Rethinking Aid

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ABSTRACT

This paper reviews the recent debate on the role of aid in providing finance, in changing policies in recipient countries, and in transmitting knowledge. It argues that where economic reforms are recent, as in much of Africa, donors can play an important signalling role. This potential remains untapped because aid allocations have been largely based on political considerations. Donors fear “aid dependency” and have therefore pushed for the substitution of domestic taxation for aid. The cost of taxation may instead justify the use of aid for tax relief, particularly where the cost of taxation is likely to decline with development.
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1. Introduction

For much of the last fifty years development aid was seen as simultaneously fulfilling two roles: first, the financing of projects in poor countries which lacked access to world capital markets and, secondly, raising the returns to investment through the donor’s role in project selection and design. During the last two decades the role of aid has become less clear, in part because these two traditional roles have come to be questioned. The growing integration of many developing countries in global financial markets has made the provision of finance seem less relevant while the fungibility critique has made the donors’ efforts in project selection seem an exercise in self-delusion. The rationale for aid became further blurred when structural adjustment lending introduced a third role: the attempt to use aid to buy policy reform in developing countries.

The last few years have seen a radical critique of aid. This recent debate concerns all three aspects of aid: its role (1) in providing finance, (2) in changing policies in recipient countries, and (3) in transmitting knowledge. The most influential recent critique of aid is to be found in the World Bank’s Assessing Aid report (World Bank, 1998). The argument in that report is built around two propositions: first, aid can be effective in raising growth but only in a good policy environment and, secondly, aid cannot buy such an environment.

There has also been a revival of interest in two other functions of aid: the provision of insurance through compensatory schemes and the use of aid as a commitment and signalling device. When economic reforms are recent (as is, for example, the case in much of Africa) risk assessments are slow to adjust so that for a time the private response to reform may be weak. In these circumstances aid can play an important signalling role. Since the allocation of aid has been dominated by political considerations this potential remains unexploited.

This paper reviews the debate on the roles and effectiveness of aid. Its structure is as follows. Section 2 considers the role of aid in providing finance. Current evidence suggests that aid is effective in raising economic growth only in good policy environments. Section 3 then considers the effectiveness of aid in securing such an environment through (ex ante) conditionality. There now is overwhelming evidence that such conditionality does not work. The paper argues that donors should switch to ex post conditionality (selectivity). How this could be implemented is discussed in section 4. Donors are concerned about the possibility of “aid dependency”. They have therefore pushed for the substitution of domestic taxation for aid. In section 5 we suggest that the cost of taxation may be atypically (and temporarily) high in very poor

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1 I have benefited from very helpful discussions with Chris Adam, Paul Collier, Jan Dehn, David Dollar, Chris Gilbert and David Vines and from excellent comments by two anonymous referees.
countries. This might justify the opposite substitution, i.e. the use of aid for tax relief. Section 6 considers the argument that the transfer of knowledge to developing countries should be tied to the provision of finance. It argues that there is no need for such “bundling” but that there is a strong case for clearly separating these two functions. Section 7 concludes.

2. Aid as Finance

If the role of aid is to provide finance (rather than changing policies) then aid would be effective if it stimulated economic growth, taking policies as given. Much of the recent debate on aid has focused on the first of the two Assessing Aid propositions: that aid cannot be effective in a poor policy environment. This proposition is, of course, intuitively appealing. There now is empirical support from two types of evidence. First, micro evidence indicates that the returns to aid-supported projects are affected by macro-economic policies. In the early 1980s accumulating anecdotal evidence of this nature was an important argument in favour of adjustment lending: it was felt that if project returns were low because of the policy environment then donors should focus on improving policies rather than on project design. There now is more systematic evidence, notably that of Isham and Kaufmann (1999) who analysed returns to World Bank supported projects and found a significant effect of macroeconomic policies.

The second type of evidence comes from growth regressions and relies on macro data. Burnside and Dollar (1997) included both aid and an aid-policy quality interaction term in a growth regression and found that aid alone was not significant but that the interaction term was. The econometric basis for their conclusion that aid works, but only in a good policy environment, has been attacked in a number of papers (e.g. Hansen and Tarp, 1999, Lensink and Morrissey, 1999, Lensink and White, 1999). However, in the most recent version of their paper Burnside and Dollar use extensive sensitivity analysis to test the robustness of their result.

A particular interesting critique of the Burnside and Dollar thesis is that of Guillaumont and Chauvet (1999). Their hypothesis is that the effectiveness of aid (in terms of growth) depends not only on the quality of the policy environment but also on the country’s “structural vulnerability”. They measure vulnerability as a weighted average of the instability of agricultural value added (as a proxy for climatic shocks), the instability of the income terms of trade, the trend value of the terms of trade, and initial population. Adding this vulnerability variable (and its interaction with aid) to the Burnside and Dollar (1997) growth regression Guillaumont and Chauvet find that the aid-policy interaction term is no longer significant while the aid-vulnerability interaction term is significant. On this basis they conclude that aid effectiveness is not increasing in the quality of the recipient country’s policies but rather that it is increasing in the country’s “vulnerability”.

How should this result be interpreted? Consider first the trend in the terms of trade. In the absence of aid a secular decline in the terms of trade might well induce an

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2 The Hansen and Tarp paper shows that controlling for investment and human capital aid is not effective in raising growth. This test seems unreasonably severe: one would expect aid to affect growth partly, perhaps largely, through those two variables.
increase in savings: agents would accumulate assets in order to smooth consumption over time. (Note that at a later stage the effect on the savings rate would be negative: agents would maintain consumption levels by drawing down the assets they had accumulated initially.) However, if aid were available to compensate for the terms of trade loss then agents would have less incentive for such intertemporal substitution. To that extent the effect of aid on the savings rate (and hence on the growth rate) might well be negative, at least initially. The trend in the terms of trade component of the vulnerability therefore provides no clear explanation for the aid-vulnerability interaction term.

Now consider the two instability measures. Guillaumont and Chauvet argue “that aid has to allow countries to overcome their vulnerability, to face shocks in better conditions, or at least to (partially) compensate for their effects.” This suggests that in shock-prone economies aid could fulfil two roles, addressing either the ex post or the ex ante effects of volatility on growth. Aid could provide insurance, offsetting the effects of negative shocks once they occurred (ex post), through compensatory finance. An example of this is the European Union’s Stabex programme. Alternatively, aid could assist countries ex ante, not in response to actual shocks but in response to an assessment that the country was facing uncertainty.

This distinction between the ex ante and ex post effects of volatility has long been prominent in theoretical work on trade shocks (see Bevan et al., 1991, Collier and Gunning, 1999a) but only very recently has it begun to be tested. Dehn (2000) constructs an uncertainty measure as the GARCH conditional variance of one-step ahead forecast errors, regressing first differences in the price series on their own lag, a second lag in levels and a time trend. Essentially this purges the series of both level and differences information so that the residual can be considered as a measure of the uncertainty faced by an agent who uses all available information. Dehn defines trade shocks as the actual occurrence of a “large” forecast error (using 2.5% cut-off points). Adding both variables - the ex ante measure of uncertainty and the ex post measure of shocks - to a canonical growth regression he finds (for a sample of 56 countries in the period 1970-1993) that positive shocks do not have a significant growth effect, that large negative price changes do lower the growth rate significantly and, most interestingly, that uncertainty in itself does not affect growth. Hence what reduces growth is not vulnerability in the ex ante sense, the prospect of volatile world prices, but the actual realisations of negative shocks. 3

This does not invalidate the Guillaumont-Chauvet result but it does suggest a refinement of their policy conclusion that the allocation of aid across countries should be based not only on the quality of policies but also on countries’ vulnerability. Recall that their vulnerability variable aggregates over quite different effects. Aid is not likely to be more effective in economies exposed to commodity price uncertainty, simply because such uncertainty in itself does not reduce growth. But negative shocks do matter for growth and this suggests a reassessment of the insurance role of aid. The

3 The finding that uncertainty itself does not affect growth appears quite robust: Dehn shows that it holds for nine different definitions of uncertainty and across different sample periods.
function of aid in shock-prone economies would be to relax borrowing constraints for countries which had experienced negative shocks.

Existing schemes such as Stabex provide compensatory finance to governments rather than to private producers. They thereby, unintentionally, reinforce (through Dutch Disease effects) rather than dampen negative shocks for producers. When compensation for negative shocks is paid to governments producers may lose twice: once directly through the reduction in producer prices and once indirectly as the government’s spending of the compensatory finance would drive up the relative prices of non-tradables thereby reinforcing the terms of trade loss suffered by the producers of the commodity affected by the shock. Aid would be more effective if it were directed at private producers enabling them to buy put options.\footnote{Collier et al. (1999) have proposed a redesign of Stabex along these lines.} Donors, however, have (until quite recently) shied away from such use of aid, feeling that producers of commodities with volatile prices (such as coffee or sugar) should be encouraged to abandon these activities rather than that they should be supported through risk sharing.

With this qualification aid can be effective when it takes the form of compensatory finance (\textit{ex post}) for countries subjected to negative trade shocks. In the more general case aid effectiveness appears to require a good policy environment. This is, of course, the rationale for the use of conditionality in adjustment lending to effect policy reform in the recipient countries.

3. Conditionality

The effectiveness of (\textit{ex ante}) conditionality has long been questioned. One line of criticism in the theoretical literature stresses that if adjustment finance is temporary then conditionality can be effective in changing policies at best only temporarily. It may well be possible to use aid to “buy” policy reforms from unwilling client governments, but those reforms will not be sustained if aid is temporary.

For example, a government which prefers protection over free trade may well be induced by the offer of aid to liberalise its trade policy but it would then have an incentive to reverse that reform once the aid runs out (e.g. Rodrik, 1989, Collier and Gunning, 1992, Killick, 1999). The government’s announcement that its trade reform was permanent would be recognised as “time inconsistent” and hence be considered as incredible. This would explain both why policy changes undertaken at the insistence of donors have often been short-lived and why the response of private agents’ to the announcement of adjustment policies has often been weak. To explain why policy reversals frequently occur even in repeated donor-recipient interactions it is usually argued that a donor threat to punish policy reversals by denying future access to adjustment lending is not credible given the incentives for donor staff to continue lending (see e.g. Killick, 1999). Arguments for \textit{ex post} conditionality are often inspired by models in which time inconsistency generates policy reversals.

Time inconsistency is, of course, not the only reason for the failure of conditionality. A good example from the political economy literature is the recent paper by Adam and O’Connell (1999). In their two-period model private agents take investment
decisions at the beginning of the first period, once the government has announced its

tax and transfer policies. They can invest in two activities, one of which is taxed. The
government collects the revenue from this (distortionary) tax, receives aid from
donors, pays for exogenous government expenditure and uses any remaining revenue
for transfers to a favoured group. It chooses the tax rate and the amount of transfers so
as to maximise the welfare of this group.

The size of this favoured group is critical. If it represents a small proportion of the
population then it is optimal for the government to engage in transfer payments. If,
however, the government is “sufficiently representative” (in the sense that the
favoured group exceeds a critical proportion of the population) then it will be benign.
In spite of being interested only in the welfare of its clients it will make no transfers to
them and it will set the tax rate at the minimum needed to finance the part of
exogenous expenditure which is not financed by aid.

The effect of (unconditional) aid differs radically in these two types of economies. In
the first case (where the government has been captured by a small rent seeking elite)
any increase in aid will be entirely used for transfer payments. In the second economy,
a (small) increase in aid will not induce any transfers: transfers will remain constant at
zero and the aid will be used exclusively for tax relief. To the extent that poverty is
concentrated in countries with narrowly-based governments this model illustrates
what is sometimes described as the problem of selectivity: aid (to the government) is
ineffective in the very economies in which it seems most desirable because of the
depth of their poverty.

This simple model shows both how aid affects growth and why aid effectiveness
depends on the policy regime. In the economy with a sufficiently representative
government the quality of the policy environment is high in the specific sense that the
government chooses to make a minimal use (given the level of expenditure) of
distortionary taxation. In this economy aid raises growth by inducing a reduction in
the tax rate and thereby an increase in investment in the high-return (taxed) activity.
Conversely, in the non-representative (or more accurately: not sufficiently
representative) economy aid affects growth only by raising transfers to the favoured
group which would then increase its saving to smooth consumption between the two
periods.

When aid is unconditional the recipient government is, of course, free to choose the
tax rate which is optimal given its objective of maximising the welfare of the favoured
group. Under conditionality, however, the tax rate and the amount of aid are
simultaneously determined in bargaining between the donor and the recipient where
the donor will be concerned by the effect of distortionary taxation, through its effect
on investment, on consumption in the second period. If the government is not

Adam and O’Connell abstract from credibility problems: in their model private agents do not doubt
whether the government will maintain its policies in the second period, i.e. once private agents have
committed themselves through irreversible investment decisions. There is therefore no issue of time
inconsistency in this model.

The intuition for this difference is that in the second case members of the favoured group lose more as
tax payers than they gain in transfers since transfers have to be shared by a relatively large number of
people.
sufficiently representative there are “gains from aid”: both parties can be made better off by conditionality. (For the recipient government this is so because without conditionality it would have received no aid at all since the donor would have realised that aid would have been wasted on transfers, without reducing tax rates.) Adam and O’Connell show that whether conditionality is needed to achieve gains from aid or, more narrowly, Pareto-efficiency, depends on the size of the government sector (as measured by the amount of exogenous government expenditure) and on the size of the group favoured by transfers.

This second version of the model (in which aid is conditional) illustrates the function of conditionality but not its possible failure through policy reversals. While the model distinguishes two periods it is essentially static: policy decisions are taken once and for all at the beginning of the first period. Hence a problem of time inconsistency cannot arise.\footnote{7 Nor can the cost of taxation vary over time. This is a point to which we will return below.}

Policy reversals are, however, a central concern in the empirical literature. Recall that the second proposition in the Assessing Aid report was that aid cannot buy policy reform. Empirical evidence on this proposition is largely in the form of case studies, although there have been many econometric attempts, notably that of Burnside and Dollar (1997). In assessing this evidence it should be noted that for conditionality to be effective it is necessary, but not sufficient that the recipient government changes its policies in a way deemed desirable by the donor. This may be seen by noting that when a donor tries to buy policy reforms through conditionality there are four conceivable outcomes (Gunning, 2000). In the first case, the reforms are not adopted so that conditionality has obviously failed. In the second case the reforms are adopted but this cannot be credited to the donor’s use of conditionality: the reforms would also have been adopted in the absence of aid. The third possibility is that the reforms are adopted and would indeed not have been adopted in the counterfactual case \(i.e.\) if no aid had been offered, but that the effect is only temporary: the reforms are reversed after some time. (This is, of course, the outcome predicted by time inconsistency models.) The final possibility is one of sustained reform (which would not have occurred without aid).

Clearly, conditionality is truly effective only in this last case. It achieves nothing in the first and the second case (although only in the first case is this obviously so) while in the third case it is only temporarily effective. Regression analysis meets an obvious limitation here: it can, of course, establish whether aid flows are accompanied by policy reform and it may be able to establish whether reforms are reversed but it cannot convincingly distinguish between situations where aid was instrumental or only incidental to policy reform. Regression evidence of a link from aid to “policy quality” at best shows that a necessary condition for effective conditionality is satisfied. Case studies go some way towards overcoming this problem by using in-depth country-specific information to construct a credible counterfactual. However, here too there is a methodological problem: donors have an incentive to exaggerate their influence over policy changes while the government has the opposite bias. Hence case studies may be biased in either direction, depending upon which policy accounts
The econometric papers have typically focused on whether the finance provided by donors is effective in changing policies in recipient countries. Dollar and Svensson (1999) focus instead on the effect of the donor’s preparation and supervision activities. Using data from the World Bank’s Operation Evaluation Department (OED) they attempt to explain a programme’s success or failure (as assessed *ex post* by OED) by the donor’s efforts. There turns out to be no such relation: the authors “find no evidence that any of the variables under the World Bank’s control affect the probability of success of an adjustment loan” (p. 4). These variables are measures of staff input, not of the aid provided. The authors, as they point out, therefore do not test the proposition that aid can buy policy change. What they do test is whether the donor’s activities which complement finance - the design of a set of conditions, the technical assistance provided and the staff efforts to twist the arms of the government - determine success or failure. While the evidence is only for the World Bank it seems unlikely that other donors would have been more effective.

The case study evidence is growing rapidly; see e.g. the country studies in the external evaluation of the ESAF (Botchwey et al., 1998), the studies in Killick (1999), the World Bank study of aid in Africa (Devarajan et al., 2000) and the recently completed evaluation of Swedish programme aid (White, 1999). This evidence strongly suggests that conditionality is not effective. For example, the Devarajan et al. study of aid and policy reform in fifteen African countries finds that while all of them got large amounts of programme aid, only three (Mali, Ghana and Uganda) reformed successfully.

There are many instances of governments simply not adopting the reforms favoured by donors (the first case in the taxonomy suggested above). For example, in the final phase of the Kaunda regime in Zambia, the government reached agreement (in 1989) with the Fund on a programme “designed to create a diversified and market-oriented economy”. It had no intention of doing so. Indeed, price controls were formally abolished but continued to be enforced and efforts to accord a larger role to the private sector were resisted effectively (Botchwey et al., 1998). More recently, again in Zambia, the prolonged dispute between donors and the government over privatisation of the copper mines (ZCCM) provides a good example of a case 1 outcome. There are also many instances of aid, far from inducing reforms, actually leading to reforms being postponed. Devarajan et al. (2000) document this for Kenya, Nigeria, Tanzania and Congo.

There is also evidence of reforms being adopted, but not as a result of donor pressure (case 2). In Vietnam the donors made an important contribution by informing the policy debate but were apparently virtually powerless to force through reforms against the wishes of the authorities. As van Donge and White stress (1999, p. 33): “The pace and direction of reform is determined by Vietnamese politics”. The literature also documents many cases where the reforms were “owned” by the government so that
donor pressure was not essential. At one extreme reforms were even undertaken without donor involvement, as was the case in the early phases of liberalisation in Vietnam, Eritrea, Burkina Faso, Uganda and Mozambique. In Uganda key reforms (abolishing price controls, liberalising the foreign exchange market, and privatisation) were all undertaken on government initiative. While donors, understandably, like to take credit for the success of reforms in Uganda, there have been very few cases of substantial disagreement on policy issues between donors and the government (Ddumba-Ssentamu and Dijkstra, 1999, pp. 91-2). Kasekende and Atingi-Ego (1999) argue convincingly that Uganda’s successes cannot be attributed to donor pressure. This is not to say that the involvement of donors in these countries was not important or helpful; it often was. However, in these instances of case 2 their effectiveness was not through conditionality. The contribution of donors was rather to help build the case for reform through policy dialogue. In addition, donor support may not have bought reform programmes but it has, of course, eased their implementation (Devarajan et al., 2000).

The third case is that of policy reversals. These have been particularly prominent in Africa. “Program interruptions” (in most cases involving policy reversals) were the main concern in the IMF’s internal evaluation of the ESAF (IMF, 1997). A well-known case is the liberalisation of maize marketing in Kenya, a reform which was repeatedly undertaken, each attempt ending in a policy reversal. Oyejide et al. (1999) document that trade liberalisations were reversed in seven out of ten African countries, in many cases (again including Kenya) more than once.

Recall that in the fourth case conditionality is effective in the sense that donor pressure was essential and that the reform was not subsequently reversed. This case seems to be fairly rare. In the exhaustive evaluation of Swedish programme aid one of the very few examples is the case of the liberalisation of the cashew sector in Mozambique, a reform which the donors apparently effected in spite of strong government objections (White, 1999, Gunning, 2000).

The central idea of structural adjustment lending is that aid can buy policy reform. Having committed huge resources to this idea for two decades one would expect donors to be shocked by the accumulating evidence that conditionality has failed. Instead that message seems to become rapidly accepted with remarkably little dissent. The extent of the recent change in thinking on aid can be measured by looking at the rationale Rodrik (1995) gave five years ago for (multi-lateral) lending. Rodrik saw the exercise of conditionality as a key rationale for aid. Donor confidence in this role for aid appears to have evaporated in a very short period.

If the evidence that ex ante conditionality does not work is accepted one can either redesign the aid contract to improve it or abandon the approach and switch to some form of ex post conditionality. The former approach weakens ownership, the latter reinforces it. Much of the theoretical literature is concerned with establishing the feasibility of an effective, incentive-compatible aid contract. However, the problem with ex ante conditionality goes beyond feasibility: one may well question its desirability. Inevitably, if donors are to succeed in achieving objectives which are not
(fully) shared by the government then they will undermine the government’s accountability. In the limit conditionality is effective in the same way as colonialism and hence suffers from the same objection. Stiglitz (1998) eloquently describes the debilitating effect of *ex ante* conditionality:

Rather than learning how to reason and develop analytical capabilities, the process of imposing conditionality undermines both the incentives to acquire those capacities and confidence in the ability to use them. Rather than involving larger segments of the population in a process of discussing change - thereby changing their ways of thinking - it reinforces traditional hierarchical relationships. Rather than empowering those who could serve as catalysts for change within these societies, it demonstrates their impotence. Rather than promoting the kind of open dialogue that is central to democracy, it argues at best that such dialogue is unnecessary, at worst that it is counterproductive.

In summary, *ex ante* conditionality has proved ineffective; it may well be feasible to make it more effective; however, this would reinforce the undesirable effects stressed by Stiglitz. The alternative is *ex post* conditionality.

4. *Selectivity*

If aid effectiveness depends crucially on the quality of the policy environment aid and donors are powerless to change policies with aid then all they can do is to improve efficiency through selectivity in the allocation of aid. Donors would treat policy regimes as exogenous and would bias the allocation of aid in favour of countries with good policy environments.

The *Assessing Aid* report does not shy away from stressing this logical implication. Some bilateral donors, notably the Dutch, are rapidly moving in this direction. The World Bank itself seems much more reticent. As so often in debates on development there is a wide gap between the world of ideas and what actually happens.

It may be noted that while selectivity can be defended even if policy remains exogenous, its beneficial effect may be reinforced through an incentive effect. This would be the case if governments recognised the donors’ new allocation rule and adopted economic reforms in part in the expectation that they would be rewarded with aid (Collier et al., 1997). The policy would then become endogenous.

Alesina and Dollar (1999) show that the allocation of bilateral aid is largely driven by political and strategic considerations, such as colonial ties and UN voting records. By contrast, the recipients’ economic policies or political institutions are relatively unimportant determinants of aid flows. They find, for example, that “a non-democratic former colony gets about twice as much aid as a democratic non-colony” (p. 21). The relative importance of non-economic objectives is quite striking. The Alesina and Dollar results indicate e.g. that openness is rewarded by donors: open

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9 Clearly, if the two parties are in full agreement on objectives then there is no need for conditionality.

10 An anonymous referee of the Burnside and Dollar paper makes the point that this is similar to the Lucas critique: if the aid allocation rule were to change then past evidence on the effect of aid on policies would no longer be relevant. I am indebted to David Dollar for this point.
economies (on the Sachs-Warner index) get twice as much aid as closed ones. However, the effect of this is swamped by the variables measuring colonial ties and UN voting records (which are uncorrelated with openness). When allocations are based on the policies adopted by recipient governments the relation is often perverse: aid “tapers off” in successful economies (Botchwey et al., 1998, Collier and Gunning, 1999, Devarajan et al., 2000). This appears to be based on the donors’ mistaken perception that the return to aid in such economies is low because they already attract private investment.

Selectivity can be seen as the most radical form of *ex post* conditionality since it treats the policy regime as exogenous and hence abandons all pretence that aid can buy policy change. The selectivity proposal has encountered (at least) three objections. The first objection is that selectivity will leave poor people living under governments with bad policies to fend for themselves, i.e. without aid. This objection is difficult to understand: aid to such governments is unlikely to benefit the poor and may well harm them by financing the continuation of a bad policy regime. (Recall from the Devarajan et al. study that aid often maintains bad policy regimes.) Conversely, selectivity, of course, does not rule out that aid is channelled directly to poor people rather than to their governments.

The second objection is that countries with good policies do not need aid. This is simply false. The evidence on risk ratings indicates that reputations die quite slowly. Hence domestic savings may remain low for some time in good policy environments, reflecting uncertainty as to whether the new policy regime will be sustained. There may therefore be a phase in which a country has already undertaken wide-ranging reforms but has not yet attracted substantial private capital. Also, in poor countries the cost of taxation is typically quite high. Encouraging countries with good policies to substitute domestic taxation for aid (a favourite proposal of critics of “aid dependency”) may therefore be quite damaging. I return to this point in the next section.

The most serious objection to selectivity in aid allocations is that it may run into the same problems as *ex ante* conditionality namely if it leads to donor-recipient bargaining over the quality of the policy environment. Selectivity ties a country’s aid allocation to an assessment of its policies. Some aspects of a “good policy environment” can be defined unambiguously in objective terms, but in many cases an element of judgement will be inevitable. The donor’s judgement may, of course, be challenged by the recipient government. In that case the government and the donor would return to the sort of bargaining which now characterises *ex ante* conditionality. Selectivity would then conflict with ownership in the sense that the donor would try to impose his judgement on the relative importance of various aspects of the policy regime. In the limit there would simply be no scope for ownership: aid would be

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11 Recall that when the aid allocation rule is clear there may well be an incentive effect so that aid does promote policy change. However, selectivity does not rely on this effect.

12 This section draws on Gunning (2000).

allocated to those countries which had adopted a list of donor-favoured policies. This objection is the main reason for favouring outcomes over policies as the basis for *ex post* conditionality.

There is an active debate on the question whether conditionality should be based on outcomes or on policies adopted by the recipient government, as has been the rule in structural adjustment programmes. Practical people have tended to favour policy-based conditionality, largely because of the long lags between policy decisions and their results, e.g. in terms of poverty alleviation. Incentive effects would be weak if governments could not expect to be rewarded (or punished) quickly for their actions. Rewards might actually be reaped only by a successor government. The theoretical literature places greater emphasis on outcomes. For example, Azam and Laffont (1999) develop a principal-agent model in which the principal (the rich in “the North”) try to induce the rich in the South to raise consumption of the poor which the donors value altruistically. In their model an optimal contract may make aid conditional both on policies and on outcomes, the latter because of incentive effects.¹⁴

An obvious objection to outcomes-based conditionality is that outcomes are only imperfectly under government control. In particular, outcomes might reflect exogenous shocks so that a passive government might receive less aid simply because the country had experienced a negative shock. Collier *et al.* (1997) suggest correcting for this by regression analysis. They introduce a number of determinants outside government control in a growth regression, e.g. terms of trade shocks and landlockedness. Using such a regression an aid allocation based on growth would correct observed growth rates for the estimated effect of the non-policy determinants. For example, the growth rate of a country which had experienced a negative trade shock in the period under review would be adjusted upwards by adding to the observed rate the shortfall resulting from the shock, using the estimated coefficient.

This correction may suffer from omitted variable bias if policies are not included and if policies are correlated with some of the other growth determinants.¹⁵ If the regression does include policy variables then the adjusted growth rate (on which the aid allocation would be based) would be equal to the part of the growth rate not explained by the non-policy variables, *i.e.* it would equal the error term plus a weighted sum of the policy variables with the estimated regression coefficients as weights. In this sense the difference between policy and outcomes-based aid allocations would be illusory:¹⁶ in the outcomes-based approach aid would in fact be allocated on the basis of the policies the government had adopted.

There are, however, two important differences, one economic, the other political. The economic point is that the policy-based approach rewards policy choices on the basis

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¹⁴ Their model is a static one so that the issue of the lag between government actions and outcomes-based aid does not arise.

¹⁵ Guillaumont and Chauvet (1999) consider a particular case namely if policies are endogenous. They advocate correcting the outcome measure not only for the direct effect of, say, a negative shock on the growth rate, but also for its indirect effect, via an induced policy change. This proposal treats observed policy responses as inevitable, as if the government had no choice. I would prefer to err in the opposite direction.

¹⁶ I am indebted to one of the referees for this point.
of their average effect in the sample used for the regression. The outcomes-based approach would include the error term in the measure of success. Whenever a government had been able to realise higher returns to particular policies than the sample average this would be picked up in the error term and hence be rewarded. The outcomes-based approach would therefore encourage the government to take its own decisions about the relative importance of reforms, giving, say, more weight to trade reform and less to fiscal rectitude if that seemed appropriate in the specific circumstances of that country. The political point is that an outcome-based allocation promotes accountability by signalling that donors have no involvement in policy choices, being interested only in results.

Finally, it may be noted that under selectivity aid could serve both a signalling and a restraint role. Signalling would occur once it was recognised that aid allocations were tied to success. Private agents would then be able to economise on monitoring by observing aid allocations instead. Similarly, donors could be used by the government as an agency of restraint: if the aid allocation rule was credible the government could resist pressures for policy reversals by pointing out that these would lead to a loss of aid. This would help to lock-in policies.

5. Aid or Taxation

The research on aid effectiveness has brought the relation between aid and taxation in the recipient countries sharply into focus. For if donors have little control over the composition of government’s spending (because of the fungibility of project lending and the limited effectiveness of conditionality in programme aid) then the effect of aid will be a combination of increased government expenditure and reduced taxation. That the recipient government will respond to aid with such a combination is, of course, rational. Domestic taxation will involve both political and economic costs (in the absence of lump-sum taxation). It is therefore optimal for the recipient government to increase government expenditure and to reduce taxation until in the new equilibrium with aid the marginal costs of taxation is again equated (but now at a lower level) to the marginal benefits of government expenditure (see e.g. Collier, 1999). Advocates of the “aid dependency” position argue, however, that increases in government expenditure should be accompanied by increased taxation and reduced aid. There is no rationale for this to be found in static donor-client models as long as the marginal benefits of government expenditure are decreasing and the marginal costs of taxation are increasing.

The real issue appears to be dynamic: how will the cost of taxation change in the process of development and what does that change imply for aid policies? Taxation involves two types of costs: the cost of collection (the cost of the administrative machinery needed to generate revenue) and the welfare loss imposed on the economy if lump-sum taxation is not feasible so that taxation reduces private agents’ income, not only directly but also indirectly by giving them incentives to change their decisions.

While this is plausible, it need not be true. For example, recall that if the government is insufficiently representative in the Adam-O’Connell model then aid has no effect on taxation: it is used entirely for transfers to the government’s supporters. However, this case is extreme. In general aid will at least in part be used for tax relief.
First consider the welfare cost of distortionary taxation. This is likely to fall over time, as the country develops. This may be illustrated with a very simple two-period model. Private agents inherit a capital stock $k$ and decide in the first period, after the government has announced the tax rate, $t$, how much of their first-period income $f(k)$ to save ($i$). Agents will choose the optimal level of investment so as to maximise the present value of utility in the two periods $W = u(c_1) + u(c_2)\beta$ where $\beta$ is the discount factor, $c_1 = f(k) - i$ is consumption in the first period and $c_2 = (1 - t)f(k + i)$ in the second period.\(^\text{18}\) The first-order condition is:

$$u'(c_1) = \beta u'(c_2)(1 - t)f'(k + i)$$

where primes denote derivatives. This condition simply equates the opportunity cost of investment (the utility of the consumption foregone in the current period) to its marginal benefit (the discounted utility of the increase in future consumption as a result of investment, taking into account that future output will be taxed). This condition implicitly defines the optimal level of investment as a function of the tax rate and the initial level of the capital stock. We will assume that increases in the tax rate reduce investment.\(^\text{19}\) The effect of a change in the tax rate on the welfare ($W$) of private agents is given by:

$$\frac{dW}{dt} = -\beta u'(c_2^*) f(k + i^*)$$

since the tax base is $f(k+i)$. Taking into account that the direct effect of an increase in the tax rate on tax revenue $T = tf(k+i)$ will be partly offset by the induced fall in investment:\(^\text{20}\)

$$\frac{dT}{dt} = f(k + i^*) + tf'(k + i^*) \frac{\partial i^*}{\partial t}$$

Hence the effect on welfare of an increase in tax revenue is given by:

$$\frac{dW}{dT} = -\beta u'(c_2^*) f(k + i^*) \left[ 1 + t \frac{\partial i^*}{\partial t} f'(k + i^*) \right]$$

which indicates that increased taxation reduces welfare.

How will this cost of taxation change if the economy develops? A more developed economy will enter the first period with a larger capital stock. This will be reflected in a higher level of investment and higher consumption in both periods. The increase in $c_2^*$ will, of course, reduce the marginal utility of consumption. This lowers the cost of

\(^{18}\)The functions $u$ and $f$ are assumed to be strictly concave.

\(^{19}\)For a utility function with a constant degree of relative risk aversion, $R$, this will be the case for $R < 1$.

\(^{20}\)We assume that the net effect is positive, i.e. that the economy is on the increasing part of the Laffer curve.
taxation: the utility loss due to a given reduction in consumption as a result of taxation is lower at higher levels of income. However, the denominator (which measures the elasticity of tax revenue with respect to the tax rate) will also be affected. In this one-sector model the elasticity will (for iso-elastic utility and production functions) decrease and this would tend to increase the cost of taxation. However, for plausible parameter values the first effect (the declining marginal utility of consumption) dominates so that the cost of taxation falls as the economy grows. Also, in reality economic growth will involve the development of new activities so that increased revenue is not only achieved by raising tax rates but also by developing new tax handles. This increases the elasticity of tax revenue with respect to tax rates, thereby reinforcing the fall in the cost of taxation.

Hence growth alone may well reduce the cost of taxation, even without any changes in the ways taxes are collected: there is no need to appeal to a fall in collection costs.

In static models of aid and taxation the rationale for aid is that it raises public expenditure and reduces the cost of taxation. The dynamic argument which we have sketched reinforces this: if the cost of taxation falls with development then this justifies concentrating aid on countries in the early phases of growth. Ironically, donors have in recent years tended to move in the opposite direction, insisting on the “tapering out” of aid in recently stabilised economies (Botchwey et al., 1998, Collier and Gunning, 1999). This donor obsession with domestic resource mobilisation (substituting taxation for aid) may well be misguided.

Now consider the second type of cost of taxation, that associated with tax collection itself rather than with the induced distortion. It might be argued that collection cost will fall over time as the tax authorities gain experience. Azam et al. (1999) model this as a learning-by-doing process by assuming that the marginal cost of tax collection is a decreasing function of the revenue collected in the past. A government which chooses to increase taxes will thereby give its tax inspectors the opportunity to learn to become more efficient, thereby reducing future collection costs. Clearly, donors would have to take such a learning process into account when deciding on their aid programmes. If they offered aid today they might undermine the learning process by inducing a reduction in taxation effort. As Azam et al. show this might lead to an equilibrium outcome with high aid and low tax collection efficiency. Aid would have the usual short-run benefits, but it would undermine institutional development by depriving the government of cost-reducing tax collection experience.

Whether the main effective of high taxes is indeed such a beneficial learning process is doubtful. While learning-by-doing can obviously play an important role in lowering tax collection costs it is not clear why higher tax rates would stimulate this process. What agents would learn might not be efficient tax collection but efficient bribery and tax evasion.

These issues must be resolved empirically. Sadly, there is very little evidence on the cost of taxation in poor countries.
6. A Knowledge Bank?

Donors, notably the World Bank, have often argued that aid is an important vehicle for the transfer of knowledge, both in project and in programme design, *i.e.* that knowledge is best transferred by tying it to aid or, in the jargon, by “bundling” finance and expertise (cf. Gilbert, Powell and Vines, 1999). Bundling is necessary, the argument goes, because recipient governments will not be willing to accept advice if it is not accompanied by finance. There are three objections to this position.21

First, it is not supported by the evidence. In structural adjustment lending advice is, of course, bundled with finance. We have already noted the finding in the Dollar-Svensson paper that the use of Bank resources in terms of staff input for the preparation and supervision of adjustment loans has no effect on the success or failure of adjustment programmes. While knowledge transfer is, of course, not identical to staff efforts in preparation and supervision, the two should be highly correlated. Hence, whatever bundling does, it cannot be said to ensure that knowledge is transferred in a form which contributes to programme success.

Secondly, bundling is equivalent to the tying of aid and has the same disadvantage: the recipient government cannot choose between suppliers. Donors differ, of course, in the expertise on which they can draw when giving technical advice (if knowledge was truly a public good then no need would be perceived to bundle finance and expertise) and there is no guarantee that any particular donor knows best. More importantly, tying undermines the recipient’s government’s accountability. When the government is not encouraged to develop its own position on the pros and cons of, say, a particular method of privatisation but relies instead on “force-fed” donor advice it can more easily deny responsibility for a subsequent failure.

Thirdly, if donors accept the case for selectivity it would be inconsistent to maintain bundling. The case for selectivity is that finance does not succeed in changing policies. There is no evidence that bundling improves this record. There is evidence, however, that knowledge transfer alone can be effective in building the case for reform. Indeed, the highest pay-off to technical advice on programme design appears to be in the pre-lending phase (World Bank, 1998, White 1999). Devarajan *et al.* (2000) find that the role of aid in two of the three successful reformers in their sample of African countries, Ghana and Uganda, was largely the provision of ideas in the pre-reform stage, rather than the provision of finance. Indeed these two countries appear atypical in having received relatively little financial aid in their pre-reform phases.22

Unbundling seems particularly pertinent for programme lending. If ownership is to be encouraged by letting governments free in designing their programmes then evidently they should be left free in deciding what information they require and from whom that

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21 Note that the first and the third objection are specific to programme lending; the second objection applies both to programme and to project lending.
22 This provides support for the position argued in *Assessing Aid* that aid to countries not yet committed to reform should take the form of ideas rather than money. The third country, Mali, did get considerable aid in the pre-reform stage but this appears to have played little role in the adoption of reforms. Côte d’Ivoire, now often classified as a successful reformer, had a long period of half-hearted reforms (Botchwey *et al.*, 1998).
information is to be obtained. Governments would then hire technical expertise themselves, either from consultancy firms or from donor agencies. Clearly, this would radically change current donor practices.

Donors can transmit knowledge not only to recipient governments but also to private agents, including foreign investors. Here the case for a donor role is much stronger. There now is a class of poor countries in which, as a result of recent economic reforms, the policy environment can be considered as adequate. However, since the reforms are recent, the private financial sector still has outdated information about these economies. Because many of these economies are very small, particularly in Africa, the private sector has little incentive to incur the high costs of acquiring the information necessary for accurate risk assessments. As a result, many newly reformed poor countries are rated as more risky than is justified on the basis of fundamentals. They therefore fail to attract investment, in spite of the far-reaching reforms they have adopted in the past decade. This is important because these newly reformed countries are critically short of private investment. In this context the rationale for a donor role is the underinvestment by private agents in information about the government’s type.

In this view the “knowledge bank” would focus, not on transmitting knowledge to, but about developing countries. As before, the question arises whether this calls for bundling. Some have argued that signalling by a donor agency is credible only when it has some of its own money at stake. I am not convinced by this argument. In the case of bundling investors might perceive the signal as noisy if they suspected that the donor’s own lending to the country would bias its reporting. It would then be difficult to distinguish between genuine positive news based on the donor’s superior information and positive news which reflected the donor’s wishful thinking. Far from bundling the two functions one would therefore want to separate them quite clearly. This might provide a basis for a division of labour between donor agencies, e.g. the World Bank lending for long-run growth in stabilised economies and the IMF limiting itself to signalling.

However, it should be noted that the noisiness of the signal provided by donor involvement in an economy is largely the result of current aid allocation practices. When these change in the direction of selectivity the problem will be solved automatically: donor involvement would be limited to good policy environments and would therefore be in itself informative to private agents.

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24 Cf. Rodrik (1995). The case for the IMF to adopt such a signalling role in post-stabilisation economies was argued in the external evaluation of the ESAF (Botchwey et al., 1998) and in Collier and Gunning (1999).
25 This was the position of the Board of the IMF in response to the recommendation of the external ESAF evaluation that the Fund adopt a signalling role (based on limited monitoring) in post-stabilisation economies.
7. Conclusion

The recent debate on aid effectiveness has focused on three functions of aid: (1) providing finance, (2) changing policies in recipient countries, and (3) transmitting knowledge. In reviewing this debate we have stressed the ineffectiveness of aid in the second of these roles and the desirability of separating the other two roles more clearly.

Whether aid is effective in raising growth rates through the provision of finance has come to be questioned. Evidence from growth regressions suggests that aid is effective, but only in good policy environments. The econometric dispute surrounding this finding is not yet resolved. However, the importance of the policy environment also emerges from micro evidence on the returns to projects.

Evidence on the effect of negative trade shocks on growth suggests an insurance role for aid.

There now is overwhelming evidence that the use of aid to effect policy reform does not work. We have argued that rather than redesigning the aid contract to make ex ante conditionality effective donors should switch to ex post conditionality (selectivity). Under selectivity the allocation of aid is tied to success. This would enable donors to play an important signalling role in transmitting information on government policies and outcomes to private agents. Since aid allocations have been dominated by political considerations the potential of such a signalling role has remained largely untapped. Where economic reforms are recent (as is, for example, the case in much of Africa) signalling can play an important role.

We have suggested that the cost of taxation is likely to be atypically high in poor economies. Donor efforts to promote tax efforts in these economies may well be misguided. The high cost of taxation and the likelihood that it will decline with growth may justify the use of aid for tax relief.

We have argued that the transfer of knowledge to developing countries need not be “bundled” with the provision of aid. Indeed they should be separated if the case for selectivity is accepted.
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