

The Economics of Foreign Aid

Lecture II

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1 The Political Economy of Aid

Lecture I discussed the relationship between aid and growth (and, by extension, poverty reduction) in a very mechanical way. Aid became investment which in turn became growth. In the final paragraphs we acknowledged the potential importance of recipient-country policies in making aid effective, but we didn't say anything about how "good" policies come about.

As is often the case, by ignoring politics altogether much of the aid and growth literature we reviewed implicitly made numerous strong assumptions about how aid and politics interact. The influential paper by Collier and Dollar (2002) makes these assumptions entirely explicit: (i) aid causes growth only in the context of good policies, (ii) aid is fungible, (iii) conditionality is ineffective, and (iv) growth (and a growth-oriented policy agenda) is good for the poor. The purpose of this week's lecture is to examine these assumptions more carefully. Having covered the first point last week, we'll focus on points two and three, leaving four for another lecture (see Prof. Dercon's notes on "Growth, Poverty and Inequality").

1.1 Fungibility

"When a thing which is the subject of an obligation . . . must be delivered in specie, the thing is not fungible, i.e. that very thing, and not another thing of the same or another class in lieu of it must be delivered." (Oxford English Dictionary)

Last week we worried a lot about whether aid goes to its intended purpose. We focused on investment, but the same question applies more generally. What certainty do donors have that aid monies ear-marked for education or health will actually reach their intended purposes? In practice, the answer appears to be 'very little'. The reason is that aid is often fungible.

The first diagram in figure 1 illustrates the concept of fungibility in foreign aid. Suppose the recipient government has preferences for spending its budget on the military and the health sector, with indifference curves as shown. A donor gives this country a quantity of aid intended for health projects. By what amount will this aid increase health expenditure? As shown, even if the donor can ensure that the specific funds given reach their intended destination, the net change in health spending will be less than the amount of aid.¹ This is because aid simply pushes out the budget constraint of the recipient, who resolves its utility maximization problem and chooses and budget bundle such as point S_2 . Even if all the aid money goes to health, some money previously allocated to health will be (in this case) shifted to

¹The exception to this result is when monitoring is possible and previous health expenditure is zero.

military expenditure. Note in this example that saying aid is fungible is *not* tantamount to saying aid recipients are corrupt. Acknowledging fungibility simply recognizes that countries are free to do what they will with their own budgets.

A number of studies have confirmed this simple theoretical analysis empirically. Feyzioglu et al (1998), for instance, estimate the impact of aid inflows on total government expenditure using data on 38 aid recipients from 1971 to 1990. The implicit trade-off they are looking at is between spending aid on the purpose intended by donors versus using the extra budget to reduce taxes. On average, they find that \$1 in aid raises government expenditure by only \$0.32. As seen in figure 1, the impact of loans is even smaller.

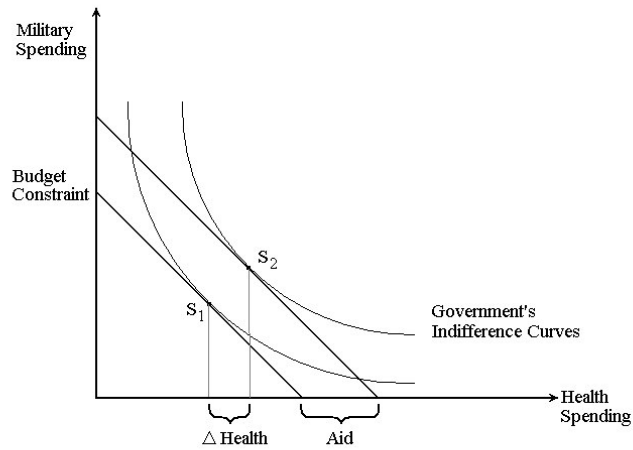
Note the importance of fungibility for advocates of aid “selectivity”. Implicit in the idea that aid is fungible is the notion that donors cannot control how it is spent. If aid is to achieve the purpose intended by donors, it must be given to governments whose preferences are in line with those of the donor. Thus the aid allocation problem can be thought of us finding a recipient whose preferences match the donor’s.

1.2 Conditionality through the lens of contract theory

As Dollar and Svensson (2000) note, the focus of foreign aid shifted during the 1980s from financing capital accumulation (as stressed by the growth models covered last week) to promoting policy reform. The main tool for achieving aid through reform has been aid “conditionality”, or specific reform requirements written into aid agreements.

A number of recent papers have shed light on the political economy of aid, and in particular aid conditionality, by analyzing the interaction between donors and recipient countries in the form of a principal-agent problem (Adam & O’Connell (1999), Svensson (2000) (2003), Azam & Laffont (2003), etc.). To start off, lets review some basic terminology from core micro, and see how we apply these concepts to aid:

- **principal (donor governments)** proposes a contract with one or more individuals so as to serve its own interests. In what follows, the principal is generally assumed to be interested in poverty reduction, about which the agent is relatively indifferent.
- **agents (recipient governments)** accept or reject the contract and choose behaviors in light of the incentives the contract provides.
- **hidden action** refers to a situation in which the agents’ actions are imperfectly observable by the principal. In our examples, the action in question will be some measure aimed at poverty reduction.



A Dollar's Worth of Aid and Government Expenditure

Estimates from Large Cross National Samples

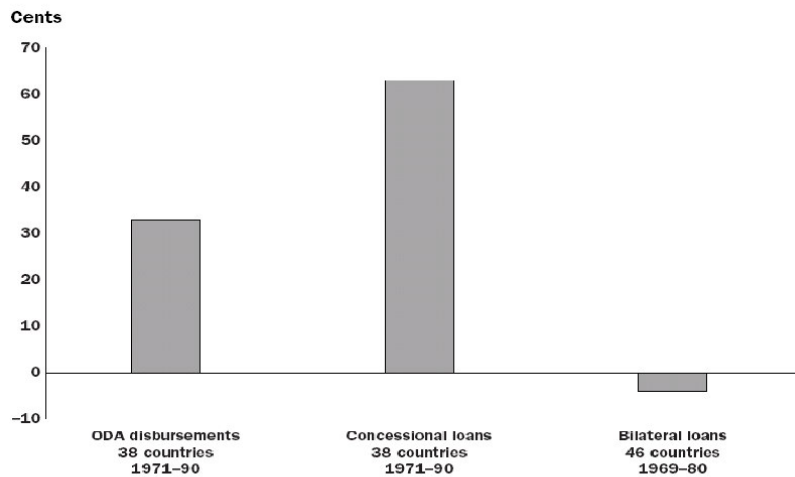


Figure 1: Top panel: Increase in recipient health expenditure may be less than the amount of aid for health projects due to fungibility. Bottom panel: empirical estimates of spending increases as result of aid

- **hidden information** refers to a situation in which agents have private knowledge of their own type (preferences or capacities). In the case of aid, agents' types usually refer to preferences for poverty reduction, levels of corruption, and so forth.
- **participation constraint.** A minimum requirement for an optimal contract is that it provide utility to the agent which is greater than his/her other alternatives.
- **incentive constraint.** In models with hidden action, the principal must recognize that the agent will maximize his/her own utility. If the principal's goal is to alter the agent's behavior, the contract must provide sufficient motivation to do so.

1.2.1 Moral hazard

Azam and Laffont model the consumption of the poor as an international public good. Aid is a contract in which the North gives a transfer to the South in return for poverty reduction. The players in the game are the rich in the North (N) and the rich in the South (R), who are assumed to control the government in the South. Both players derive utility from their own consumption, and altruistic utility from consumption of the poor (P):

$$U_N = c_N + v(c_P) \quad (1)$$

$$U_R = c_R + \theta v(c_P) \quad (2)$$

where $0 < \theta < 1$ captures the assumption that governments in the South have less preference for poverty reduction than those in the North.

Departing from this basic setup, Azam & Laffont consider several different scenarios:

- Autarky: no aid transfer occurs. Consumption of the rich and poor in the South are at some level c_R^A and c_P^A , which provides a benchmark from which to analyze other outcomes.
- Full observability: if the donor can perfectly observe the consumption of the poor, it will offer a contract making aid conditional on c_P . Consumption of the poor will increase vis-à-vis autarky. The same result holds (in expectation) if c_P is imperfectly observed but the South is risk neutral, as shown here.
- Favoritism: suppose the government in the South has preferences tilted in favor of one portion of the poor (for instance, a certain ethnic group). The optimal aid contract, conditioned on c_P^1 and c_P^2 , will reduce but not eliminate inequality between the two groups.

- Incomplete info about the government’s altruism (θ) in the South: in this case the optimal contract has several interesting features . . .
 - for θ below some lower threshold θ^* no aid is given
 - for θ above some upper threshold $\bar{\theta} > \theta^*$ aid and c_P are the same as under full information.
 - however, for $\theta^* < \theta < \bar{\theta}$ aid continues to flow, but both aid and c_P are lower than under full information. As the authors note, this pattern of aid allocation is quite similar to that proposed by Collier & Dollar (2002): aid is reserved for those countries with a sufficiently high level of governance.

1.2.2 Time inconsistency & the Samaritan’s Dilemma

“Over the past few years Kenya has performed a curious mating ritual with its aid donors. The steps are: one, Kenya wins its yearly pledges of foreign aid. Two, the government begins to misbehave, backtracking on economic reform and behaving in an authoritarian manner. Three, a new meeting of donor countries looms with exasperated foreign governments preparing their sharp rebukes. Four, Kenya pulls a placatory rabbit out of the hat. Five, the donors are mollified and the aid is pledged. The whole dance starts again.” (The Economist (1995), cited in Svensson (2000))

The concept of “time inconsistency” should be familiar from your macro tutorials: in certain models policymakers have an incentive to pledge tight monetary policy in the future (so as to lower inflation expectations) but then to renege in the second period (making their pledges non credible). In general, *time inconsistency occurs when it is not in the best interest of an agent to carry out a threat or promise that was initially designed to influence another agent’s actions*. Kydland and Prescott recently won the Nobel Prize for a model which essentially shows that if economic policymakers lack the ability to *commit* in advance to a specific decision rule, they will often not implement the most desirable policy later on. The “Samaritan’s Dilemma” refers to a specific form of time inconsistency in which the Samaritan’s desire to assist persons in need undermines others’ incentives to exercise caution.

The quote above provides a very caricatured example of time inconsistency in aid policy. Ravi Kanbur (2000) provides a more concrete example from the World Bank’s aid to Ghana in the early 1990s.

“Up to 1992, Ghana had been called the ‘star pupil’ of the Bretton Woods institutions, with an adjustment programme proclaimed by the IMF and World Bank as perhaps the most suc-

cessful in Africa . . . But in 1992 Ghana consummated its transition to democracy and, in the process, the government gave in to pressures to grant enormous pay increases to civil servants and the military. In late 1992, in advance of the elections, an 80 per cent across-the-board pay increase, backdated, was announced. As a result, the budgetary conditionality in the World Bank's then current structural adjustment credit was violated, and the impending tranche release was suspended. Through its own tranche, and through co-financing tied to it, the World Bank found itself holding up as much as one eighth of the annual import bill of the country.

“One would think that holding one eighth of the annual import bill of a poor cash-strapped economy would give enormous leverage to the World Bank and the donors to dictate terms to the Ghanaians. In fact, as the representative of the World Bank on the ground, I came under pressure from several sources, some of them quite surprising, to release the tranche with minimal attention to conditionality.” Kanbur (2000, p.414)

Among those who lobbied for a release of the World Bank's aid to Ghana were not only Ghanaian public officials, but also private sector representatives (domestic and foreign, whose business would be in peril if the economy suffered a large shock) and even aid agency representatives (whose own job performance was often evaluated on their ability to “push money out the door”.)

Svensson (2000) provides a theoretical framework for analyzing time inconsistency in aid policy. He analyzes aid conditionality in the form of a game between donors and recipient countries. Because donors wish to allocate aid according to need (i.e., poverty) there is low incentive for recipient governments to enact sound policies. Attempts at imposing conditionality on aid are non-credible threats: unless the donor has access to a strong commitment device they will always give aid to irresponsible governments in the final period. The following paragraphs examine the model in closer detail.

Players: donor with a preference for poverty reduction; 2 recipient governments with preferences for poverty reduction *and* other consumption (e.g., spending money on political patronage to preserve themselves in power); nature which produces a shock, creating noise in the link from reform effort to growth; the poor (not actually players in the strict sense).

Timing: Donor sets reform program and conditional aid, based on exogenous budget, A , which can be split between 2 recipients. Recipients choose reform effort. (Nature, in some versions, adds noise.) Finally, in 1st best

donor rewards recipients according to effort, or in 3rd best skews allocation to the more needy country - which probably put in less effort.

1. First best outcome requires: observable reform effort, donor ability to commit ex ante.
 - Donor bears all risk
 - Optimal effort is higher than without aid
2. Second best outcome: noisy signal of effort, donor ability to commit ex ante.
 - Risk is shared between donor and recipient
 - Optimal effort is lower than first best
 - Recipients strictly better off and donor (and poor) worse off than 1st best.
3. Third best outcome: no donor commitment.
 - Equilibrium entails full consumption smoothing
 - That is, the first best allocation of aid among countries is achieved, given their reform level
 - BUT, their reform level is reduced. Aid provides no incentive to do so. When the 2nd period rolls around, your poor people need help, and the donor ponies up.

So what can be done? Svensson proposes several partial solutions to the lack of credibility in aid policy:

- Rogoff's "Conservative central banker": improve welfare by delegating allocation to "an (international) agency with less aversion to poverty."
- Tied aid. Sign contracts with private (profit-maximizing) companies to implement projects. Less efficient, yes. But then aid budget is tied up in future and can't be diverted to reward misbehavior.
- Svensson (2003): allocate aid to regions; let recipients in region compete for the aid. This improves the donors' ability to observe governments' behavior by eliminating the effect of common shocks, but doesn't fully resolve the time inconsistency issue.

1.2.3 Evidence on the success of conditionality

Assessing the success of conditionality ultimately requires us to understand the process of how policy reform happens in developing countries. This literature is far too vast to summarize here. However, we examine partial answers to three particular questions which have been central to the conditionality debate:

1. **Is conditionality enforced?** The model of time inconsistency in aid allocation above suggested that even when recipient countries renege on their pledges to reform, aid may be disbursed anyway. Svensson (2000) provides evidence that this is indeed the case. Using data on World Bank loan tranche releases (i.e., the scheduled disbursement of money the WB has already pledged, conditional on reform) Svensson finds that the full amount was released in almost every case, regardless of the success or failure of reform implementation.
2. **When is conditionality successful, when is it not?** Dollar & Svensson (2000) investigate the determinants of success in 220 structural adjustment programs (SAPs) supported by the World Bank. They measure success two ways: first by relying on the approval of the WB's independent Operations Evaluation Department, and second by examining changes in inflation and budget deficits. Their primary result is that political variables (whether the government is democratically elected; how long the government has been in power; the degree of ethnic fractionalization) correctly predict the success or failure of SAPs in 75% of cases. Adding the amount of resources devoted to the program by the WB does nothing to help explain success or failure.
3. **Does aid reinforce reform?** A subtly different question is analyzed by Sachs (1994) who argues that while political factors set the stage for a successful reform effort, foreign aid has helped to reinforce this initial effort in almost every case of successful reforms since the end of WWII. As Dollar & Svensson point out, this near perfect correlation makes it fairly difficult to evaluate the importance of such aid monies statistically.

1.3 Dependency: "Is aid oil?"

In the previous sections, we examined how the perverse incentives in aid allocation can undermine the effectiveness of conditionality. The even more pessimistic view articulated by critics of "aid dependence" is that reliance on large inflows of foreign aid will undermine domestic governance and retard economic development.

In a famous and much debated paper, Acemoglu et al (2001) declare that the protection of private property rights is the key underlying determinant

of long term economic prosperity. The Harrod-Domar and Solow growth models analyzed in Section ?? shared a focus on capital accumulation, which has carried over into the aid literature. However, the more recent growth literature has shifted focus quite dramatically toward analyzing what many claim is a more fundamental question: what kinds of institutions foster the human and physical capital accumulation that we know causes growth?

If we accept with Acemoglu et al and a host of other authors that “good” institutions are the key to growth, it is logical to ask what effect aid has on institutional development.

The general critique that aid creates dependency is based on several overlapping propositions, some of which are enumerated in Collier (1999):

1. Aid reduces the incentives to adopt good policies.
2. Aid overwhelms the administrative capacity of recipient governments and dealing with multiple donors and hundreds of aid projects distracts bureaucrats from their core tasks.
3. Aid reduces accountability to citizens. In many political economy models, governments obey the will of the people for two reasons: voters must reelect them and tax payers pay their salaries. Aid cuts the link between taxation and representation.
4. Aid works like ‘welfare dependency’ in which households face an extremely high marginal tax rate if they earn too much to qualify for benefits.
5. Aid flows are highly volatile and thus a source of instability rather than sustained growth. Collier (1999) describes this as “the conventional wisdom at the International Monetary Fund (IMF).”

The natural resource curse: 1. dutch disease, 2. political economy, 3. parallels between aid and oil in this sense, both = “sovereign rents”.

A recent example of the aid dependency critique is a paper by Brautigam and Knack (2004) entitled “Foreign Aid, Institutions and Governance in Sub-Saharan Africa.” They take their basic hypothesis from a quote from Milton Friedman, who argued in 1957 that by strengthening governments “at the expense of the private sector” aid will “reduce pressure on the government to maintain an environment favorable to private enterprise.” In short, their argument is that aid will cause corruption. However, they are also interested in the more subtle point that aid will reduce a government’s accountability to its citizens by cutting its reliance on tax revenues. (One might wonder if lower taxes really make the business environment *less* favorable to private enterprises, political accountability aside.) Their discussion is informal, but they point to several mechanisms by which aid might undermine governance:

- creating moral hazard (see above). They argue that moral hazard exists not only between donor & recipient, but also between donor governments & donor aid bureaucrats, as well as recipient governments & local bureaucrats.
- funding political patronage. Aid provides money which incumbent politicians can allocate as ‘pork’ to favored constituencies. Crucially, it wasn’t raised domestically, so isn’t ‘owed’ (politically) to any group.
- creates soft budget constraints leading to a lack of fiscal discipline. Problematic in the long run, especially in light of possible debt overhand affecting future governments/generations.

They test their basic hypothesis by estimating two equations using data on corruption (ICRG dataset), central government tax collections as a share of GNP, political violence, aid as a share of GNP (or public sector budget), and other controls for 32 African countries.

$$\begin{aligned}\Delta\text{corruption} &= f(\text{initial corruption, growth, aid, controls}) \\ \Delta\text{tax revenue/GNP} &= f(\text{initial tax share, growth, aid, controls})\end{aligned}$$

Their key result is the finding of a significant, negative coefficient on aid. That is, they find that aid raises the level of corruption and reduces tax revenues - both of which the authors association with “institutional destruction”. However, there are some serious caveats to their empirical results.

Writing in similar vein, Collier (2005) notes that aid and oil are the two largest external financial flows to Africa. Furthermore, an enormous literature in both economics and political science has documented the “natural resource curse.” Oil-rich countries tend to underperform. Macroeconomists have long noted the distortionary effects of large resource inflows (“Dutch Disease”). Political economists have also argued that oil wealth undermines governance and political accountability. So why should aid be any different? Both, Collier notes, are “sovereign rents” - unrestricted money which accrues to whoever is in power. Such rents are believed to encourage rent-seeking (fighting over a fixed pie) rather than productive activity. Collier offers several reasons why aid may be less prone to such negative side-effects. Among them are . . .

- technical assistance: technical assistance does not put “free” money in the hands of governments. Rather, it contributes to making their current expenditures more effective at poverty reduction. (On a cynical note, Collier speculates that this may explain why recipient governments favor project aid so strongly over technical assistance.)
- conditionality: for all the weaknesses of conditionality documented above, the aid tap can in theory be turned off if governments abuse

it. Historically, we have seen that donors have rarely been strict in enforcing conditionality, just as they have failed to allocate aid to the neediest and most worthy recipients. Looking forward though, there is potential for a renewed commitment to efficient aid allocation and strict conditionality to make aid more effective (and avoid the traps associated with natural resource dependence).

2 Conclusions

A review of some points to take away:

- Foreign aid represents a fairly minor resource flow from the perspective of donor countries GDP (an average of .3% among OECD countries), but constitutes a large share of both government revenues and GDP in recipient countries. (Implications for aid and government accountability in recipient countries.)
- The allocation of foreign aid has historically had very little to do with poverty reduction. Most cross-country differences in aid receipts are explained by political and strategic factors (Alesina and Dollar 2000). (To what extent, then, should we expect any link between aid and growth or poverty reduction in historical data?)
- Turning to the effectiveness of aid, the empirical evidence on aid and growth is somewhat mixed, but many studies have found a significant positive relationship (Hansen and Tarp 2000).
- An important result in the cross-country aid literature is that the impact of aid on growth may be conditional on a “good” policy environment (Burnside and Dollar 2000). Numerous studies have cast doubt on this result, but its intuitive appeal has made it very influential among donors (particularly the U.S. and World Bank).
- Building on the Burnside & Dollar result, Collier & Dollar have calculated the optimal allocation of aid for poverty reduction. In their scheme, aid should be allocated on the basis of poverty and the quality of economic policies. Because the Collier & Dollar calculation assumes that conditionality is ineffective, the allocation they suggest makes no attempt to influence country policies. Aid rewards good policies - an approach described as “selectivity” rather than conditionality.

Turning to the political economy of aid, lecture 2 analyzed the donor-recipient relationship as a principal-agent problem. In this framework we saw that

- The potential for moral hazard in aid allocation arises when recipient governments have a weaker preference for reform or poverty reduction than do donors. As Azam & Laffont (2003) show, moral hazard may be usefully addressed through aid conditionality.
- However, the success of conditionality in the moral hazard framework hinges crucially on the ability of donors to commit to aid policies ex ante. As Svensson (2000) shows, when donors can’t commit aid may undermine the incentives for reform. This is a case of the more general ‘time inconsistency’ problem in policy-making.

- Evidence suggests that time inconsistency has been a serious problem in practice. Conditions in structural adjustment loans have been found to be largely ineffective. Aid is generally disbursed even after recipients renege on commitments.
- Finally, a common critique is that aid produces dependency. Perhaps the most coherent forms of this critique argue that soft budget constraints engender corruption and reduce the incentive to make painful policy reforms. However, evidence for this link is fairly weak.

The overall impression from these lectures may be that aid has been a dismal failure. It has not lived up to expectations in terms of growth or poverty reduction.

The common disclaimer from investment analysts that “Past performance is no indication of future returns,” should be some consolation here. To a great extent we know why aid has failed. It has not been allocated for growth or poverty reduction. Aid modalities have not necessarily been targeted at growth. Aid policy has not been credible. Conditionality has not been enforced. Emphasis has been placed on large resource transfers, ignoring domestic political considerations. Inasmuch as donors can recognize these failures, they should not be forced to repeat them.

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