure and have time trajectories that are unpredictable.<sup>5</sup> Instead of a material output indicator, therefore, we propose a measure that is an indicator of the *subjectively perceived* beneficiary welfare (see Figure 2 below), as assessed by a group of beneficiaries from the community. Confronted with a hypothetical scenario where the NGO was experiencing serious financial difficulty, focus group participants from the beneficiary community were asked to reach consensus on what share, s, of a gift (represented by a pile of 100 beans) they would allocate to save the NGO in

<sup>5</sup> Herman and Renz (2004) discuss the difficulties with selecting performance indicators for nonprofit organizations. It is not always clear whether performance should be judged on a program basis or organization-wide. There are often a number of distinct client and stakeholder types with competing aims and needs associated with a nonprofit organization (e.g. beneficiaries, staff members, suppliers, private sector funders, government), and it is difficult to make sense of these different voices and claims to derive a single indicator of the organization's performance. Additionally, comparability is a concern, given the variety of activities and aims present in the nonprofit sector. One of the frequently cited objections to NGO project assessments is that less tangible, but vital project aims such as empowerment, social trust and changes in attitudes and behavior do not have predictable gestation periods.

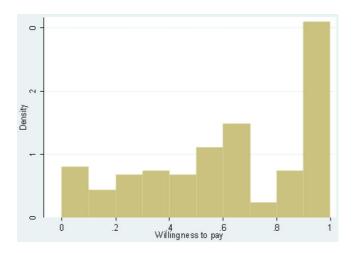


Figure 2 – Histogram of willingness to pay.

question. It was explained to community members that the gift could also be used for any other community initiative or distributed among members of the community. The question tries to capture the perceived utility generated by the organization, by gauging community members' *willingness to pay*. Under our hypothetical scenario, willingness to pay can be separated from issues concerning the ability to pay. Importantly, this perceived utility measure also allows comparison across focus areas and organization types.

It is worth noting that the outcome variable is not dependent on the number of NGOs in a particular region. As part of the structured group interviews with the beneficiaries data was collected on all service providers in the area. In particular beneficiaries were asked to list all providers of the service that the NGO reported to be doing. We found the number of competitors varied from 1 to 16 with the majority, 30 percent, facing no competition, and another 21 percent from one of two providers. Regressing this competition variable on the bean count variable we found no correlation. The level of competition did not affect the sharing of the beans.

We are also encouraged that the focus groups were not dominated by elites: the majority of the sample had secondary education, 40 percent, 34 percent had primary education and only 19 percent had a degree. When we include these variables in the estimations to control for potential bias, they do not alter the findings. We also found that in the majority of cases the beans were decided as a group. In 17 percent of cases the participants the allocation was determined by individual voting. Again, adding the voting indicator variable does not alter the findings of the beneficiary welfare model.

We capture variation in the selfishness parameter ( $\theta_i$  in our theoretical analysis) via a community focus group question on the perceived altruism of the NGO staff, as reported on a Likert scale. Community members were asked whether they agreed or disagreed that the NGO existed to serve the purposes of its own staff rather than to help the community. As reported in Table 1 below, we find that there is a strong and positive relationship between perceived altruism and beneficiary welfare, which is robust to the inclusion of a variety of control variables for managerial traits, the features of the

	Coef.	P >  t	
NGO characteristics			
NGO staff described as selfish	-0.2089	0.081	
Community participation index	-0.0531	0.332	
Ratio of revenue to members	0.0412	0.06	
Log of number of members	0.0390	0.131	
Log of staff members	-0.0765	0.093	
Proportion of staff members who have professional qualification	-0.1752	0.179	
Log of years of NGO existence	0.0380	0.486	
Describes activities as community development	-0.0208	0.848	
Microfinance activities	-0.1531	0.084	
Local NGO?	0.1692	0.381	
Community need			
Index of community capabilities (higher $=$ more assets)	-0.0131	0.525	
Availability of basic infrastructure	-0.0176	0.839	
Manager characteristics			
Log of years of manager experience	0.0171	0.792	
Manager has a degree	-0.1878	0.139	
Constant	1.0701	0.044	
Observations	124		
Sargan test	1.6942 (p = 0.6382)		
Wu-Hausman test	2.8117 (p = 0.0965)		

community and the NGO's characteristics. We are however cognisant of the dangers of contamination across community focus group assessment categories (e.g. halo effect) based on the findings of previous studies (e.g. Cooper 1981, Thorndike 1920). In this setting it is conceivable that the scores across a range of assessment categories are reflective mainly of the community's vague and fuzzy positive or negative sentiment towards the NGO. This could create a spurious positive correlation between perceived altruism and the willingness to pay measure.

As a further check, we use alternative and more exogenous measures of altruism such as gender of the manager and also whether the manager had a religious title or role, the share of staff members with religious titles/roles and whether the NGO had a religious affiliation to instrument our perceived altruism variable (See Table 1).<sup>6</sup> The Sargan test of over-identifying restrictions fails to reject null hypothesis that the instruments are valid, but the low F-statistic value confirms that the instruments are however weak. Encouragingly, the instrumented variable coefficient remains significant when using wider confidence intervals that are robust to weak instruments, as suggested by Moreira and Poi (2003).

<sup>6</sup> Previous research on this dataset (Fafchamps and Owens 2009) used both NGO religious affiliation and gender of manager as proxies for altruism. These proxies are motivated by evidence in the literature that 'working for God matters'. Reinikka and Svensson (2010) found that workers and managers of religious not-for-profit health care facilities in Uganda have intrinsic motivations to serve poor people. Using the Ugandan dataset Barr and Fafchamps (2006) found that if the manager has a religious title, the NGO is more likely to be perceived by the community as altruistic.

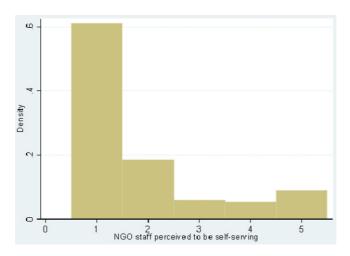


Figure 3 – Histogram of selfishness variable.

The histogram of the selfishness variable is shown in Figure 3 below and displays a high concentration of observations in the left tail, i.e. a high proportion of NGOs are rated as very altruistic.

To allay fears that the asymmetric shape in Figure 3 may be due to framing effects or bunching, we ran a tobit model (with assumed lower level censoring) and an ordered probit model for the first stage regression of the IV. If these effects distorted the scale so that most of the variation is now located in a small section of the scale, the ordered probit model can help correct for this effect by relaxing the assumption that the distances between the categories are equally far apart. If however we are concerned that the skewness to the left was attributable to framing effects that caused an underreporting of selfishness that cannot be wholly retrieved because the lowest category is 1, a tobit model assuming censoring at the lower bound (i.e. at 1) for the first stage can help to correct for such an effect. In both cases, we find that the selfishness variable remains significant. Unfortunately, we cannot run our IV regressions correcting for weak instruments at the same time as these robustness checks to investigate how the Likert scale and the concentration of observations to the left/bottom of the distribution may influence our estimates.

We therefore conclude that the positive and significant relationship between altruism and beneficiary welfare, reported in Table 1 above, is robust. The analysis also suggests that community participation does not significantly alter beneficiary welfare. It is plausible that community participation only yields economic benefits to projects in specific subsectors. Alternatively, the variable could be insignificant because it fails to capture the quality dimensions of community participation, which could be an essential determinant of the approach's impact.

The negative and significant coefficient on number of staff members could resonate with work that suggests that larger organizations tend to be less agile and less responsive (Haveman 1993). Similarly the negative and significant coefficient on microfinance NGOs may reflect perceptions that microfinance NGOs aim to enrich themselves and maximize profits.

	Coef.		P >  t
NGO characteristics			
NGO staff described as selfish	-0.304		0.405
Ratio of revenue to members	0.009		0.894
Log of years of NGO existence	-0.562		0.008
Log of number of members	0.214		0.010
Log of number of staff	0.047		0.727
Proportion of staff with professional qualifications	0.459		0.223
Specialize in microcredit	-0.062		0.813
Local NGO?	0.978		0.024
Manager characteristics			
Manager has degree	-0.541		0.100
Log of years of manager experience	0.385		0.049
Community characteristics			
Index of community capabilities (higher = more assets)	0.111		0.047
Constant	4.112		0.003
Observations		129	

#### Table 2 – Empirical model of community participation

We are also interested in the relationship between community participation and altruism of the organization. As shown in Table 2 below, the altruism coefficient is not significant in our IV model of community participation. In our empirical model, we control for a number of NGO inputs, managerial characteristics and community need. In line with intuition, local NGOs and NGOs with a higher number of members have higher community involvement levels. Also, we find a positive association between the experience of managers and community participation. The analysis also shows that older NGOs and NGO where managers have degrees tend to have lower levels of community participation, which could be due to the tendency of donor funding to crowd out community funding and distort the orientation of the NGO away from the community and towards the establishment of an experienced and skilled bureaucracy to serve the donor (Fafchamps and Owens 2009). Contrary to what one would have hoped, we find that community participation tends to be significantly lower in poor communities.

The insignificant coefficient on the selfishness variable in the community participation model is interpreted as evidence that the level of participation implemented by an NGO does not appear to vary appreciably with the extent of its selfishness, even though Figure 1 above shows that there is a fair degree of variation in the underlying variable – even in its raw format prior to instrumentation.<sup>7</sup>

Recall now equation (15) above. Our regression results lead us to conclude that  $\frac{c}{\beta} \cong 0$ . As already discussed in Section 2, we therefore have theoretical grounds for inferring that all NGOs in our data-set are broadly implementing the optimal level of participation. Thus, our theoretical analysis provides us *a priori* reasons for rejecting

<sup>7</sup> While controlling for a set of covariate that may define the type of NGO we also included interaction terms to see whether community participation made a difference within particular types of NGOs. We looked at interaction effects with a range of indicators, including altruism and community participation and found none to be significant.

the case for switching to a participation subsidy for the group of NGOs covered in our data-set.

To summarize, our empirical findings lead us to conclude that: (a) a pure lumpsum contract appears to be the most apt description for the revenue arrangements of the typical NGO in our data-set, and (b) recalling equation (15) above,  $\frac{c}{\beta} \cong 0$ . As already discussed in Section 2.3, we therefore have theoretical grounds for rejecting the case for providing a participation subsidy to the group of NGOs covered in our data-set.

## 5 Conclusion

This paper has examined the theoretical or *a priori* case for donors subsidizing NGOs to increase community participation. We have shown that such a case is not robust in general. Thus, making expansions in community participation an objective of donor policy, and applying explicit financial inducements to achieve this objective, may end up generating perverse welfare consequences. Conversely, eliminating community participation from the set of conditions for funding an NGO may improve beneficiary welfare. We have offered evidence from the NGO sector in Uganda that operationalizes our theoretical conclusions. Specifically, we failed to find a statistically robust relationship between the degree of community participation implemented and the extent of NGO selfishness, with the latter measured by the stated perceptions of client communities. Our theoretical conclusions lead us to interpret this as a rejection of the case for providing a participation subsidy to the group of NGOs covered in our data-set.

Bougheas et al. (2007) show, in the general context of charitable transfers, how conditions imposed by donors may be inefficient, yet persist indefinitely. Our analysis suggests that the current popularity of community participation as a donor conditionality, in the context of developmental aid channelled through NGOs, may possibly constitute an example of this phenomenon. More discriminating assessment of the benefits and costs of community participation as a donor conditionality, in alternative theoretical and empirical contexts, is evidently called for in light of this paper. Burger et al. (2014) discuss the problem of regulating NGOs by making grants to them conditional on their spending at least some pre-determined proportion of revenue on direct project related expenses. An analogous exercise, carried out in the context of a threshold level of community participation, may yield useful policy-relevant insights.

Lastly, in line with much of the existing empirical literature, the nature of the 'community' that is supposed to 'participate' has been left unexplored in our analysis. Dasgupta and Kanbur (2011, 2007, 2005) have shown how differences in patterns of voluntary provision of public goods crucially affect inequality, distributive tensions and poverty levels, both within and across communities. It is conceivable that such differences, by influencing the costs of consensus-building within a community, may also have a bearing on whether greater community participation leads to substantial improvements in decision-making or simply creates blocking coalitions. Relatedly, Platteau and Abraham (2002) and Platteau and Gaspart (2003) have discussed how existing power relations within a community may cause attempts at ensuring participatory development to generate perverse consequences. How the efficacy of donor-mandated community participation is affected by various aspects of the internal organization of a community is an issue that would merit extensive examination in future research.

Lastly, it should be emphasized that, while the insignificance of the community participation variable cautions against a 'magic bullet' view of the economic contribution of the participatory approach to poverty alleviation projects, it does not address the extraeconomic (or, indeed, non-welfaristic) case for community participation. The framework adopted in this study is one of standard welfare-theoretic analysis: we do not consider non-welfaristic (implicitly, freedom or rights-based) 'social empowerment' justifications for the participatory approach. Whether such justifications may possibly constitute a theoretically coherent alternative case for the participatory approach is a question that deserves independent in-depth investigation.

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# Appendix

Variable	Mean	Std. Dev.	Min	Max
Willingness to pay	0.62	0.34	0.00	1.00
Poverty index	0.00	2.09	-5.07	3.24
Ln of ratio of revenue to members	7.11	3.60	0.18	14.98
Ln of years of experience for manager	2.11	0.67	0.69	3.71
Ln of years of existence for NGO	1.94	0.89	0.00	3.91
Ln of number of members	4.04	2.91	0.00	8.70
Community participation index	4.94	1.51	0.00	7.00
Basic infrastructure	0.48	0.50	0.00	1.00
Ln of number of staff members	3.10	0.99	1.39	5.99
Specialize in community development	0.13	0.34	0.00	1.00
Specialize in microcredit	0.24	0.43	0.00	1.00
Local NGO?	0.92	0.27	0.00	1.00
Manager has degree	0.80	0.40	0.00	1.00
Proportion of staff with professional qualification	0.42	0.33	0.00	1.00
Selfishness index	1.89	1.34	1.00	5.00
Male manager	0.21	0.41	0.00	1.00
Does the NGO have a religious affiliation?	0.37	0.49	0.00	1.00
Does the manager hold a religious title?	0.18	0.38	0.00	1.00
Proportion of staff classified as religious	0.07	0.16	0.00	0.98

# Table 1 – Descriptives of regression variables.