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Does Aid Availability Affect Effectiveness in Reducing Poverty? A Review Article

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Summary. — This paper addresses the impact of aid supply on aid effectiveness. First, we review theoretical literature that deals with the problem of governance in donor–recipient relationships and are susceptible of highlighting effects of aggregate aid availability. Second, we provide a conceptual framework that explicitly incorporates a trade-off between considerations of needs and governance. We examine the impact of aid supply on the manner in which a donor agency allocates the available money between countries differing in terms of both needs and domestic governance. The central conclusion is that a donor's utility function that embodies the need-governance trade-off and the associated optimization mechanism yield a meaningful rule to guide inter-country allocation of aid resources.

Key words — aid effectiveness, governance, poverty reduction, aid allocation

1. INTRODUCTION

In contrast to the mass of empirical papers dealing with various aspects of development aid, there is a surprisingly narrow body of theoretical literature devoted to the joint question of aid effectiveness and allocation of available funds by donors. If we leave aside the research pieces that use a macroeconomic framework (see Azam & Laffont, 2003, for a useful survey), we find that this limited literature is focused on agency problems. One particular issue that has received scant attention so far is the impact of aid supply, or the volume of aid, on aid effectiveness. Such an issue has become especially critical nowadays since the donor community puts emphasis on the twin needs to increase aid to poor countries (see the objectives of the Millennium Development Goals, launched by the United Nations) and to enhance aid effectiveness. The two objectives are obviously interdependent since donor agencies are unable to mobilize more money for development aid unless they persuade the taxpayers or voluntary contributors that the funds are put to good uses and, in particular, reach the poor effectively. It is therefore important to look at the way aid effectiveness is affected by aid availability. Note that the issue remains as topical in times of growing aid scarcity, such as seems to happen in a number of donor countries as a result of the Global Economic Crisis. We are then interested in knowing whether reduced aid availability can hinder or enhance aid effectiveness.

The problem is far from trivial because the neediest countries tend to also be the worst governed and, therefore, those where aid is least effectively used: there is at least a significant (inverse) correlation, if not causal relationship, between governance and poverty (Collier, 2007, chap. 5). There are then three conceivable answers to the above question. The first line of argument is based on the normative principle that aid ought to accrue in priority to the neediest. Thus, Liberia receives an amount of aid that exceeds its national budget although it is considered the most corrupt country in the world according to the ranking of Transparency International (Economist, 2011). Since the late 1970s till the early 2000s, this approach dominated the aid literature which tended to assess aid performance of donor countries on the basis of their effort to direct aid toward countries with lower per capita incomes (see, e.g., McGillivray, 1989; McGillivray & White, 1995; McKinlay & Little, 1977). It is well reflected in the proposition by Thirlwall (2011) that aid assistance ought to be distributed on a per capita basis according to some target level of per capita income, a principle "which would operate rather like an international negative income tax" (p. 476). Revealingly, Thirlwall glossed over the governance problem by pointing out that "all this would be conditional, of course, on the new guiding principle of good governance" (p. 476).

The second line, popularized in the early 2000s by Burnside and Dollar (2000) and Alesina and Dollar (2000), draws attention to the critical role of aid effectiveness and the need to consider the quality of institutions and policies in recipient countries as the new criterion of aid allocation. Various measures of aid quality incorporating that criterion have thus been proposed (see, e.g., Berthelémy & Tichit, 2004; Birdsall, Claessens, & Diwan, 2003; Birdsall & Kharas, 2010; Easterly & Pfutze, 2008; Knack, Rogers, & Eubank, 2010; Roodman, 2012). From a normative standpoint, the central idea behind the so-called "country-selectivity" approach is that aid should first be given to potential beneficiaries with the best gover-

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nance record. An extreme version of it is the principle of "zero tolerance for corruption".

Finally, the third line allows explicitly for a trade-off between needs and governance. It therefore addresses upfront the issue escaped in the statement by Collier and Dollar (2002) according to which "to maximize the reduction in poverty, aid should be allocated to countries that have large amounts of poverty and good policy" (p. 1482).

Depending on the normative approach chosen, the effect of aid supply on aid effectiveness differs if we measure aid effectiveness by the proportion of the aid flow that actually reaches the poor and therefore helps to improve their welfare. When the volume of aid is increased, the additional amounts available may accrue to better, or worse governed countries (or regions, or communities), and it may therefore be useful to distinguish between average and marginal aid effectiveness. Marginal aid effectiveness then measures the proportion of the additional amount of aid available that effectively reaches the poor whereas average aid effectiveness measures the proportion of the aggregate aid amount that reaches the poor.

A direct implication of the needs-based approach is that more aid will cause the marginal (and average) effectiveness of aid to rise: the donor community begins by serving the needs of the poorest but also worse governed potential beneficiaries and, as more aid becomes available, it gradually shifts its efforts toward less poor but also better governed beneficiaries. In contrast, the governance-based approach leads to the opposite implication: since priority is given to the better governed countries, the marginal (and average) effectiveness of aid falls as the aid amount grows bigger (unless, of course, this approach denies aid to all countries below a certain threshold of good governance, as the view of "zero tolerance for corruption" would imply). The needs-based approach thus implies that the first units of aid money have a low impact on poverty reduction in the sense that the poorest are reached but in low numbers. Therefore, a relatively large quantity of aid is required to reach them all, before attention can be shifted to less needy people. By contrast, the governance-based approach implies that not-so-poor people are helped yet in comparatively large numbers. The amount of aid required to remove poverty among them is relatively modest.

Finally, donors may be interested in aid outreach rather than aid effectiveness as measured above. How many poor people, however far they may be from the poverty line can be reached by aid efforts is then their central concern. Finally, they may be concerned with the extent of poverty reduction or the poor's welfare. When the volume of aid is constant, the latter criterion is obviously equivalent to that of aid effectiveness: when aid is more effective, the absolute amount of money accruing to the poor increases (while aid outreach may improve or not). When the volume of aid is varied, the equivalence is no more guaranteed. If the poor receive a lower share of a larger total fund or a higher share of a reduced fund, it is not possible to say a priori whether the poor's welfare moves in the same direction as aid effectiveness.

The aim of the present paper is to probe further into the relationship between aid availability, on the one hand, and aid effectiveness, aid outreach, and the poor's welfare, on the other hand. Special emphasis is put on the trade-off approach under which the effect of aid availability is hard to elucidate without the support of a formal framework. Before embarking upon this central task, it is nevertheless useful to deepen our understanding of the analytics of the governance-based approach and its implications in terms of the effects of aid availability on aid effectiveness, aid outreach, and poverty reduction. This is done, in Section 2, by reviewing significant pieces of the relevant theoretical literature that uses a one-donor–one-beneficiary or a one-donor–multiple-beneficiaries framework. Section 3 then looks at the issue of aid allocation with multiple recipient countries when the donor's utility function balances needs against governance considerations. The first approach we review assumes the existence of random shocks that make reform efforts of recipient countries non-observable (SubSection 3(a)). Thereafter, we look at papers that explicitly model the donor's allocation choice between countries that differ *ex ante* in terms of governance quality (SubSection 3(b)). In a first step, we consider models that assume the quality of domestic governance as exogenous and, in a second step, we examine an effort to address the problem of aid allocation when the donor is able or willing to influence the outcome of governance by adding external to internal discipline of the national elites. In Section 4, we summarize the main results of our survey, and discuss their policy implications.

The central lesson that emerges from the review is that greater aid availability decreases aid effectiveness under a variety of conceptual frameworks. Yet, the mechanism underlying the decreasing return to aid differs according to the framework chosen. In particular, the decreasing impact of aid may either be due to the behavior of the local elites when they receive a greater amount of external resources on behalf of their constituency (the project or program size effect), or to the behavior of the donor agency when it has more plentiful aid to allocate between potential recipient countries with different characteristics (the selection effect).

Moreover, a donor's utility function that embodies the need-governance trade-off, such as the one proposed by Bourguignon/Platteau (2013), and the associated optimization mechanism yield a meaningful rule to guide inter-country allocation of aid resources. This rule does not present the problems inherent in rules emphasizing aid effectiveness at the expense of considerations of needs, or rules focusing on poverty reduction regardless of aid embezzlement or misuse. At the heart of the new approach to optimal aid allocation lies the concept of need-adjusted aid effectiveness which is a combined measure of the needs and governance quality in a country.

Note that we have refrained from establishing a link between the above theoretical prediction and the empirical literature on aid effectiveness. This is not only because there are several plausible mechanisms at work, and they need to be carefully distinguished (in particular, the project size effect must be distinguished from the selection effect), but also because there are numerous and complex methodological and measurement problems that plague this empirical literature. Looking at it from the standpoint of the impact of aid supply on aid effectiveness is clearly beyond the scope of this paper, whose main focus is theoretical.

2. THE GOVERNANCE-BASED APPROACH

(a) *Optimal aid contracting with multiple countries of unknown (governance) type*

In the pioneer paper by Azam and Laffont (2003), the authors look for the optimal aid contract that will best mitigate the moral hazard problem arising from the presence of an intermediary whose actions are imperfectly observed. Some form of conditionality needs to be applied to moderate the effects of opportunism by local elites or governments. The optimal contract specifies that the recipient government will