

## **Development Effectiveness: What have we learnt?**

Paul Collier and David Dollar  
Development Research Group, the World Bank

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## 1. Introduction

In the mid-1990s there was widespread pessimism about the future contribution of aid. Despite huge aid receipts, many countries had deepening poverty. Aid budgets were in steep decline. The latest academic evidence suggested that donors had little control over how a recipient government used the finance for a particular project. Aid was highly 'fungible' so that to a considerable extent donors were in reality augmenting the resources available for the government. While this of itself need not have been worrying, other academic research, notably Boone (1995), purported to show that aid had no significant effect on growth. The implication appeared to be that, despite the appearance that aid was channeled by donor agencies into useful development projects, in reality, aid was under the control of recipient governments which were wasting it.

However, since the mid-1990s there has been a major research effort into aid effectiveness by academics around the world and at the World Bank, and also a major rethinking of practices by donor agencies. Some of this work has challenged previous results head-on. For example, Hansen and Tarp (2001) completely reverse Boone's result: aid is effective, without qualification, in enhancing the growth process. Such upbeat results are, of course, heartening for aid agencies, although in one sense they are too upbeat to be helpful: they can only account for the many failures of aid as random, and so provide no guidance as to how to make aid programs more successful. Other work, including our own, has attempted to nuance the earlier analysis: aid is more effective in some circumstances than in others. One advantage of this work, which is indeed why it has proved controversial, is that unlike unqualified condemnation or approbation, it provides guidance for improvement. An inability to account for any of the high failure rate of past aid programs is surely unsatisfactory, both from the perspective of aid agencies, and from the perspective of research. It is likely that there are some systematic lessons to be learnt in respect both of the choice of recipient country and the style of relationship with the government.

In Section 2 we review three recent attempts to nuance the analysis. Each takes as its starting point the notion that a donor will be working *with* the recipient government, either providing it with budget support, or financing projects but accepting that some of this support is fungible and so finances other government projects. One attempt at a nuanced analysis of aid effectiveness was Burnside and Dollar (2000) who argued that aid is more effective in better policy environments. In a previous paper (Collier and Dollar, 2000) we combined this with the obvious but important and neglected point that aid is more effective in high-poverty countries to show how aid allocation might be more 'poverty-efficient'. Our purpose was not to constrain aid allocation to some rigid mechanistic formula, but simply to provide benchmarks which could help aid agencies think through the fraught but important issue of how a given aid budget should be allocated among countries. These results have recently been challenged, and in Section 2.1 we in turn test the counter-propositions of the critics. A second attempt at a nuanced analysis of the effect of aid on the growth process is that of Guillaumont et al. (1999) and Dehn and Gilbert (2000) who argue that aid is more effective in those countries prone to severe external shocks. We review this work and its implications in Section 2.2. A third attempt at a nuanced analysis is that of Collier and Hoeffler (2001). They switch the focus from the effect of aid on growth to its effect on the risk of large-scale civil conflict. They find that in some countries aid can substantially reduce the risk of such conflict. In Section 2.3 we summarize this work and discuss its implications for aid allocation.

In many situations aid agencies are not content to accept the recipient government's priorities or even its conduct. In Section 3 we review the experience of donor attempts to influence the policy and conduct of recipient governments. Section 3.1 reviews the experience with inducing policy change and Section 3.2 considers the less analyzed effects of aid on the quality of governance. The broad conclusion from Section 3 is that, while much can be done to improve the potency of aid in these respects, it is unlikely to be a very powerful instrument for inducing either type of change and so these considerations should not become a dominant influence upon aid allocation.

If there are severe limits in using aid to induce changes in government behavior, donor agencies may wish to operate in the country but yet not fully trust the government to achieve donor objectives. Aid agencies have themselves tried to nuance the fungibility analysis by adopting practices in some countries which are likely to make aid less fungible, thereby enabling them to finance projects which reach the poor without relying upon the good intentions of the government. In Section 4 we try to systematize some of the criteria that have been suggested to us by practitioners so as to differentiate countries according to the likely fungibility of an aid program.

Finally, in Section 5 we bring the analysis together. What does it imply for an effective aid program?

## **2. Working *with* Governments**

### **2.1 *Reducing Poverty***

Poverty reduction is the central goal of aid programs. The Collier-Dollar model applies the Burnside and Dollar results to the question of how should aid be allocated for poverty reduction (Collier and Dollar, 2000). We derive an allocation rule which shows the allocation which would have the largest impact on poverty reduction were donors to have only very limited information about countries. Specifically, the only information which this allocation takes into account is the depth of poverty in a country, the distribution of income in the country, and a broad measure of the country's policies. In practice donors know much more than this and of course they should use this information. The 'poverty-efficient' allocations are simply benchmarks against which deviations can be justified: 'the poverty-efficient allocation does not take into account X and Y and so it is sensible to allocate more money to country A and less to country B'. Nevertheless, the benchmark allocation is useful to protect from lobbying. Sometimes lobbying is morally innocent: aid workers ought to believe in what they are doing, so that naturally, those who work on (say) water projects in Nicaragua will tend to want more of them. Sometimes lobbying is morally doubtful: consultancy firms will want aid to go to projects and countries in which they specialize. In both cases lobbying gets in the way of the efficiency of aid programs. Precisely because the people who pay for inefficiency in aid programs are very poor people who could otherwise have been helped, it is morally incumbent upon the management of aid agencies to strive for programs which are as efficient as possible.

The first step in the estimation of a poverty-efficient allocation is to allow for diminishing returns to aid. Both Collier and Dollar and Hansen and Tarp find empirical support for diminishing returns. Furthermore, the result is analytically highly plausible: beyond a point, as aid is increased as a proportion of GDP, the marginal growth response will surely diminish.

A second step is the inclusion of policy. Both Burnside and Dollar and Hansen and Tarp use objective measures of macroeconomic policy. Collier and Dollar use the subjective CPIA scores. All three studies find that policy is directly important for growth. This is important common ground: 'better' policy, in the sense conventionally used by the Bank, is indeed found significantly to raise growth. While there have been some serious errors in policy advice, and important questions remain unresolved, these studies imply that the broad thrust of Bank policy advice over the last two decades has been correct.

If policy is important for growth, it is likely that one route by which this occurs is that better policy raises the return on investment. Indeed, it is quite challenging to think of a credible model in which *broad* policy improvement raises growth but lowers the return on investment (although particular policies could have this effect). Since public and private investment tend to be complements, we would expect that better policy would raise the return not just on investment in general, but also on public investment. There is indeed strong microeconomic evidence for this proposition from Bank-supported public investment projects evaluated by the Bank's Operations Evaluation Department. Isham and Kaufmann (2000) show that there is a strong positive association between policy and the rate of return on these projects. This is the relationship found at the macroeconomic level by Burnside and Dollar (using objective indicators of policy) and by Collier and Dollar (using the Bank's subjective CPIA score).

This relationship is challenged by Dalgaard and Hansen (2000) on analytic grounds and by Hansen and Tarp and empirically. The analytic story told by Dalgaard and Hansen is that aid and good policy are substitutes in achieving social peace which in turn induces investment. In a good policy environment the populous does not need to be mollified with aid, whereas in a poor policy environment aid buys tranquility and so reduces the risks of investment. A given amount of investment will still be more productive the better is the policy environment. However, because aid has more impact on the quantity of investment when policy is poor, its impact on growth could even be greater when policy is poor, and is in general ambiguous.

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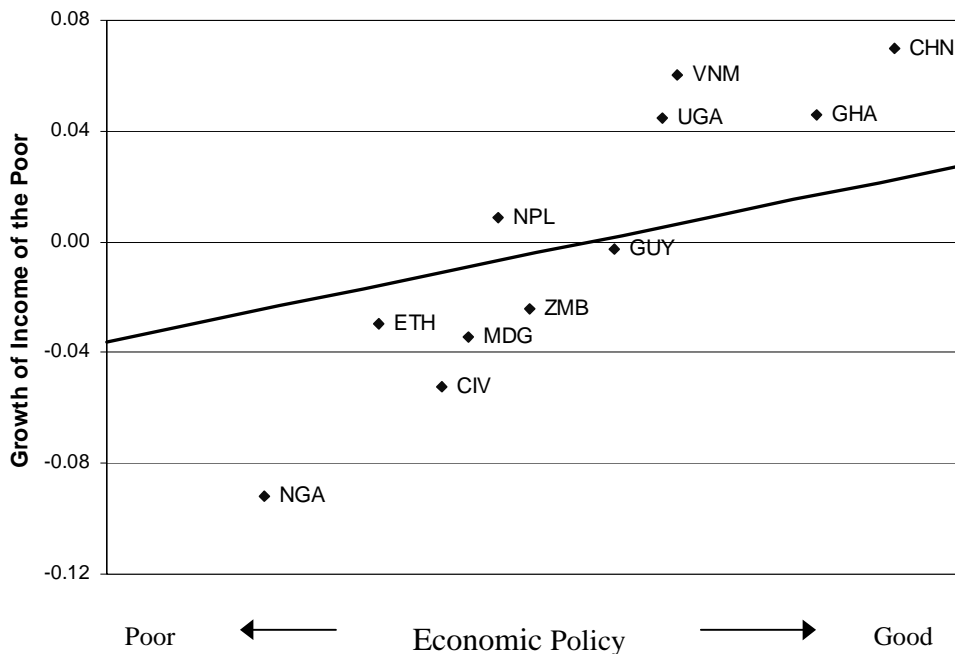
**Box 1. What is good economic policy?**

“Good economic policy,” conceptually, measures the extent to which government policy creates an environment for broad-based growth and poverty reduction. The World Bank measures this through its Country Policy and Institutional Assessment (CPIA); it has 20 components which can be grouped into four categories:

- **Macroeconomic policies:** whether fiscal, monetary, and exchange rate policies provide a stable environment for economic activity;
- **Structural policies:** the extent to which trade, tax, and sectoral policies create good incentives for production by households and firms;
- **Public sector management:** the extent to which public sector institutions effectively provide services complementary to private initiative, such as the rule of law (functioning of the judiciary, police), infrastructure, and social services;
- **Social inclusion:** the extent to which policy ensures the full participation of the society through social services that reach the poor and disadvantaged, including women and ethnic minorities.

There is a very close relationship between this measure of policy and actual improvements in living standards of the poor. The figure below shows the average relationship between the CPIA and growth of income of the poor (defined as the bottom 20% of the income distribution) during the 1990s. The relationship is estimated across 80 countries; a few specific ones are identified as illustrations. Uganda, Vietnam, Ghana, and China all have good policy environments for low-income countries, and have had rapid growth of income of the poor. Zambia and Cote d’Ivoire would be examples of weaker policy environments in the 1990s, and Nigeria would be an example of a very poor policy environment. In these countries income of the poor declined during the 1990s.

**Growth of Income of the Poor and Policy in the 90s**



This ingenious argument is entirely consistent with the project-level evidence that the rate of return is higher when policy is better. Dalgaard and Hansen do not challenge the proposition that better policy raises the return on investment, but rather introduce an additional relationship such that the effect of aid on the quantity of investment is adversely affected by better policy.

However, before overturning the inferences from the project-level evidence it would be reassuring were there some evidence supporting the Dalgaard-Hansen hypothesis that policy improvement reduces the impact of aid on the quantity of investment. Although the authors do not provide any evidence for their model, their hypothesis that aid is more conducive to investment the *worse* is the policy environment is readily testable and can be formulated in an investment function (1). The hypothesis is that while the coefficients on aid and on policy are themselves positive, the coefficient on their interaction is negative. To allow for diminishing returns to aid, a point correctly stressed by Dalgaard and Hansen, the function also contains an aid squared term, the coefficient on which should be negative.

$$I = a + bA - cA^2 + dP - eAP \quad (1)$$

Where:

$I$  = investment/GDP

$A$  = aid

$P$  = policy

We test this hypothesis on the same data set used in Collier-Dollar (2000), the results being reported in Table 1. We find solid evidence for a positive average contribution of aid to investment: for the typical developing country (getting 2% of real PPP GDP in aid and with average policy), an additional 1% of GDP in aid results in an estimated additional 0.9 percentage points of GDP in gross investment. However, we also find that there are diminishing returns to aid, so that the leakage from aid to consumption increases as aid is increased.. This is consistent with reasonable priors but it is very important in determining an efficient allocation of aid, because it implies that aid should be spread across many poor countries rather than just concentrated in the poorest. Turning to the test of the Daalgard-Hansen hypothesis, the interaction term between aid and policy is indeed highly significant – indeed more significant than any of the direct effects of aid and policy on their own (it has a t-statistic of 4.62 in specification #2). However, precisely contrary to their hypothesis, the interaction term is *positive*. For spurring investment, aid and policy are complements, with better policy substantially increasing the effectiveness of aid in inducing investment, rather than substitutes, with better policy reducing the effectiveness of aid as Daalgard and Hansen propose. In a good policy country aid has twice as much effect on the quantity of investment as in a poor policy country, which helps explain why it has more impact on growth in that context. In the Appendix we subject the results to robustness checks. We have found no variant in which the interaction term is negative. Daalgard and Hansen stress that their model only serves as an example of how better policy might reduce the effectiveness of aid. However, it is the only explanation which they offer for their proposition and they do claim that ‘we believe the model captures some important aspects of aid and growth in developing countries’ (p.4).

While the Dalgaard-Hansen hypothesis is evidently rejected, we have much sympathy both for the notion that aid can reduce the risk of social conflict, and for the notion that aid should be allocated so as to compensate for deficiencies in the environment. We explore this thoroughly in the next section. We show that aid can indeed be effective in reducing the risk of social conflict, so that when social peace is an objective of aid, it will be appropriate to target aid to countries with quite high risks of conflict. However, we show that far from being substitutes, aid and policy are again highly complementary: aid is much more effective in reducing conflict in better policy environments, so that even with peace as the explicit objective, aid will not be systematically targeted to poor policy environments.

We now turn from the analytic critique of the presumption that better policy raises the return on aid to the empirical critique. Hansen and Tarp (2001) criticize the Burnside and Dollar result on grounds of model specification and sensitivity to sample. As shown in the appendix, these criticisms are themselves flawed. If the full sample is used, then the model specification adopted by Hansen and Tarp is rejected in favor of that used by Burnside and Dollar. The Hansen-Tarp model specification is accepted only if five outliers are dropped, but in this case they themselves find a significant and positive aid-policy interaction effect.

In summary, the critiques of the presumption that better policy raises the return on aid are to date somewhat unpersuasive. The presumption does not, however, depend upon a single regression result. It is consistent with the microeconomic evidence from the OED dataset, with the investment regression presented above, and increasingly with donor practice (which in turn reflects agency experience).

The third, and most important component of the Collier-Dollar allocation rule is to allow for differences in the incidence of poverty. This is not academically controversial but it is the aspect of aid allocation which provides most scope for improvement. Large, poor countries such as Bangladesh and Ethiopia are systematically under-funded relative to a poverty-efficient allocation.

Poor policy cumulatively causes poverty, and this creates a tension between the second and the third principles of poverty-efficient aid allocation. The second principle is that aid should be given to countries with good policy, the third is that aid should be given to countries with high poverty, but countries with high poverty tend to have poor policy. To illustrate the nature of the tension, we construct a 'policy-blind' allocation of aid in which only diminishing returns and poverty are taken into account. The resulting allocation of aid would have a negative correlation with the CPIA score of -0.31. If donors ignored policy and just focused on poverty, aid programs would be heavily skewed in favor of countries with poor policies. The poverty-efficient allocation, which takes both policy and poverty into account, yields an allocation which is virtually neutral with respect to policy: the correlation between policy and aid is 0.07. While the allocation rule has sometimes been accused of being harshly selective, as if it advocated walking away from the weak policy countries, it is in fact virtually neutral with respect to policy. The effect of taking policy into account simply counters the bias towards poor policy countries implicit in taking poverty into account. While the 'policy-blind' allocation and the 'poverty-efficient' allocation are thus very differently correlated with policy, they are in fact quite closely correlated with each other: their correlation coefficient is 0.79. Indeed, all the divergence is created by a few countries at the extremes of policy. Moving from the 'poverty-efficient' to the 'policy-blind' allocation would produce a large transfer to Burma, Sudan, Somalia, Nepal and

Afghanistan from Uganda and Ethiopia. It seems to us doubtful whether the Dalgaard and Hansen and Hansen and Tarp studies provide compelling evidence in favor of such a transfer. Indeed, Hansen and Tarp favor skewing aid towards countries with better policy, as in the poverty-efficient allocation. Their rationale for this is to avoid aid providing an incentive for policy deterioration. Clearly, the 'policy-blind' allocation ends up rewarding governments for poor policies and this gives rise to a moral hazard. We consider the effects of aid on policy in more detail in Section 3. On the whole we believe that the incentive effects of aid, for good or ill, have been exaggerated. However, we accept that a sensible constraint upon any aid allocation formula is that it should not systematically reward poor policy. Formally, this would require that the correlation coefficient between aid and policy should be non-negative: we will refer to it as the 'moral hazard constraint'. As it happens, this is (barely) satisfied both by the poverty-efficient allocation and by actual aid allocations (as of 1996) but would be severely contravened by a 'policy-blind' allocation rule.

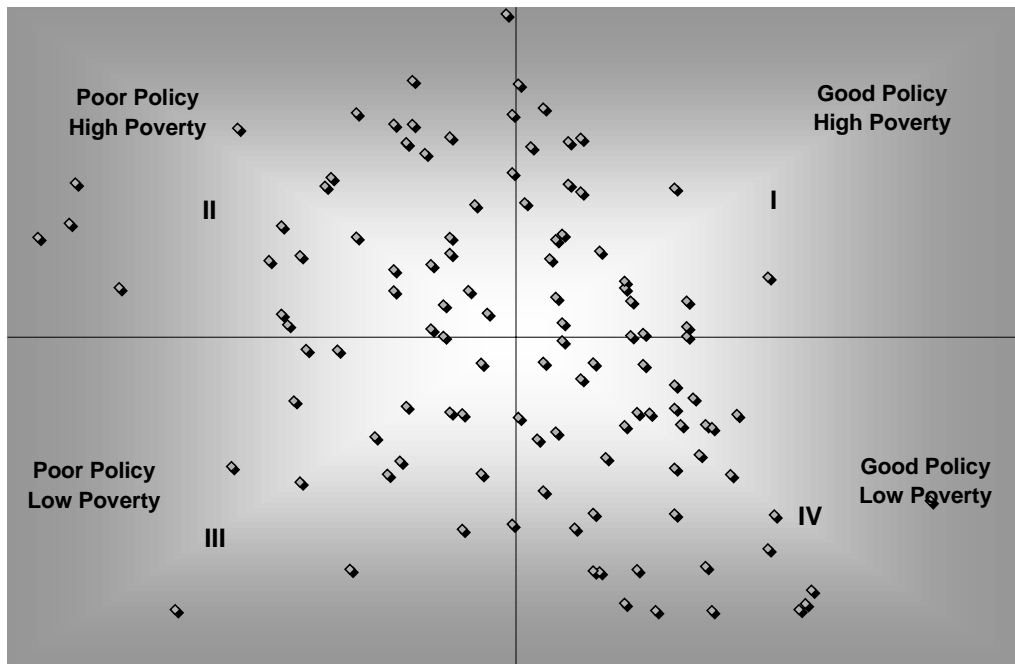
Hence, the celebrated dispute between Burnside and Dollar (2000) and Hansen and Tarp (2001) happens to have virtually no implications for aid allocation. Both sides accept that aid allocation should be linked to policy as well as to poverty, and the minimum degree of linkage necessary to avoid moral hazard is extremely close to the actual allocation proposed by Collier and Dollar (2000). The dispute is merely about why aid should be linked to policy, not whether it should be linked.

To see the practical import of linking aid allocations to both poverty and policy consider Figure 1 which depicts countries in the four quadrants of policy-poverty space. In general, aid is going to be more effective in the countries in quadrant I (above average poverty and above average policy). The relatively good policy here means that assistance will be used effectively. The high poverty in these countries means that growth spurred by aid will have a large effect on poverty reduction. In quadrant IV (above average policy but below average poverty), aid will also be effective at promoting growth, but it is not efficient to give a lot of aid to these countries because poverty is relatively low. Chile or Thailand would be examples of countries with good policies but relatively low poverty.

In quadrant II there are countries with severe poverty. However, the weak policies mean that aid is not that effective in generating growth and poverty reduction. The countries in quadrant III have poor policies and relatively low poverty (these are mostly transition economies such as Russia or Ukraine).

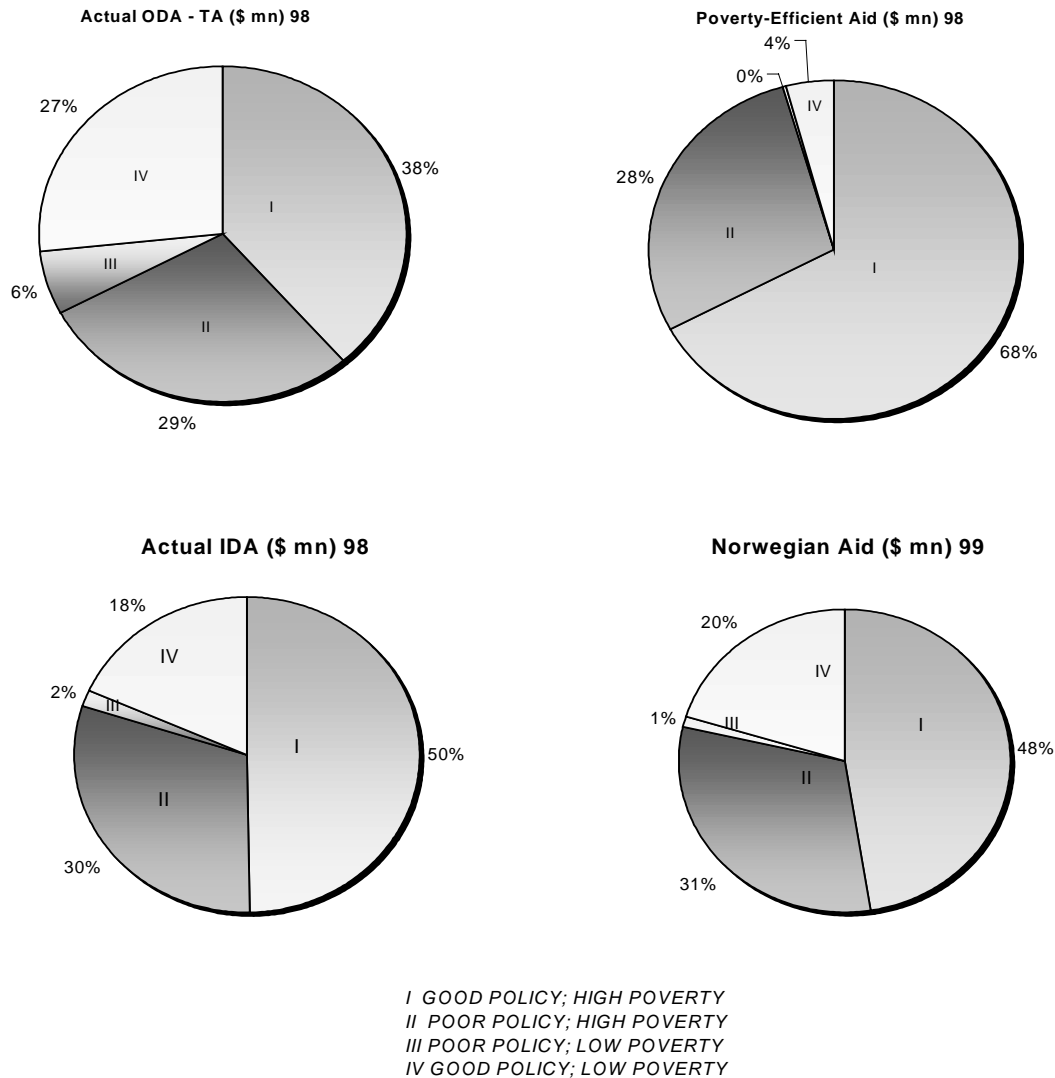
Figure 1 is useful as a heuristic device to emphasize that among poor countries there are large differences in economic policy and that aid will be more effective at reducing poverty in the countries that are in the upper right (high poverty, good policy). However, our model of efficient aid does *not* say that the moment you cross the line between quadrants II and I that aid suddenly becomes effective. Rather, the model says that aid becomes *more effective* as you move to the right in the figure. We have devised a specific algorithm for allocating aid to have the maximum effect on poverty, an algorithm in which the amount of aid that a country receives increases with the quality of policy and also increases with the extent of poverty (Collier and Dollar, 2000).

Figure 1. Poverty and Policy, 115 Developing Countries, 1999



In Table 2 we show a “poverty-efficient” allocation of the world’s aid for 1998. (The year 1998 is the most recent one for which we have the data on the allocation of total world aid.) This provides a useful benchmark for looking at the efficiency of donor assistance. Figure 2 shows how our “poverty-efficient” aid is allocated across the countries in the four quadrants. (Because China and India are so large, we left them out of this calculation.) In particular, 68% of assistance goes to the “good policy, high poverty countries.” Note that the countries in the “high poverty, poor policy” group get 28% of the allocation. This drives home the point that our recommendation is *not* to give zero assistance to the poor policy countries. The main thrust of our analysis is that donors should be giving more assistance to those high-poverty countries in which policy is above average than to those in which policy is poor. Up through the mid-1990s, donors were not doing this at all. In the past two years, however, there has been a notable change in donor behavior, in the direction that we have advocated. Some poor policy countries such as Kenya have seen clear cuts in their aid receipts.

Figure 2. Actual and Poverty-Efficient Aid Allocation



As can be seen in Figure 2, the allocation of total ODA in 1998 was far from the “poverty-efficient” allocation. We should stress that the ‘poverty-efficient’ allocation is not meant as a mechanistic formula: donors should indeed use additional knowledge to depart from the benchmark allocations. It is possible that the actual deviations from the benchmark indeed reflect just such a process of appropriate usage of information. However, the actual pattern of deviation from the benchmark casts some doubt on this. Systematically, donors in the aggregate continue to give a lot of assistance to middle-income countries. It is unlikely that this reflects a superior use of information: in these countries aid is not likely to have much impact on poverty. In middle-income countries aid is likely to be highly fungible because it is a smaller fraction of the national budget. Hence, aid will simply reduce poverty through augmenting the growth process. Yet in most middle-income countries the impact of growth on poverty reduction is much smaller than in most low income countries, for the obvious reason that there are proportionately fewer poor people. It is therefore more likely that the deviations from the ‘poverty-efficient’

benchmark in favor of more aid to middle-income countries (and correspondingly less aid to low-income countries) reflect some combination of bureaucratic inertia and the influence of strategic and commercial interests. As an example of bureaucratic inertia, many national aid programs to Botswana rolled on well after Botswana's spectacular rate of growth had lifted it out of low income status.

## ***2.2 Reducing Macroeconomic volatility***

There is now considerable evidence that macroeconomic shocks have negative net effects on growth and poverty. The most thoroughly analyzed type of shock has been terms of trade shocks. Collier and Gunning (1999) provide systematic case studies of 23 trade shocks in developing countries, and Dehn (2000) provides a global econometric analysis. The two approaches concur in finding that on average booms are not translated into sustained increases in income, whereas negative shocks cause sustained losses.

Developing countries differ massively in their degree of exposure to terms of trade shocks. African economies are the least diversified, with other developing regions having succeeded in reducing primary commodity dependence over the past three decades. However, even diversified economies such as Indonesia can suffer severe macroeconomic shocks originating in the financial sector rather than trade.

Two recent studies, Guillaumont et al, (1999) and Dehn and Gilbert (2000) have found some evidence that aid differentially raises the growth rate in those countries which are the most shock-prone. This is in the spirit of the Dalggaard-Hansen hypothesis that aid has enhanced effectiveness when it compensates for some disadvantage, although the disadvantage is now not poor policy. Neither study has presently established a precise mechanism by which aid disproportionately assists shock-prone economies. One possibility is that aid finances the complementary infrastructure which enables producers to take advantage of price shocks, shifting production into whichever commodity is currently most profitable. A second possibility is that aid provides a cushion, especially for government revenue, enabling governments to survive revenue shocks with less disruption. These routes would have radically different implications for aid policy: the former would prioritize infrastructure provided in anticipation of shocks, whereas the latter would prioritize budget support provided counter-cyclically and earmarked for the protection of non-deferrable recurrent expenditures such as education and health. Until we have a better understanding of why aid is more effective in shock-prone economies, it is therefore difficult to draw practical implications for donor allocation rules.

## ***2.3 Reducing the risk of conflict***

While poverty reduction is the central objective of aid programs, the promotion of security is also an important and legitimate objective. Partly, this is instrumental: conflict causes poverty and securing peace is a necessary first condition for development. Most of the lowest income countries have recent experience of large scale violent civil conflict. However, the case for focusing on the reduction of conflict is much stronger than its role in poverty reduction. Freedom from large scale violence is a fundamental human goal: in traditional societies communities often prioritized security over poverty reduction, choosing to be poor if this reduced the risk of being attacked (Bates, Greif, and Singh, 1998). Further, security is a global public good: the

breakdown of order in one country provides a haven for crime and disease which respect no boundaries.

Recent research has begun to quantify the risk of civil war, and to analyze the effect of aid on this risk (Collier and Hoeffler, 2000, 2001). The Collier-Hoeffler model of civil war is based upon global data for the period 1960-99. The model predicts the risk of conflict during a five-year period, on the basis of characteristics prior to the period. Table 3 presents the results of the core logit regression. Collier and Hoeffler find that economic factors are highly significant in determining the risk of conflict, so that potentially both policy and aid can be effective in reducing risks. Three aspects of economic performance are directly important. A faster rate of economic growth directly reduces the risk of conflict. A higher level of per capita income directly reduces the risk of conflict. Reduced dependence upon primary commodity exports directly reduces the risk of conflict. Surprisingly, the obvious indicators of political grievance, notably poor political rights and high economic inequality, have no effect on the risk of conflict. Collier and Hoeffler suggest that perhaps most societies have groups who are willing to resort to violence for some cause, so that the determining factors in whether civil war occurs are not grievances but rather the financial and military ability of such groups to engage in large-scale combat. Rapid growth and high per capita income make it more difficult for rebel organizations to escalate combat, whereas a high degree of dependence upon primary commodity exports offers rebels opportunities for financing their organization (as with alluvial diamonds in West Africa, drugs in South America, and timber in East Asia). This suggests that even were aid able to influence political rights and inequality, which is itself rather doubtful, it would not significantly affect the risk of conflict. Nevertheless, aid does have quite substantial effects on conflict risk via the economic variables.

Aid potentially affects the risk of conflict through several different routes. First, it might directly affect risk through augmenting the government budget. This might enable the government to increase its military expenditure, or it might act as a lure to rebels seeking to capture the state. Collier and Hoeffler add aid into their regression of conflict risk. Aid is lagged by one five-year period to reduce problems of endogeneity: donors will evidently reduce funding to countries in conflict. They find that there is no significant direct effect. All the effects of aid work through the three economic variables noted above: the level, growth and structure of income.

The effect on the level of income evidently works by means of the cumulative effect of growth. The effect of aid on growth was central to our above analysis of aid on poverty, and so the same analysis now applies in the context of the reduction of conflict risk instead of poverty. The effect of aid on the structure of income works through two distinct routes. *A priori*, we would expect aid to cause 'Dutch disease': the provision of foreign exchange through aid tends to appreciate the real exchange rate and so reduces the incentive to export. Collier and Hoeffler find that aid indeed directly reduces dependence upon primary commodity exports and Dutch disease is the most likely explanation. Additionally, to the extent that it raises income, aid further reduces primary commodity dependence. As economies grow they typically change their structure away from primary commodities.

To summarize, although there is no direct effect of aid on conflict risk, there are four indirect effects, all favorable. Three of these depend upon policy: with reasonable policy in place, aid raises growth. This directly reduces conflict risk, cumulatively raises income, which further reduces conflict risk, and gradually changes the structure of the economy away from primary

commodity dependence, which also reduces conflict risk. Only the fourth effect, Dutch disease, does not depend upon policy.

In Table 4 we simulate the effect of a donor-government package of additional aid of \$1 per capita per year, sustained for five years, and a one point improvement in economic policy as measured by the World Bank's Country Policy and Institutional Assessment, also sustained for five years. We take a hypothetical country which has the characteristics of the average aid recipient country. Initially, the conflict risk for such a country is 11.3%: that is, during a five year period there is approximately one chance in nine that a major civil conflict will be initiated, causing more than one thousand combat-related deaths. Sustained over five years, the aid and policy improvement package reduces this risk to 7.9%. Thus, the risk is reduced by around 30% in a relatively short period. With policy reform alone, that is, without the increase in aid, the risk would have been reduced to 8.6%. Hence, the relatively small increase in aid reduces the risk by around 10% and the (relatively large) improvement in policy reduces risk by around 20%. While these are simulations for a hypothetical country, they illustrate the orders of magnitude which donors might expect from aid used to prevent civil conflict.

In the above example we considered a representative aid recipient country. We now consider differences between countries so that aid for conflict prevention might be targeted where it is most effective. Where the objective of aid is poverty reduction, our previous argument has been that aid should target countries with the combination of good policies *and* high poverty. Just focusing on countries with good policy is wasteful, because many of these countries have little poverty, and just focusing on countries with high poverty is wasteful because many of these countries have policies which are too poor for aid to be effective. When the objective is conflict prevention there is an analogous need to target countries which have the combination of good policies and a high risk of conflict. Most countries with good policies do not have a high risk of conflict. Conversely, some of the countries with high conflict risk have policies which are too poor for aid to be effective in risk reduction. Allocating aid according to conflict risk is in the spirit of the Dalgaard-Hansen hypothesis that aid can compensate for other disadvantages, but has two advantages over their suggestion of compensating for poor policies. First, there is clear empirical evidence showing that aid is effective in compensating for other factors which contribute to a high risk of conflict. Second, there is much less reason to worry about moral hazard effects: governments broadly want to reduce conflict risk as much as possible, with some governments unlucky enough to find themselves in high risk environments due to factors outside their control, such as a previous history of conflict and unfavorable geography. Thus, an increase in aid is unlikely to be offset by other actions.

In principle, it is possible to estimate a 'security-efficient' allocation of aid analogous to the 'poverty-efficient' allocation. A 'security-efficient' allocation would equalize the marginal contribution of aid to risk reduction across aid-recipient countries. However, such a technocratic approach to conflict reduction would be of little interest. A poverty-efficient allocation starts from known and massive differences in the incidence of poverty between countries. By contrast, while there are presumably large differences in the risks of conflict between countries, these are not readily observable. Estimates of risk can be generated by a model such as that developed by Collier and Hoeffler, or they can be made through the normal process of intelligence assessments which are in any case generated in the foreign ministries of donor governments. The utility of the Collier-Hoeffler model lies not in its superior ability to forecast, but in its demonstration that aid is effective in substantially reducing conflict risk in those environments in which economic policy is reasonable. Hence, rather than have a publicly available 'security-efficient' aid

allocation (which would require the World Bank publicly to forecast conflict), it is better for those donor governments that wish to use aid as an instrument for conflict reduction to make their own risk assessments. The Collier-Hoeffler model can then be readily used, in conjunction with the economic policy ratings, to quantify the likely reduction in risk achievable from an augmented aid program. Since aid in combination with policy reform is highly effective in reducing conflict risk even for the average aid recipient, it is likely to be even more effective in some of the high-risk environments. We illustrate this by taking the non-controversial example of Zaire as of 1995, a country which collapsed into severe conflict during the ensuing five years.

It was perhaps not difficult for the intelligence services of a foreign ministry to forecast as of 1995 that Zaire faced a high risk of civil conflict. The Collier-Hoeffler model 'predicts' that as of 1995 Zaire had the highest risk of conflict of any then-peaceful country, with a risk of conflict of 76% during the next five years. We presume that intelligence services, with access to far more information than used in this model, were producing similar forecasts. Hence, the collapse in Zaire probably did not take donor governments completely by surprise. The more pertinent question is whether donor agencies and the IFIs could have done anything to reduce this risk. We now use the model to simulate whether it was possible to reduce conflict risk from 76% to the more viable level of 30% (Table 5). We find that this would have been achieved by a combination of an economic reform program of about the same magnitude as achieved by Uganda during the period 1989-91, and a tripling of aid receipts. Whether either of these was feasible in the circumstances of Zaire in the mid-1990s is questionable. However, the neighboring Uganda model was already in place as an example, and it is perhaps conceivable that President Mobutu might have been persuaded of the evident fact that the resulting reduction in conflict risk would be to his own advantage. Had such reforms been implemented, the donor community would probably have found a tripling of funding an affordable price to pay for a major reduction in conflict risk.

### **3. Encouraging Changes in Policy and Governance**

In Section 2 the donor worked *with* the government, in the sense that the donor did not try either to change or to frustrate government intentions. However, in many instances donor agencies would like to encourage change, either with respect to a specific policy or in the broader conduct of governance. We now consider the evidence on the efficacy of aid as an instrument for inducing these changes.

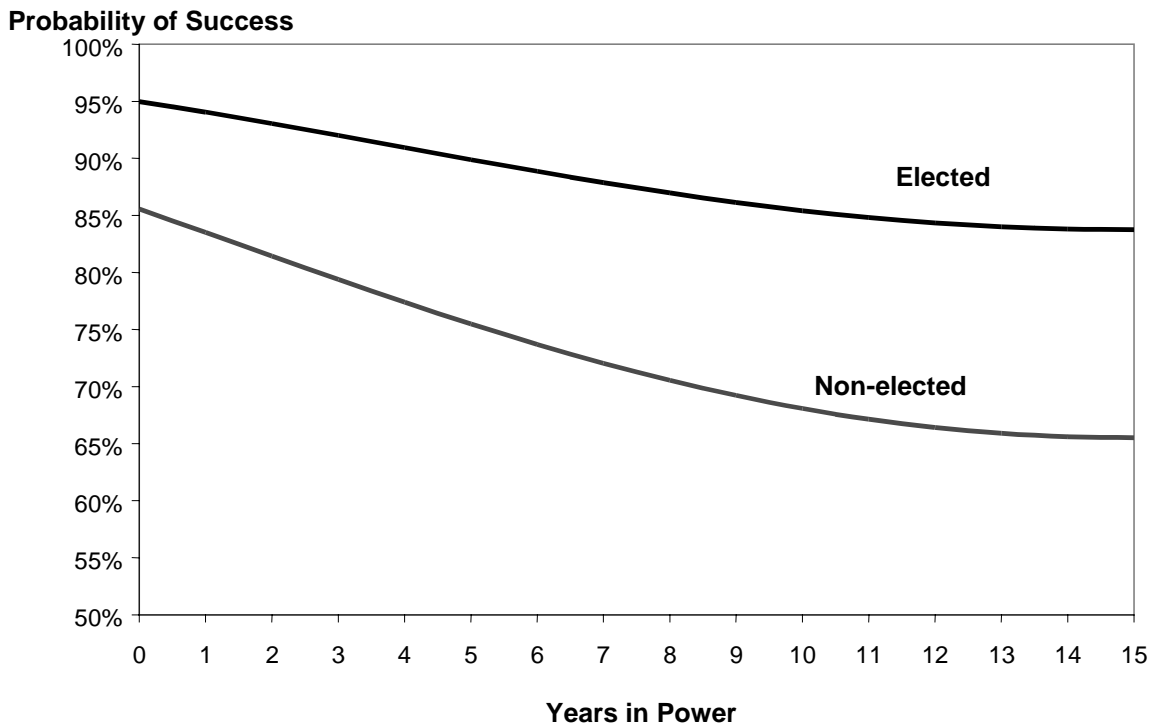
#### ***3.1 Inducing Policy Change***

Research inside and outside of the World Bank has established that donors in general have greatly exaggerated their influence over policy. Worse, the wrong type of aid in the wrong environment can actually make policy worse. Meaningful, sustained policy reform requires deep commitment and ownership from the societies and governments in question. So, it is useful for donors to begin by looking at aid effectiveness on the assumption that they have no influence on policy at all – which is what we have done in the previous sections. This provides an initial benchmark allocation of aid from which a rational donor might want to deviate for a variety of reasons. One of those reasons is that in some cases assistance can help build and sustain successful reform programs. Hence, in this section we will look at some political economy considerations that might alter the judgments made above.

A useful starting point is findings from recent research into aid and the political economy of reform – both cross-country econometric analysis and the case studies from the *Aid and Reform in Africa* project. Taking the cross-country work first: Dollar and Svensson (2000) look at 220 economic reform programs supported by the IMF and World Bank, mostly carried out in the 1980s and the very early 1990s, and ask: are there common features of successful programs and unsuccessful programs? The measure of success here comes from the World Bank’s Operations Evaluation Department (OED), an outcome assessment of whether the targeted policy measures were carried out. (The paper shows that a successful outcome rating is highly correlated with better economic management – lower inflation, more sustainable fiscal situation -- several years after reform, which suggests that the OED measure is a good one.) In their sample, about one-third of the reform programs had failed.

What Dollar and Svensson find is that the outcome of reform programs can be predicted quite well by information on the *recipient country’s characteristics* that is available before the reform starts. For example, the success rate for new governments is far higher than the rate for governments in power for a long time. On top of that, the success rate was higher for democratically elected governments. These two findings are put in terms of the probability of success of a reform program in Figure 3: a new, democratically elected government has a 95% probability of success, compared to 67% for an authoritarian government in power for 12 years. This result makes intuitive sense. Countries that have poor policies over significant periods of time develop vested interests who benefit from the policies (distorted exchange and trade regimes, inefficient state enterprises, corruption more generally), and it is unlikely that an entrenched government is going to take on those vested interests.

**Figure 3. Elections, Tenure, and Probability of Successful Reform**



One of the positive findings in the Dollar and Svensson paper is that, after controlling for these characteristics, the success rate for low-income countries and middle-income ones is the same, as is the success rate in different regions. In other words, the low success rate of reform programs in poor countries or in certain regions (Africa) can be explained to a large extent by characteristics that can change.

In another study, Alesina and Dollar (2000) look at the relationship in general between official finance and policy reform. One aspect of their paper is quite relevant to aid and reform: they ask whether or not there is any tendency for increases in finance or decreases in finance to *lead* policy change. This is important because it gets at the timing of assistance and policy change. It is possible that even a failed adjustment program sets the stage for further policy reform, and success at a later date. If that were true, then donors should not be too concerned about providing program aid in low probability environments. What Alesina and Dollar find, however, is that there is no tendency for surges in finance to lead policy reform. Specifically, they find more than 100 episodes in which there are "surges" in finance (defined as a change of at least one standard deviation relative to the country's own history of financing). Many of these are associated with Bank-Fund supported adjustment programs. In only a handful of cases does policy significantly improve in the following three to five years, and in just as many cases policy significantly worsens. The most striking fact here is that *in general policy is quite persistent*. Large changes in policy are the exception, not the rule. Analytically, aid can be expected to have two opposing effects on the incentive for a government to reform. If aid is linked to reform there is some favorable *substitution* effect: if the government agrees to reforms it will receive more aid. Offsetting this effect is the *income* effect: the more aid the government expects to receive, the less necessary is it to implement those reforms which are politically costly. *A priori*, the net influence of these opposing effects is ambiguous. The empirical results noted above suggest that on average the net effect is small. This may be because both the income and substitution effects are small, or because although each effect is large, on average they are offsetting. If both effects are small, then the implication is that donors should generally treat policy as exogenous. If both effects are large but on average offsetting then, in principle, good intelligence might enable a donor to distinguish between those situations in which aid was net harmful to the reform process from those in which it was net helpful.

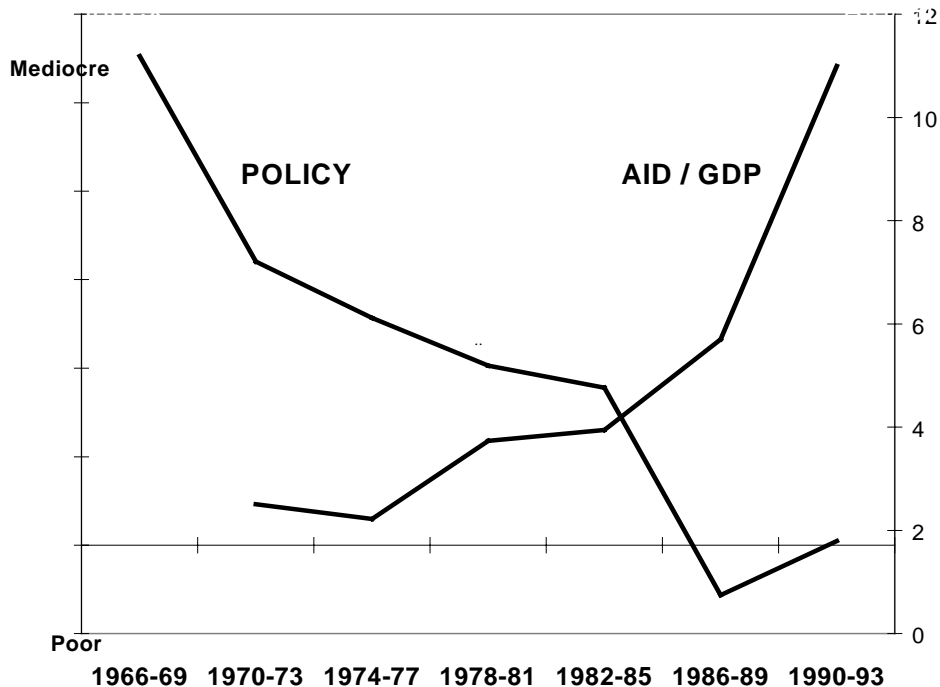
Alesina and Dollar also look at the converse question: are large changes in policy typically followed by surges in financing? They find that donors have responded quickly to democratization episodes (political reform), but that they have not responded consistently to large economic policy changes with significant increases in finance. That may seem surprising since in many of the well-known reform cases there are adjustment loans bringing finance. But when we look at the overall pattern of donor behavior, it has not been the case that changes in policy have been met by major changes in financing.

Finally, we should also mention the Burnside-Dollar paper, "Aid, Policies, and Growth," (2000). That paper is primarily about the effect of aid on growth (and it finds that the effect of aid on growth increases with the quality of policy). But it also considers the question of whether the amount of aid that countries received affected their policy. They found no evidence that the amount of aid *systematically* affected policy. In some cases, however, that finding has been misunderstood. First, the fact that there is no systematic relationship does not mean that aid could not have influenced policy in specific cases. If in some cases aid supported policy reform and in other cases it retarded reform, then what one would find in a large sample is no systematic

relationship. Second, research is always about the past, and in this case the research covers a period in which donors overall were not putting much weight on economic policy. That is true in a cross-section of countries: ones with better policy, after controlling for factors such as poverty level and population, did not receive more aid. And it is true in a time series: when a typical country reformed, it did not receive a significant increase in finance. Given that pattern of donor behavior, it cannot come as a surprise that there is no systematic evidence that more aid has led to better policy. And if donors change their behavior, then the past results are not an accurate predictor of what will happen.

While the econometric studies are useful for summarizing regularities in the data, they cannot have the richness of institutional and historical detail that one gets in a good case study. The World Bank research department followed up the econometric work described above with the project, "Aid and Reform in Africa," which carried out case studies of DR Congo, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Mali, Nigeria, Tanzania, Uganda, and Zambia. The group is diverse in terms of policy reform, with Ghana and Uganda well known as relatively successful cases; Congo and Nigeria with very poor policies up through the mid-1990s; and the other countries in between. This project received financial support from a range of donor countries (France, Germany, the Netherlands, Norway, Sweden, and Switzerland). It was innovative in that all of the case studies involved the participation of African researchers and policy-makers. The risk with case studies is that there may not emerge any clear generalizations, but in this case there was consensus on a range of issues concerning aid and policy reform.

Figure 4. Zambia: Aid and Policy



First, the studies were clear that aid cannot bring about sustained policy changes to which the government is not committed. Zambia under the Kaunda regime is probably the best example of the impotence of policy-based assistance in the face of a non-reforming government. By objective measures, policy got continually worse in Zambia throughout most of Kaunda's tenure (Figure 4). During the period covered here, there were 18 adjustment loans from the IMF and the World Bank. In the case of the Bank, all of the loans fully disbursed, and yet there was no policy improvement. Partly as result of this adjustment lending, the total volume of assistance to Zambia continued to rise. Worse still, the Zambia, Tanzania, and Kenya case studies all argue that the large amount of finance to poor policy governments actually sustained bad policy:

Does aid sometimes help defer reforms? It is probable that the heavy infusion of budgetary support which Kenya received during the 1980s assisted the government in financing the cost of civil service overmanning and public enterprise inefficiencies, thus permitting the government to defer reforms in these areas until the 1990s. **(Kenya case study, p. 27)**

Initially aid probably delayed reforms by helping to finance schemes that would have been wholly unviable without aid backing... **(Tanzania case study, p. 44)**

Much of this assistance came in the form of adjustment loans. Without government commitment, the conditionality did not successfully lead to policy change:

The reform experience in Zambia reiterates the importance of local ownership of the reform process: Conditionality is a relatively impotent tool in terms of bringing about policy change unless the reform measures are supported by the political leadership. **(Zambia case study, p. 17)**

We would argue that at times of severe economic crisis, as in 1980-82 and 1993, the government's need for financial support was desperate and the promise of support did induce the government to come to agreement on far-reaching reform programs. However, these agreements were not always implemented. Sometimes the probability of successful implementation was low from the outset. Other times the lenders or donors may have aligned themselves with well-intentioned technocrats who wished to achieve the results contracted for but lacked the political support to do so. **(Kenya case study, p. 27)**

On a more positive note, the case studies of both Ghana and Uganda argue that foreign assistance helped with policy reform, and that specifically adjustment lending from IDA was helpful. There are several things different about Ghana and Uganda, compared to the other countries in the study. Both countries received very small amounts of aid during a period of poor policy in which their regimes were estranged from western governments. Regime changes led to new governments that were committed to making things better, but which were not initially committed to market-oriented reforms. (Incidentally, Vietnam -- another relatively successful reformer -- fits this pattern exactly: estranged from the west, new leaders came to power in the late-1980s searching for a new approach.)

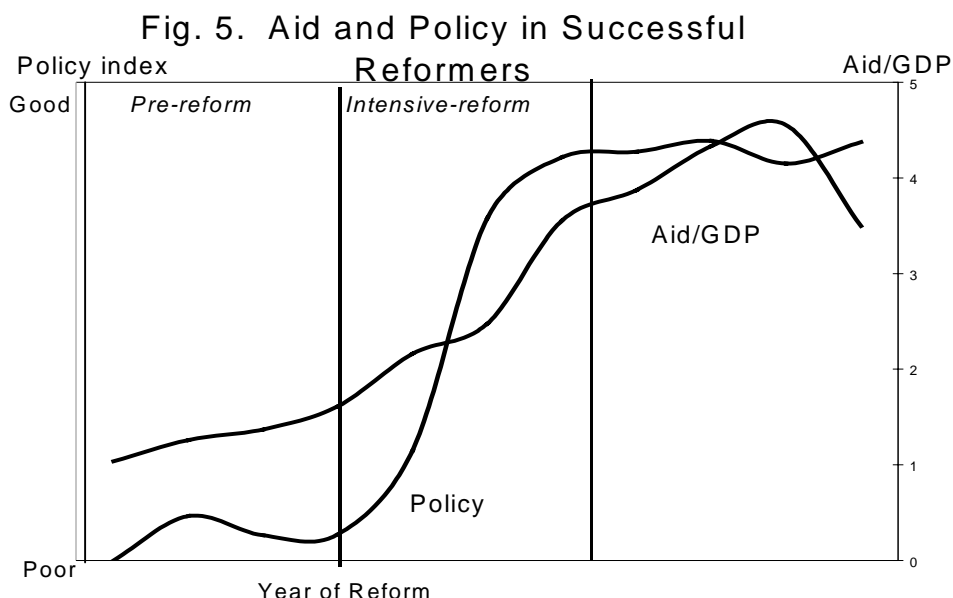


Figure 5 shows the pattern of aid and policy for the three successful low-income reformers, Ghana, Uganda, and Vietnam: small amounts of assistance (and no adjustment loans) when they had bad policy; and then sharply increasing finance associated with adjustment loans as they put in place major reforms. The Ghana and Uganda case studies argue that this pattern of assistance had several advantages. First, during the poor policy period assistance focused on policy dialogue and technical assistance. In this period, the governments were searching for their basic policy orientation, and they did some experimentation. It was useful in this case *not* to have adjustment loans tying the government to plans -- the government was still searching for its plans. Low level assistance without conditionality can help that learning process (which involves studying other countries and trial and error). Once Ghana and Uganda moved decisively to put policy reforms in place, it was important to have the increasing finance, which helped bring forth a strong response from the reform program: it is important that citizens see the benefits of reform quickly, and aid increasing in lock-step with policy improvements helps in this way:

[B]alance of Payments support “provided the government with the breathing space it required to contain domestic opposition to market-based reforms... [It] allowed imports that helped fill the shelves of supermarkets and other traders. The filled shelves provided a psychologically-induced breather for the government because ...people saw this as a sign of better things to come.”

**(Ghana case study, p. 35)**

When countries actually reform, finance increases the benefits of those reforms. That is, the growth impact of a particular improvement in policy is enhanced by the flow of aid. There are two reasons for this. Aid increases confidence in the reform program and calls forth greater private investment. Also, it enables the government to provide public services that are complimentary to private investment. By increasing the benefits of reform, aid enhances the likelihood that they will be sustained. As the Ghana study notes,

Coming back to politics, ultimately economic reform was only politically sustainable because some results emerged quickly. **(Ghana case study, p 19)**

It is important to link this point back with the Burnside-Dollar finding that aid did not systematically affect policy. The two findings are not inconsistent. The Ghana and Uganda case studies argue that, because finance increased as policy improved, this financing help sustain the reforms (aid contributed to good policy). But, up through the mid-1990s, this pattern of aid giving was not typical donor behavior. So, when Burnside and Dollar ask, has aid typically supported good policies, the answer is "no." Another way to look at this issue, is that the positive role of aid in supporting reform in Ghana and Uganda was offset by its negative role in Kenya, Tanzania, and Zambia, so that on balance aid did not systematically lead to good policy.

In this section we have focused upon inducing improvements in ‘economic policy’. However, below the rather grand level of ‘economic policy’ there is an array of practices which can be improved simply by the transfer of knowledge. This has indeed been the rationale for technical assistance. While experience with technical assistance has on the whole not been encouraging, donor projects can be vehicles for ideas through a demonstration effect. When such a demonstration effect is the objective, the design of the project needs particular features. Most obviously, the project needs to incorporate a feature which is novel and yet replicable. It needs to be directly comparable to a project without this feature so that differences in performance can be

properly attributed to the feature. The key officials within the government administration who would need to be convinced by the project should be incorporated *ex ante* into the evaluation process. Thus, where projects are justified in terms of their knowledge transfer, they need to be designed as if they were scientific experiments. This is only feasible for a limited number of projects and so, while such projects may well be highly strategic, they are unlikely to constitute a major financial commitment. They should rightly utilize a disproportionate amount of the time of donor staff, but they are unlikely to be significant in the allocation of financing between countries.

### **3.2 Inducing Changes in Governance**

So far we have focused upon changes in economic policy. However, donors are also concerned about governance. There is probably the broadest consensus for the need for aid policy to take government corruption into account. Beyond this, there is some consensus for encouraging popular participation in matters such as public service delivery. There is perhaps least consensus, but still a large majority, in favor of democratization. The World Bank is constitutionally not permitted to have democracy as an end in itself, although to the extent that democracy is an instrument in poverty reduction, it is legitimate and indeed necessary to take it into account in aid allocation.

While good governance is desirable, as with policy donors must again chose between two approaches when factoring it into their programs. The maximal approach is to allocate aid so as to induce improvements in governance, whereas the minimal approach is to allocate aid so as to reduce its exposure to the poor governance environments. As with policy, the appropriate choice as between the maximal and the minimal approach depends on whether aid affects governance and whether governance affects aid.

First, consider the affect of aid on corruption. As with the effects of aid on policy reform, there is likely to be a substitution and an income effect working in opposing directions. To the extent that the receipt of aid is linked to government actions to reduce corruption, there is a favorable substitution effect. Offsetting this, aid directly augments public resources and reduces the need for the government to fund its expenditures through taxation, thereby reducing domestic pressure for accountability, and we can think of this as an adverse income effect. *A priori*, the net effect could be favorable or unfavorable, the question only being resolvable empirically. Knack (2001) has investigated the relationship using international ratings of corruption, bureaucratic quality, and the rule of law. He finds that over the period 1982-95 there was an adverse effect: aid has been associated with an increase in corruption, and a deterioration in bureaucratic quality and the rule of law. Obviously, since 1995 the donor community has given much more attention to corruption. Many projects are now explicitly designed to reduce corruption and all projects show greater awareness of the potential dangers. While it is reasonable to expect that since 1995 the negative effects of aid have been reduced, and even eliminated, realistically, just as aid is not a very potent instrument for achieving policy reform, it is a weak instrument for reducing corruption. However, aid allocation needs to take corruption into account because, even if aid cannot significantly reduce corruption, corruption can significantly impair aid effectiveness. In principle, the Dalgaard-Hansen hypothesis might apply in respect of corruption: aid could compensate for the inefficiency implied by corruption, so that aid should be targeted to the most corrupt environments. However, such a strategy would clearly be inadvisable: OECD electorates

perceive that aid given to corrupt governments is wasted, and so the Dalgaard-Hansen strategy would undermine the electoral support for aid.

Thus, while aid does not reduce corruption, corruption seriously weakens an aid program. With this causal structure the best course of action is to allocate aid to those governments which do not have major corruption problems. Knack finds that historically donors have indeed tended to allocate less aid to the more corrupt environments and presumably since 1995 this has become more pronounced.

Next consider popular participation. As with policy reform and honest administration, donors can either use aid to induce participation, or target aid where participation already exists. There has not been systematic research on the effects of aid on popular participation. However, it is likely that there are opposing effects, analogous to the income and substitution effects discussed above. Micro-level evidence suggests that NGO/donor involvement in an organization might be at the expense of local 'ownership' analogous to an adverse 'income' effect. For example, a study of the effect of NGO presence on rotating savings and credit associations (ROSCAs) in Nigeria (Olomola, 1999) found that repayment rates were highest in those which had no NGO presence, were lower in those ROSCAs which had been 'adopted' by NGOs, and were lowest in those which were established by NGOs. This adverse income effect is then presumably offset by a favorable substitution effect - the incentive provided by linking aid to participation.

Finally, consider democratization. In the early 1990s there was a wave of democratization triggered by the collapse of the Soviet Union. In some instances donor policies probably assisted this process: for example, the aid cut-off in Kenya may well have increased the pressure upon President Moi to hold contested elections. However, it is evident that the extent of donor influence on democratic process is normally quite limited. Donors may nevertheless take democracy into account in aid allocation to the extent that it influences aid effectiveness. Analogous to a poor policy environment, a lack of democracy might reduce the poverty impact of projects. There is some evidence for this proposition. Rodrik (1999) finds that democracies pay higher wages, consistent with the broader notion that democracy increases the power of the poor so that a given amount of growth may be more pro-poor in democratic societies. Further, in some contexts the growth impact itself may be enhanced by democracy. Collier (2000) finds that in ethnically diverse societies (such as characterize most of Africa), democracy substantially raises the growth rate. Collier (1999) shows that in such societies democracy also improves the success rate of aid projects (Collier, 1999, 2000).

In summary, while good governance is highly desirable both in itself and in order to achieve other donor objectives, aid is a very weak instrument for improving governance. An implication is that the likely impact of aid on governance should not normally be a criterion for the allocation of aid between countries. However, while aid has little impact on governance, governance has a substantial impact on aid effectiveness. Hence, aid allocations may well need to take into account the attained level of governance, with lower allocations to countries with poor governance and correspondingly higher allocations to countries with good governance.

#### **4. Alternatives to Partnership: working *through* governments and working *around* governments**

In Section 2 we took policy and institutions as givens which affected all donor spending: the donor could not finance projects which avoided the environment. This begged the difficult but important question of what could donors do in those countries in which there were many poor people but in which the policy or institutional environment was, on their assessment, highly unsatisfactory. In Section 3 we considered one option: the scope for the donor to change the environment. We concluded that normally that scope is rather limited. Here we consider a second option: the scope to implement projects which reach the poor despite the environment.

Potentially, the donor can reach the poor despite its doubts about the government through either of two approaches. First, suppose that the donor can somehow overcome the problem of fungibility, so that it is confident that its expenditure priorities will prevail over those of the government. Then even though it cannot genuinely work *with* the government, it can work *through* it: letting the government implement the projects which it, the donor, chooses. Alternatively, the donor can choose to work *around* the government, for example, by financing local NGOs.

We now develop some criteria for when these two strategies might be appropriate: enabling the donor to reach the poor with effective projects when otherwise they could not be reached. Evidently, it is better where possible to work *with* the government. Hence, the issue only arises when the donor would otherwise find that an aid program of the desired size was not justified. This would arise if the poverty-impact of aid provided to the government (effectively) without restrictions on its use, was too low for it to be justified. In the Collier-Dollar formulation, this situation arises if one or more of three characteristics are sufficiently adverse: poor policy (so that aid yields little growth); high inequality (so that growth yields little poverty reduction), high mean income (so that again growth yields little poverty reduction).

Unfortunately, if policy is very adverse then working through or around the government is also problematic. Even if fungibility can be overcome, so that the donor-financed project is genuinely incremental, projects cannot fully avoid their setting. As Isham and Kaufmann (2000) show, the worse is the overall policy environment, the lower is the return on aid projects. By working through or around the government, the donor can, for example, ensure that its money is spent on credit for small farmers rather than on government offices. However, the donor cannot prevent that credit having less impact because agricultural prices are depressed by high taxation. Hence, in order for a country to be suited for donors to work through or around the government, policy should at least be reasonable. In the table below, we apply the criterion that to be suited for such an approach, a country should be above the median on the pertinent characteristic. Thus, we consider countries which have above-median policy, even though a donor may prefer not to work *with* the government due to other characteristics, most notably inequality or high mean income. Even if the economic policy environment is otherwise satisfactory, the donor might still choose not to work with the government because of concerns that the government is insufficiently committed to the poor. Hence, below we consider as particularly suited to an approach of working through or around the government countries which have at least above-median policy and greater-than-median inequality.

Supposing a country now meets these criteria, now consider the choice as between working through and around the government. If fungibility is not a problem it will usually be preferable to work *through* the government rather than *around* it. With the government as the implementing agency there is some chance that this will strengthen public administration. Hence, it is important to determine the circumstances in which fungibility is less likely to be a problem. *At the margin*, fungibility is likely to be less of a problem in countries which are highly dependent upon aid. In the limit, if the entire development expenditure of a government was financed by aid projects, there would be no scope for *further* fungibility (although there must already have been considerable fungibility in respect of the intra-marginal aid since no government would choose not to have any development expenditure).

As shown in Table 6, four countries have characteristics which make them particularly suited for donors to work through the government. They have sufficiently good policy that projects are not badly handicapped. There is high inequality, so that a donor might reasonably have doubts as to whether working with the government by providing unrestricted finance would reach the poor. Finally, the country is highly aid dependent so that, at the margin, aid is less likely to be fungible. Hence, for these countries, it might well be appropriate for a poverty-focused aid program to be larger than implied by the 'poverty-efficient' allocation discussed in Section 2.1. In the case of Slovakia, which is a middle-income country, an aid program would otherwise be unjustified according to the 'poverty-efficiency' benchmark.

If the country is not very aid-dependent, so that fungibility is likely to be a problem, then the donor still has the option of working *around* the government. However, sometimes this can be highly undesirable. By detaching the wellbeing of the population from the actions of government, delivering services through NGOs can undermine democratic accountability. If the government is relatively undemocratic there is evidently less reason to be concerned about undermining accountability. If, however, the government is democratic, then offsetting the direct benefits of the project are unquantifiable externalities as accountability is undermined.

As shown in Table 6, three countries have characteristics which make them particularly suited to aid projects which work around the government. Again, for these countries, a poverty-focused program could be larger than that proposed in the 'poverty-efficient' allocation.

For these seven countries there is a reasonable case for systematically exceeding the 'poverty-efficient' benchmark, taking advantage of donor influence over the composition of government expenditure in the first four, and making use of NGOs in the other three. In arriving at these lists we have applied the criterion that suitability requires being above the median in a characteristic. Obviously, suitability is a continuum rather than a threshold, and so the lists could be considerably expanded. However, being above the median in a characteristic is not a particularly severe hurdle. The reason that relatively few countries are systematically suited for aid programs in excess of the 'poverty-efficient' benchmarks is that to be suitable a country needs several characteristics which are not often found together.

Thus, although many countries are highly aid dependent, so that fungibility may not be a major problem in them, most of these are either suited for an aid program which works *with* the government, or are unsuited by some other characteristic for an aid program which works *through* the government.

#### 4. Conclusion

We started by recalling that as of the mid-1990s there was considerable aid pessimism. Over the last few years this has changed radically. Aid has now been shown to be effective in reducing poverty, in reducing the risk of conflict, and even in assisting policy reform. To the charge that ‘if aid is so effective, why have poverty and conflict not been reduced?’, we and others have proposed that aid is *conditionally* effective. There are circumstances in which it reduces poverty, circumstances in which it reduces conflict risk, and circumstances in which it assists policy reform. In the past, much aid was less effective than it could have been because its allocation did not heed these circumstances.

The allocation of an aid budget is a political process. Donors have multiple objectives, the weighting of which will differ among governments. Further, decisions are influenced by the lobbying of interest groups. From the perspective of enhanced development, not all objectives are equally legitimate. Poverty reduction and peace are self-evidently legitimate goals for aid, shared by all donors. However, donor agencies have to contend with lobbies which want to further commercial or political interests unrelated to these donor objectives. By being explicit about its objectives and its allocation rules a donor agency may better defend itself from illegitimate pressures: it can show the cost, in terms of the legitimate objectives, of deviations in response to other pressures. This is the case for having a benchmark allocation.

In Section 2 we suggested that the ‘poverty-efficiency’ allocation was merely a benchmark guide if a donor lacked other information about the country and also lacked the power to change or prevail over government preferences. In Section 3 we argued that in most circumstances donors have only limited scope for changing either the policies or the conduct of government. While it is nevertheless appropriate for donors to make such efforts, the aspiration to change policies or government conduct should not have a *major* influence upon aid allocation. In Section 4 we explored the circumstances in which the donor has the power not to change government preferences but to prevail over them. High aid dependence may reduce the problem of fungibility, at least at the margin of donor financing, and the use of NGOs as implementing agencies can by-pass the fungibility problem altogether. We have suggested that, while such circumstances indeed exist, they are not very common. Hence, the main reasons for departing from the benchmark of ‘poverty-efficiency’ are when the donor has additional information about likely poverty impact, or if poverty reduction is not the objective (such as with conflict reduction). Both of these are the normal business of an aid agency.

**Table 1: Effect of Aid on Investment****Dependent variable: Gross Investment/GDP**

(Four-year averages, 1974-77 to 1994-97, 59 countries)

	(1)		(2)
Initial per capita GNP	5.54 (8.24)		5.40 (8.49)
Policy (CPIA)	0.55 (1.31)		0.39 (0.97)
ODA/GDP	0.42 (0.78)		--
(ODA/GDP)^2	-.031 (-1.65)		-0.02 (-2.02)
CPIA x ODA/GDP	0.27 (2.15)		0.35 (5.17)
South Asia	6.13 (4.65)		5.99 (4.62)
<b>East Asia</b>	10.85 (11.40)		10.84 (11.39)
Sub-Saharan Africa	1.74 (1.79)		1.85 (1.89)
Middle East/North Africa	5.34 (5.46)		5.32 (5.42)
Europe/ Central Asia	4.49 (2.60)		4.33 (2.54)
# of Observations	491		491
R^2	0.39		0.39

t-statistics in parentheses (calculated with robust standard errors)

**Table 2. Poverty-Efficient Aid Allocation 1998**

Code	Country	Pop < \$2 a day	Policy Rating	Poverty-Efficient Aid GDP(%) 98	Poverty-Efficient Aid (\$ mn) 98
ETH	Ethiopia	89%	Good	6.66	2,342.7
MWI	Malawi	90+ %	Moderate	6.53	359.8
ERI	Eritrea	89%	Good	6.36	205.4
ZMB	Zambia	90+ %	Moderate	6.28	436.6
UGA	Uganda	90+ %	Very Good	6.16	1,382.7
MOZ	Mozambique	90+ %	Moderate	6.11	810.0
MLI	Mali	90+ %	Moderate	6.07	438.0
TZA	Tanzania	46%	Moderate	5.75	886.2
GNB	Guinea-Bissau	90+ %	Poor	5.49	39.3
BEN	Benin	80%	Moderate	5.43	280.2
BFA	Burkina Faso	86%	Poor	5.10	475.8
NER	Niger	90+ %	Poor	4.94	370.1
MDG	Madagascar	90+ %	Poor	4.89	539.4
SLE	Sierra Leone	77%	Poor	4.85	107.9
BGD	Bangladesh	88%	Good	4.77	8,157.7
TCD	Chad	85%	Poor	4.70	293.2
NGA	Nigeria	60%	Poor	4.55	4,365.4
SEN	Senegal	80%	Good	4.19	494.3
GHA	Ghana	68%	Good	4.11	1,314.6
BDI	Burundi	88%	Poor	4.04	150.6
PAK	Pakistan	57%	Moderate	3.83	8,636.4
YEM	Yemen	35%	Moderate	3.61	430.8
LSO	Lesotho	74%	Good	3.58	119.9
KEN	Kenya	78%	Poor	3.54	1,015.4
GMB	Gambia	74%	Moderate	3.38	59.6
VNM	Viet Nam	80%	Good	3.27	4,219.5
NPL	Nepal	87%	Poor	3.25	858.9
TGO	Togo	65%	Poor	2.95	180.5
MNG	Mongolia	57%	Good	2.89	115.0
LAO	Laos	83%	Poor	2.83	244.0
COG	Congo, Rep.	65%	Poor	2.81	77.9
CAF	Central African Rep.	70%	Poor	2.64	102.8
HTI	Haiti	68%	Poor	2.43	257.3
CMR	Cameroon	58%	Moderate	2.32	489.1
NIC	Nicaragua	75%	Moderate	2.10	215.8
TJK	Tajikistan	48%	Poor	1.82	115.5
CIV	Côte d'Ivoire	49%	Moderate	1.76	407.2
ZAR	Congo, Dem. Rep.	71%	Poor	1.59	631.5
COM	Comoros	64%	Poor	1.34	10.0
BOL	Bolivia	59%	Good	1.17	211.0
HND	Honduras	76%	Moderate	1.11	165.5
GIN	Guinea	50%	Poor	0.20	25.4
IND	<b>India</b>	89%	Good	<b>0.08</b>	1,594.6
DZA	Algeria	18%	Moderate	0	0
AGO	Angola	68%	Poor	0	0
ARG	Argentina	36%	Very Good	0	0
ARM	Armenia	33%	Good	0	0
AZE	Azerbaijan	36%	Moderate	0	0

**Table 2. Poverty-Efficient Aid Allocation 1998, cont'd.**

Code	Country	Pop < \$2 a day	Policy Rating	Poverty-Efficient Aid GDP(%) 98	Poverty-Efficient Aid (\$ mn) 98
BLR	Belarus	6%	Poor	0	0
BLZ	Belize	45%	Moderate	0	0
BWA	Botswana	61%	Very Good	0	0
BRA	Brazil	44%	Very Good	0	0
BGR	Bulgaria	8%	Poor	0	0
CPV	Cape Verde	57%	Very Good	0	0
CHL	Chile	39%	Very Good	0	0
CHN	China	51%	Very Good	0	0
COL	Colombia	22%	Very Good	0	0
CRI	Costa Rica	44%	Very Good	0	0
CZE	Czech Republic	55%	Very Good	0	0
DMA	Dominica	48%	Poor	0	0
DOM	Dominican Republic	48%	Moderate	0	0
ECU	Ecuador	66%	Poor	0	0
EGY	Egypt	52%	Good	0	0
SLV	El Salvador	52%	Very Good	0	0
EST	Estonia	18%	Very Good	0	0
FJI	Fiji	37%	Poor	0	0
GAB	Gabon	54%	Moderate	0	0
GEO	Georgia	32%	Moderate	0	0
GTM	Guatemala	77%	Good	0	0
GUY	Guyana	60%	Very Good	0	0
HUN	Hungary	11%	Very Good	0	0
IDN	Indonesia	59%	Poor	0	0
JAM	Jamaica	25%	Moderate	0	0
JOR	Jordan	24%	Good	0	0
KAZ	Kazakstan	12%	Good	0	0
KOR	Korea, Rep.	0%	Very Good	0	0
KGZ	Kyrgyz Republic	18%	Very Good	0	0
LVA	Latvia	8%	Very Good	0	0
LTU	Lithuania	8%	Very Good	0	0
MYS	Malaysia	27%	Very Good	0	0
MDV	Maldives	57%	Very Good	0	0
MRT	Mauritania	68%	Moderate	0	0
MUS	Mauritius	34%	Very Good	0	0
MEX	Mexico	40%	Good	0	0
MDA	Moldova	32%	Poor	0	0
MAR	Morocco	20%	Good	0	0
NAM	Namibia	50%	Very Good	0	0
PAN	Panama	25%	Very Good	0	0
PNG	Papua New Guinea	58%	Poor	0	0
PRY	Paraguay	41%	Poor	0	0
PER	Peru	50%	Very Good	0	0
PHL	Philippines	65%	Very Good	0	0
POL	Poland	2%	Very Good	0	0
ROM	Romania	28%	Poor	0	0
RUS	Russia	25%	Poor	0	0

**Table 2. Poverty-Efficient Aid Allocation 1998, cont'd.**

Code	Country	Pop < \$2 a day	Policy Rating	Poverty-Efficient Aid GDP(%) 98	Poverty-Efficient Aid (\$ mn) 98
SVK	Slovak Republic	2%	Very Good	0	0
SVN	Slovenia	1%	Very Good	0	0
SLB	Solomon Islands	54%	Poor	0	0
ZAF	South Africa	50%	Very Good	0	0
LKA	Sri Lanka	41%	Good	0	0
KNA	St. Kitts-Nevis	36%	Very Good	0	0
LCA	St. Lucia	34%	Very Good	0	0
VCT	St. Vincent and Gr.	36%	Very Good	0	0
SWZ	Swaziland	56%	Poor	0	0
THA	Thailand	24%	Good	0	0
TTO	Trinidad & Tobago	39%	Very Good	0	0
TUN	Tunisia	23%	Very Good	0	0
TUR	Turkey	18%	Good	0	0
UKR	Ukraine	24%	Poor	0	0
URY	Uruguay	34%	Very Good	0	0
UZB	Uzbekistan	27%	Poor	0	0
VUT	Vanuatu	52%	Poor	0	0
VEN	Venezuela	32%	Poor	0	0
ZWE	Zimbabwe	68%	Poor	0	0

**Table 3. The Collier-Hoeffler Logit Model of Conflict Risk**

(dependent variable is  $\ln(p/(1-p))$ ; where  $p$  is the probability of civil conflict during a five year period.)

ln GDP per capita	-1.007 (0.281)***
(GDP growth – 3*population growth) t-1	-0.103 (0.035)***
Primary commodity exports/GDP	22.983 (6.806)***
(primary commodity exports/GDP) <sup>2</sup>	-39.293 (14.505)***
ln population	0.625 (0.148)***
Social fractionalization	-0.0004 (0.0001)***
Ethnic dominance (dummy variable = 1 if largest ethnic group is 45-90% of population)	0.623 (0.348)*
Geographic dispersion	-1.851 (1.006)*
Peace duration (months since previous conflict)	-0.004 (0.001)***
N (number of five-year episodes analyzed)	747
no of wars	47
Pseudo R <sup>2</sup>	0.27
log likelihood	-128.71

Notes: All regressions include a constant. Standard errors in parentheses. \*\*\*, \*\*, \* indicate significance at the 1, 5 and 10 percent level, respectively.

**Table 4: Aid, Policy and the Risk of Conflict: a Simulation of the Effects of Increased Aid and Improved Policy for the Mean and Recipient Country**

<b>Variable</b>	<b>Mean of X</b>	<b>Coeff of G&amp;G var</b>	<b>At mean</b>	<b>Improved Policy</b>	<b>Increased Aid</b>	<b>Improved Policy and Increased Aid</b>
Ln GDP per capita	3.390	-1.007	-7.863	-7.926	-7.877	-7.948
(GDP growth - 3*population growth) t-1	-6.404	-0.103	0.660	0.531	0.633	0.485
Primary commodity exports/GDP	0.178	22.983	4.091	3.808	4.043	3.754
(primary commodity exports/GDP) <sup>2</sup>		-39.293	-1.244	-1.079	-1.216	-1.048
Ln population	7.465	0.625	10.7	10.740	10.740	10.740
Social fractionalization	2113	-0.0004	-0.761	-0.761	-0.761	-0.761
Ethnic dominance (45-90%)	0.456	0.623	0.284	0.284	0.284	0.284
Geographic dispersion	0.593	-1.851	-1.097	-1.097	-1.097	-1.097
Peace duration	338	-0.004	-1.385	-1.385	-1.385	-1.385
Constant		-5.482	-5.482	-5.482	-5.482	-5.482
$X * \hat{\beta}$			-2.059	-2.367	-2.118	-2.459
Probability			0.113	0.086	0.107	0.079

**Table 5: Donor-Government Partnership for Conflict Prevention in Zaire, as of 1995**

	coeff g&G var	Variable values	1995	Aid Tripled	Policy Improved by 2.1	Aid Tripled and Policy Improved by 1.2
Ln GDP per capita	-1.0074	5.4	-5.44	-5.42	-5.55	-5.53
(GDP growth - 3*population growth) t-1	-0.103	-20.019	2.06	2.11	1.83	1.88
Primary commodity exports/GDP	22.9831	0.141	3.24	2.35	0.88	0.76
(Primary commodity exports/GDP) <sup>2</sup>	-39.2932		-0.78	-0.41	-0.06	-0.04
Ln population	0.6248	17.6	10.99	10.99	10.99	10.99
Social fractionalization	-0.00036	5850	-2.11	-2.11	-2.11	-2.11
Ethnic dominance (45-90%)	0.6225	0	0	0	0	0
Geographic dispersion	-1.8505	0.632	-1.17	-1.17	-1.17	-1.17
Peace duration	-0.0041	43	-0.18	-0.18	-0.18	-0.18
Constant	-5.4823		-5.48	-5.48	-5.48	-5.48
			1.138	0.700	-0.846	-0.880
prob of civil war			0.757	0.668	0.300	0.293

**Table 6: Countries by Suitability for differing types of donor relationship**

Countries particularly suited for donors to work *through* governments: (above average policy, above average inequality, above average aid dependence)

Burkina Faso, Mali, Honduras, Slovakia

Countries particularly suited for donors to work *around* governments: (above average policy, above average inequality, below average aid dependence, below average democratic participation)

Peru, Colombia, Malaysia

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