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Public-private partnerships in micro-finance: Should NGO involvement be restricted?[☆]

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ABSTRACT

This paper examines public–private partnerships in micro-finance, whereby NGOs can help in channelizing credit to the poor, both in borrower selection, as well as in project implementation. We argue that a distortion may arise out of the fact that the private partner, i.e. the NGO, is a *motivated* agent. We find that whenever the project is neither too productive, nor too unproductive, reducing such distortion requires *unbundling* borrower selection and project implementation, with the NGO being involved in borrower selection only. Further, we compare and contrast two alternative credit delivery mechanisms, the linkage mechanism (which is the focus of this paper), with the 'Grameen' one.

1. Introduction

Micro-finance is an important tool in fighting poverty.[2] Scaling up micro-finance operations, one of the central challenges facing the micro-finance movement, is, however, often constrained by a lack of funds, particularly when the government, the banks and the recipients are not well connected. One possible solution is to use non-governmental organizations (henceforth NGOs) to channelize government credit to micro-finance recipients. Interestingly, under the self-help group (SHG) linkage program in India, the NGOs play precisely this role.[3] In fact, the SHG linkage program is rapidly turning into the dominant micro-finance paradigm in India, with the number of self help groups linked to banks increasing from 500 in the early 1990s, to over 800,000 by 2004 (Basu and Srivastava (2005)).[4]

In this paper we thus examine a public–private partnership (henceforth PPP) in micro-finance, whereby private agents, namely NGOs, link government banks to micro-finance recipients — the so called linkage model. In doing so we bring together two of the central strands in the PPP literature, namely the bundling/unbundling of tasks, as well as the issue of ownership. We shall argue that doing so yields some interesting new insights that add to both these literatures. First, it identifies a hitherto unexplored rationale for unbundling that relies crucially on the fact that the NGO is motivated. Second, irrespective of how motivated the NGO is, we find that providing ownership of the project to the bank is always optimal (contrast this with Besley and Ghatak (2001)). Further, the theoretical framework developed in this paper allows one to analyze the optimal design of such linkage schemes, as well as compare and contrast such schemes

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[2] A relatively recent and comprehensive survey of the literature is provided, among others, by Aghion and Morduch (2005).

[3] The SHG linkage program of course has many other interesting aspects, e.g. group lending and an emphasis on savings (see, e.g. Aniket (2007) and Roy Chowdhury (2007)). For the sake of focus this paper abstracts from these issues.

[4] Harper (2002a) reports that SHG systems are also found in Indonesia, parts of South Asia, Africa and elsewhere. There are other examples where the government has delegated the management and delivery of public goods to NGOs, while retaining financial obligations, e.g. management of schools in Bolivia, agricultural extension in Columbia and Chile, and primary health in El Salvador (see, Bebbington (1997)).

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with the more traditional Grameen one where the NGO functions more like a direct and independent source of finance.

Formally, we consider a model with a motivated NGO, who may be potentially involved in two stages of credit delivery, borrower selection, as well as their training. Besley and Ghatak (2005) define motivated agents as those "who pursue goals because they perceive intrinsic benefits from doing so" and give examples such as doctors, researchers, judges, soldiers and of course NGOs (see also Besley and Ghatak (1999)). The United Nations Interagency Committee on Integrated Rural Development for Asia and the Pacific (1992) (henceforth UNICIRDAP), for example, mentions motivation and commitment as one of the six key features of an NGO.

As to NGO involvement in delivery of services and public goods, Cernea (1988) quotes a World Bank report on the dramatic expansion of such services.[5] Typically, the raison d'etre of NGOs is government failure.[6] While government failure can take different forms,[7] in our model it comes from two sources that are common to many developing economies, first, a lack of information regarding borrower types, and second, an inability to provide training. In such a setting, an NGO can potentially provide both these services. Because of the closeness of NGOs to their clientele, something which the government, or profit-seeking organizations lack,[8] an NGO can help in identifying good, i.e. relatively more efficient, borrowers. Second, it can help borrowers implement their projects more efficiently.[9]

The question we address here is whether the NGO should be involved in both these stages, or in borrower selection alone. Empirical evidence on this issue is relatively scarce. In the Indian SHG-linkage program, for example, we find that the NGO may, or may not be involved in the implementation stage. Harper (2002a), for example, says that the "NGO may remain heavily involved, assisting the members to manage their affairs,..., or it may withdraw and work with other groups."[10]

We thus take a theoretical approach to the problem. We consider a model with two borrowers, one efficient, the other one inefficient, both of whom have a project with setup costs that must be borrowed from a bank. The bank however is resource constrained, and can lend to at most one borrower, but does not know the identity of the borrowers. It can thus enlist the NGO, who is a motivated agent, to help with borrower selection, and possibly borrower training. In a contracting environment where contracts can only be contingent on the level of NGO involvement, but not on borrower types, we examine institutional designs that allow the implementation of the first best.

Turning to our main results, we find that whenever the project is neither too productive, nor too unproductive, attaining efficiency requires *unbundling* borrower selection and project implementation, with the NGO being involved in borrower selection only. One interesting implication is that providing ownership to the bank/government is optimal, since in that case the bank/government can design the institution optimally.

The essential trade-off in the model arises because the NGO is a motivated agent who maximizes the aggregate utility of the villagers and its own monetary income, while the government, which supports micro-finance that targets the poor, wishes to maximize a utilitarian social welfare function. This formulation captures one of the central themes in the literature on NGOs, that "the rural poor are given higher priority by NGOs" as compared to governments (see, UNICIRDAP (1992), page 20).

Given their motivations, from the view-point of the NGOs the more efficient borrowers are 'less needy' (in a sense made formal later on), so that maximizing aggregate borrower utility may involve channeling the loan to the less efficient borrowers. Doing so becomes more attractive if the NGO is also involved in the project implementation stage, since in that case the NGO can help out the less efficient borrowers with on-the-job training, thus reducing the inefficiency arising out of the loan going to the less efficient borrowers. With full NGO involvement, resolving this problem requires the rate of interest to be lower than the first best level. We show that this happens whenever the project is neither too efficient, nor too inefficient. Under these parameter conditions, implementing the first best therefore calls for restricting NGO involvement to borrower selection alone.

We further show that our results remain qualitatively robust across other environments, e.g. even if the government can use state-contingent contracts, or if the NGO has a soft budget constraint, etc. We also argue that competition amongst different NGOs does not change our main result.

As mentioned before, our framework also throws some light on the debate regarding alternative credit delivery mechanisms. In particular, we compare the 'linkage' mechanism studied in this paper with a 'Grameen' type institution, where the NGO acts more like a bank itself since now the bank provides the loan to the NGO who is directly responsible for repayment. Further, under the Grameen model, the NGO is necessarily involved in both borrower selection and project implementation. Our analysis suggests that ranking these two mechanisms in terms of welfare is not straightforward, and depending on various factors either one or the other may be preferable. The comparison depends, for example, on regulatory policy, in particular whether the concerned NGO has control over the factor of interest or not, the productivity of the projects, as well as the motivation levels of the NGOs. Further, an increase in motivation has an ambiguous effect on the relative attractiveness of these two mechanisms.

The rest of the paper is structured as follows. In Section 2 we provide a formal description of the environment. In Section 3 we discuss the first best outcome. Section 4 studies implementation of the first best and reports our main result. Alternative scenarios are discussed in Section 5 to address robustness issues. In Section 6 we compare the linkage mechanism with the Grameen one. Section 7 relates our paper to the literature, while the paper concludes in Section 8. Some proofs are provided in an appendix at the end.

2. A linkage model of microfinance

A village consists of two individuals (henceforth villagers) and an NGO. The villagers plan to start a project each, which requires a start-up capital of 1 unit. The villagers have no money or assets, and hence require to borrow this amount from a government bank which has limited resources and can finance only one such project. We assume that 1 unit of capital yields 1 in its alternative use and denote $r \geq 1$ as the interest factor. Further, there is limited liability on part of these villagers.

Let $\theta \in \{h,l\}$ denote the skill level of a villager, with one of the villagers being high-skilled (h type), and the other one being low-skilled (l type). These types are common knowledge amongst the villagers, but are not known to the bank officials. This assumption is driven by the fact that, compared to bank officials, individuals coming from the same village have greater knowledge of each other. Further, the NGO, for some cost c_0 (≥ 0), can find out the borrower types.[11] This presumes that the NGO has enough local knowledge and grass-root experience in the village, a natural assumption if the NGO has been already active in this village, but perhaps in other spheres of activities.

[5] Cernea (1988) reports on the increase of NGO participation in providing developmental, financial and production-support to local people. Moreover, the said World Bank report indicates a high correlation between NGO involvement and success of World Bank financed projects.

[6] To quote Besley and Ghatak (1999), "In developing countries NGOs typically work in communities or settings where the reach of the government is weak or non-existent."

[7] Besley and Ghatak (1999), for example, talks of non-democratic and/or non-sensitive governments.

[8] In the Indian SHG-linkage program, for example, the idea is to utilize NGOs who are already active in the area. See, e.g. Harper (2002b, pp.12).

[9] Fiszbein and Lowden (1999) argue that the NGOs' ability to target and access the poor, as well as experience and knowledge in various fields have been the main reasons behind involving the NGOs. An interested reader may also see Harper (2002b) regarding NGO involvement in the SHG mode of micro-finance in India.

[10] Moving away from micro-finance, Farrington and Lewis (1993) mention an NGO in Karnataka, India, that organizes and trains local groups to apply for government antipoverty funds, but is not involved in fund disbursement.

[11] Our results are qualitatively independent of this cost unless it is prohibitively large.