



Discussion Paper No. 2006/01

## **Aid Allocation and Fragile States**

Mark McGillivray\*

January 2006

### **Abstract**

This paper summarises research on aid allocation and effectiveness, highlighting the current findings of recent research on aid allocation to fragile states. Fragile states are defined by the donor community as those with either critically poor policies or poorly performing institutions, or both. The paper examines the research findings in the broader context of research and analysis on how aid should and is being allocated across all developing countries. Various aid allocation models and their implications for aid to fragile states are considered. The paper also looks at types of instruments and their sequencing in fragile states.

Keywords: aid, fragile states, volatility, growth, poverty, MDGs

JEL classification: F35, E61, I31, O19

---

Copyright © UNU-WIDER 2006

\*UNU-WIDER, Helsinki, Finland; email: [mark@wider.unu.edu](mailto:mark@wider.unu.edu)

This study has been prepared within the UNU-WIDER project on Fragility and Development directed by Mark McGillivray.

UNU-WIDER gratefully acknowledges the financial contributions to the project from the Australian Agency for International Development (AusAID) and the UK Department for International Development (DFID).

UNU-WIDER also acknowledges the financial contributions to the research programme by the governments of Denmark (Royal Ministry of Foreign Affairs), Finland (Ministry for Foreign Affairs), Norway (Royal Ministry of Foreign Affairs), Sweden (Swedish International Development Cooperation Agency—Sida) and the United Kingdom (Department for International Development).

## Acknowledgements

This paper was written with Sophie Pongracz, from DFID's Poverty Reduction in Difficult Environments Team. It was commissioned by DFID for the Learning and Advisory Process on Difficult Partnerships of the OECD-DAC. The author is especially grateful to Sophie Pongracz, but also to Tony Addison (UNU-WIDER), Michael Anderson (DFID), Sarah Cliffe (World Bank), James Gilling (AusAID), Paul Isenman (OECD), Max Willis (AusAID), Adrian Wood (DFID) and Peter Versegi (AusAID), for very useful comments, suggestions, background discussions or information. The usual disclaimer applies. A previous version of this paper was circulated as a background paper at the joint UK-DFID, OECD-DAC, EU, UNDP and World Bank Senior Level Forum on Development Effectiveness in Fragile States held in January 2005 at Lancaster House, London.

*The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.*

*[www.wider.unu.edu](http://www.wider.unu.edu)*

*[publications@wider.unu.edu](mailto:publications@wider.unu.edu)*

UNU World Institute for Development Economics Research (UNU-WIDER)  
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Camera-ready typescript prepared by Lorraine Telfer-Taivainen at UNU-WIDER  
Printed at UNU-WIDER, Helsinki

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

ISSN 1609-5774

ISBN 92-9190-768-5 (printed publication)

ISBN 92-9190-769-3 (internet publication)

## **Executive Summary**

This paper summarises research on aid allocation and effectiveness, highlighting the current findings of OECD-DAC research on aid allocation to fragile states. It presents these findings in the broader context of research and analysis on how aid should and is being allocated across all developing countries. The paper also looks at types of instruments and their sequencing in fragile states. As agreed with the DAC, fragile states are treated as those countries in the bottom two quintiles of the World Bank's Country Policy and Institutional Assessment (CPIA), as well as those 'not rated' by the Bank.

Over the past few years a dominant paradigm has evolved on how aid should be allocated. It is based on the now widely accepted premise that not only is aid effective in promoting growth, but that it is more effective in countries with better policies and better institutional settings. Aid can lead to higher growth in these countries and hence more poverty reduction and quicker progress towards achieving the Millennium Development Goals (MDGs). Donors seeking to maximise worldwide poverty reduction, minimising the number of people living below the US\$1 per day poverty line, should therefore give preference to well performing countries, those with higher CPIA scores. In the dominant paradigm's optimal poverty efficient allocation, one extra dollar of aid in one country reduces poverty by the same amount as in any other country.

While many bilateral donors' allocation decisions are often heavily influenced by criteria other than poverty reduction, there has in practice been a move towards greater selectivity, with donors concentrating aid on fewer good performers. Accompanying this move has been an increasing concern for allocations to fragile states. DAC-commissioned research on aid flows between 1992-2002 shows that aid to this group could be increased by 43 per cent without affecting the performance basis of aid allocations. These countries are collectively 'under-aided' in the sense that they have received less aid per capita than their poverty, populations and CPIA scores would justify. There is wide variation within the group, however, with some countries (aid 'orphans') receiving far less aid and others far more aid than these criteria would justify. There is some evidence that the international community's response to September 11th has been relevant to this outcome.

Fragile states as a group have not only been under-aided but aid flows have also been twice as volatile as those to other low income countries, even when changes such as the onset or cessation of conflict and large performance changes are taken into account. Within the fragile state group, flows received by the under-aided countries are the most volatile. This is particularly damaging to growth and prospects for poverty reduction. There may be valid reasons for aid flows to be volatile in fragile states, but the current picture suggests the reasons are not obvious. Non-transparent and inconsistent

allocation criteria exacerbate the problem for fragile states by making aid flows unpredictable.

The work ongoing in the DAC points to a problem with donor co-ordination. On the one hand, we are still short of reaching a global optimal poverty efficient allocation. More aid still needs to go to poor countries than currently does. On the other hand, if all donors adhered to the model based on selectivity without effective co-ordination, the under- and over-aiding problems to individual countries could be exacerbated.

An important feature of the orphans problem is not just their low per capita aid flows, but the fact that these countries often do not get much media and diplomatic attention. They are not sufficiently in the public eye even though there is a high risk of them falling into instability with costs not only to the country's citizens but its neighbours and the international community.

Research commissioned by the DAC also found that decisions made on volumes of aid to fragile states go hand in hand with consideration of the type and sequencing of aid modalities. Conventional aid instruments can be problematic in fragile states. The pay-off is often very risky. Risk adverse donors frequently shy away from investing in fragile states—the risk of non-intervention is rarely considered. Several recent research papers have tried to quantify the cost of neglect. One way of doing this is through estimating the spillover effects from one fragile state to its neighbours. Preliminary results show that the negative effects of having a fragile state as a neighbour are significant, estimated as losses of 1.6 per cent of GDP every year. Another study estimates the cost benefit ratios of investments in conflict prevention. The results show that on average for every GB£1 spent on conflict prevention, GB£24 of savings are generated. While these figures should be read with caution, given their speculative nature, they do point to a substantial pay-off for investment in fragile states—if the donor community knows how to work effectively in them. But the weak capacity and risk of instability in these countries requires particular attention in the sequencing of reforms and donor engagement. Early research results indicate that technical assistance is particularly effective when the government has already committed to reform. Only once a minimum level of capacity is reached should other development aid such as infrastructure investment be scaled up. At this point aid can effectively promote growth and poverty reduction. Well-targeted investment in the social sectors, however, might be important for building the conditions for reform and meeting immediate human development needs even when the government is not able or willing to cooperate.

The paper draws four main conclusions. First, donors need to resolve the co-ordination problem that leads to donor orphans and excessive volatility of aid flows. Second, that absorptive capacity constraints in fragile states need to be urgently addressed. These constraints can result in aid being counterproductive or harmful, reducing growth and increasing poverty. One way of potentially alleviating these constraints is the provision

of aid via non-government channels, such as NGOs, the private sector or independent service authorities. The levels at which aid becomes counterproductive in fragile states also needs to be clarified. Third, we need to learn much more about which aid modalities work well in fragile states and about the optimal sequencing of interventions. There is some evidence that ring-fenced, long-term investments in human capital and working with civil society and the private sector has potential to increasing absorptive capacity even prior to government-wide reform. After reform efforts take off, fast and flexible technical assistance might be key, laying the basis for more substantial funds for capital investment and service delivery once institutions have been strengthened and governance improved. This has in part been the experience aid to post-conflict countries, which has been shown to work particularly well if appropriate governance and institutional settings are in place. Fourth, further consideration of the different variables that can make aid more or less effective in generating growth and poverty reduction is warranted. The current dominant paradigm does not sufficiently take factors other than policy and institutional quality into account. Yet research suggests that a number of additional variables, such as structural vulnerability and political stability, are important in converting aid into growth and poverty reduction. Taking into account these other factors might ensure that more aid is allocated to poorer countries, without compromising the poverty-reducing efficiency of these flows. It should also be recognised that growth is not the only benefit of aid. Prevention of instability and conflict, improvements in human rights, avoiding deterioration of human development indicators and preventing spillovers on neighbouring countries are other benefits. We need to learn more about the impact of aid on these factors. If we accept them as legitimate objectives of development aid, we need to make further adjustments to the paradigm.

## **1 Introduction**

Does aid work, by increasing growth and reducing poverty? The answer to this question, based on recent research on the macroeconomic impact of aid, evidence from micro studies and field experience, is, in general, a clear ‘yes’. Growth would clearly be lower than would otherwise have been the case in the absence of aid.<sup>1</sup> One can reasonably infer that by implication poverty would be higher without aid. Yet it is also clear that the contribution of aid to growth differs across countries: An additional dollar of aid to one country does not have the same impact as an additional dollar to every other country. Burnside and Dollar (1997, 2000) found that aid works better in countries with better policy regimes or, more generally, that its effectiveness in promoting growth was contingent on the quality of these regimes. This very well-known finding has been

---

<sup>1</sup> A brief survey of the literature on aid and growth is provided in the Appendix.

questioned by some subsequent research.<sup>2</sup> There is, however, an acceptance among researchers that better policies, however defined, should in all probability result in more effective aid.<sup>3</sup> Other studies find evidence of a number of alternative contingencies.<sup>4</sup> These findings have clear implications for aid allocation, for if one wishes to maximise its global poverty-reducing effectiveness, one primarily allocates it to countries in which it has the greatest impact. The Collier and Dollar (2001, 2002) aid selectivity model, discussed in detail later in this paper, is built partly on this principle. By taking into account recipient country policy and institutional performance in aid allocation, so too is the IDA's long-standing country allocation system (World Bank 2003).

The selectivity approach, or more broadly giving preference to countries that can use external resources more effectively in allocating aid, is one that donors are embracing to such an extent that it has become a dominant paradigm in international aid policy and practice. Donors are in general linking aid allocation to assessments of the quality of recipient country policies and institutions, in the belief that aid works better in countries that do better in terms of these assessments. Some donors are concentrating aid on relatively small samples of countries that *inter alia* are rated higher on the basis of these assessments. But this paradigm does have drawbacks, some of which are receiving increased scrutiny within the international development community. One is the allocation of aid to countries that score poorly in policy and institutional assessments, especially those that are poor and in great need of assistance. These countries are penalised with less aid in a pure selectivity regime.<sup>5</sup> A specific concern has arisen for

---

<sup>2</sup> Studies that do not find empirical evidence of the link between policy and aid effectiveness include Hansen and Tarp (2000, 2001); Dalgaard and Hansen (2001); Guillaumont and Chauvet (2001); Hudson and Mosley (2001); Lu and Ram (2001); Dalgaard et al. (2004); and Ram (2003, 2004). The acceptance that policies generally matter is based on theoretical reasoning, micro studies and field experience. To this extent, much of the debate has been over whether one can validly observe a link between aid effectiveness and policy in the context of the type of econometric exercise conducted by Burnside and Dollar (1997, 2000) and not *per se* over the relevance of policy for this effectiveness. See Robinson and Tarp (2000); Benyon (2001, 2002); Gunning (2001); Morrissey (2002); Collier (2000); McGillivray (2003a); and Collier and Dollar (2004) for further details.

<sup>3</sup> See Robinson and Tarp (2000); Benyon (2001, 2002); Gunning (2001); Morrissey (2002); Collier (2000); McGillivray (2003a); and Collier and Dollar (2004). This acceptance is based on theoretical reasoning, micro studies and field experience. To this extent, much of the debate has been over whether one can validly observe a link between aid effectiveness and policy in the context of the type of econometric exercise conducted by Burnside and Dollar (1997, 2000) and not *per se* over the relevance of policy for this effectiveness.

<sup>4</sup> These studies are cited in Section 2.

<sup>5</sup> It should be acknowledged, though, that the Collier-Dollar selectivity model gives more aid to many poor countries than is the case in practice. The model also gives a higher weighting to aid to populous poor countries than to those that score highly in policy and institutional assessments. Regarding the growth relationships underpinning the model, one can further speculate that the link between aid effectiveness (defined in terms of its impact on growth) and policy might not be as systematic or consistent across countries at the bottom end of the policy scale as otherwise might be the case. Aid might still be reasonably effective in some of them, and the case for reducing or giving less aid than would otherwise be the case to all of these countries is weakened. This speculation is consistent with some residual disagreement in the donor community regarding how much aid to give countries with bad or

‘fragile states’. These states have difficult development environments, in that according to conventional wisdom on aid effectiveness they are ‘unable or unwilling to harness domestic and international resources effectively for poverty reduction’ (Torres and Anderson 2004: 1).<sup>6</sup> Nations engaged in or recently having emerged from conflict tend to feature heavily among states classified as fragile. Countries that descend into a state of fragility remain in it for decades, and the human and financial costs of this are staggering. Estimated financial costs, for any one country, are well in excess of the current world aid budget (Chauvet and Collier 2004).

This paper reviews the different research strands and views in the international development community on (i) how aid *should* be allocated among developing countries, and (ii) how aid *is* being allocated among these countries. Special consideration is given to allocations to fragile states, as defined above. The first of these issues is examined in Section 2. It looks at the different allocation models proposed in recent years, including the Collier-Dollar selectivity model and cases for and against aid to fragile states. Special attention is given to absorptive capacity constraints and recent research looking at whether aid can promote policy and institutional reform in fragile states. Section 3 addresses the second of the above issues. It reports evidence that donors are increasingly taking into account developmental criteria in aid allocation, in particular the notion of aid selectivity. The question of whether fragile states receive aid allocations appropriate to their population and poverty levels and policy and institutional environments is examined. Evidence is shown that most fragile states are under-aided in this sense. Also considered is aid volatility. It is observed that aid to these countries, especially the under-aided ones, is highly volatile. Section 4 looks at possible directions for future research and policy.

## **2 How *should* aid be allocated?**

Early approaches to the issue of how aid should be allocated among developing countries tended to be based on notions of equity, efficiency or a combination of both

---

weak governments, and possibly warrants further research on the link between aid effectiveness and policy in countries that do poorly in terms of indices like the CPIA. It is also consistent with a view expressed in Beynon (1999), that one should not apply the Collier-Dollar model in a mechanistic or inflexible way.

<sup>6</sup> At present there appears to be no universally accepted ‘fragile states’ definition. As Torres and Anderson (2004: 1) note, these states ‘take many forms, and have been defined in various ways’. Selecting a group of countries that fall into the category of a fragile state can be problematic, therefore. Jones et al. (2004) refer to ‘difficult partnership countries’ (DPCs), as do Levin and Dollar (2005). According to the former study a country was assigned to that group if it was a member of the World Bank low-income country under stress (LICUS) group, while according to the later a DPC was defined as one belonging to the World Bank low-income country group and was in the bottom two World Bank Country Performance and Institutional Assessment (CPIA) quintiles. There is, however, very substantial overlap between these two groups.

criteria.<sup>7</sup> These approaches were not linked in a systematic way to findings from the aid effectiveness literature.<sup>8</sup> This is understandable given the inability of the aid effectiveness literature to provide consistent, reasonably unambiguous results for country level effectiveness. Collier and Dollar (1999, 2001, 2002) changed this state of affairs with their ‘aid selectivity’ model of inter-country aid allocation. This model provides a ‘poverty-efficient’ inter-country aid allocation that provides a benchmark guide to donors pursuing poverty reduction as the prime operational criterion.<sup>9</sup> A poverty-efficient allocation is one that minimises the total number of people living in the world below the chosen, international income poverty line. According to the prescriptive Collier-Dollar selectivity model, aid allocated to each country is an increasing function of its poverty level and CPIA score and a decreasing function of its national per capita income. Countries with inferior policy regimes receive less aid in this model, therefore, as these regimes are thought to reduce the impact of aid on growth and thus poverty reduction. The poverty-minimising optimal allocation is one in which an extra dollar of aid in any given country decreases the number of people living below the income poverty line by an identical amount as in any other country.

The Collier-Dollar selectivity builds on the empirical work of Burnside and Dollar (1997, 2000), in particular the notion that the effectiveness of aid in promoting growth is contingent on the policy regimes of recipient countries. A number of other aid-growth studies provide empirical findings that lend support for additional contingencies. These include the extent of democracy (Svensson 1999), structural vulnerability (Guillaumont and Chauvet 2001), the presence of trade shocks (Collier and Dehn 2001), climatic conditions (Hansen and Tarp 2001), the extent of political stability (Chauvet and Guillaumont 2002), the existence of a post-conflict scenario (Collier and Hoeffler 2002, 2004), the presence of a totalitarian government (Islam 2003), the degree to which aid is

---

<sup>7</sup> The equity-based approaches favoured the allocation of aid according to relative need, typically proxied by per capita income levels. See, for example, Bhagwati (1972); Mosley (1987); McGillivray (1989); McGillivray and White (1994); and Rao (1994, 1997).

<sup>8</sup> The IDA’s country allocation system, mentioned above, had for many years been in part based on recipient country policy and institutional performance, but this was not linked to findings from the research community, but instead on field experience. Kanbur (2004) charts the link between this system and the contemporary aid effectiveness literature, showing how it is consistent with the findings of Burnside and Dollar (1997, 2000) and other studies that show a link between aid effectiveness and CPIA (or similar) scores.

<sup>9</sup> Collier and Dollar (2002) acknowledge that donors will also have valid, non-developmental criteria for the allocation of aid, and that actual allocation of aid will deviate from the benchmark guide for this reason. The use of the Collier-Dollar model allocations is articulated further in Collier and Dollar (2004). They argue that the poverty efficient allocation is a benchmark guide if a donor lacks other information about the likely impact of aid on poverty reduction in the recipient country and the ability to change or prevail over recipient government preferences (hence avoiding fungibility). This is consistent with the above-stated view of Beynon (1999), that the model should not be applied mechanically. Collier and Dollar (2004) argue that since that ability is uncommon, the main reasons for departing from the benchmark are that the donor has the above-mentioned information or if poverty reduction is not the objective.



fungible across sectors (Pettersson 2004), and the quality of institutions (Dalgaard *et al.* 2004).<sup>10</sup>

McGillivray (2003a) advocates an extension of the Collier-Dollar model on the basis of some of the preceding findings, involving augmenting it with additional contingencies.<sup>11</sup> McGillivray speculates that this might see more aid being prescribed for countries with not-so-good CPIA ratings. Whether this might see more aid to fragile states is a matter of speculation. The Collier and Hoeffler (2002) finding that, *ceteris paribus*, aid works better in post-conflict scenarios might on the surface provide a basis for such an outcome. A closer inspection reveals, however, that their finding relates not to countries that have just emerged from a conflict, and which might be classified as fragile, but to those four to seven years into a post-conflict episode and is contingent on the CPIA-assessed quality of the recipient policy and institutional regime. Thus, according to Collier and Hoeffler, aid will not be especially poverty efficient in post-conflict countries with inferior CPIA scores.

A defining feature of the Collier-Dollar selectivity model is that it minimises aggregate global poverty. It does not seek to minimise poverty in each individual country. Reallocating aid from one country to another is globally poverty efficient if the increase in poverty in the former is less in absolute terms than the decrease in poverty in the latter. An alternative approach is to seek to equalise poverty differences or poverty reduction across countries. This lies at the heart of the allocation model implicit in the strategy for achieving the Millennium Development Goals (MDGs), outlined in the *UN Millennium Project Report*. This strategy involves allocating aid in such a way as to minimise the shortfall between actual levels of MDG variables and their target values, in each country. These targets can in a sense be defined as poverty lines, but defined in spaces or dimensions in not only income but others as well, corresponding to the various MDG variables. The greater the shortfall, and presumably its size, the greater the amount of aid a country can expect to receive. The implicit poverty efficient outcome is one that equalises the above-mentioned shortfalls across all countries irrespective of the amounts of aid required to do this in each country.<sup>12</sup> This will result

---

<sup>10</sup> Kosack (2003) finds that the impact of aid on the quality of life across countries (measured by the Human Development Index) is contingent on the extent of democracy. Unfortunately there are comparatively very few studies linking aid to such variables.

<sup>11</sup> These contingencies have not been subject to extent of scrutiny to which the aid-policy-growth link reported in Burnside and Dollar (1997, 2000) has. It would be appropriate that they be further scrutinized prior to be incorporated into a selectivity model.

<sup>12</sup> Wood (2004) provides a critique of the *UN Millennium Project Report*, arguing that this outcome violates the basic principle of equity, which is to treat like cases alike. The example is given of a situation in which it takes US\$1,000 to lift one person out of poverty in one country, while in another country this amount of aid will lift three people out of poverty. Assuming these four people are equally poor, it means that the person in the first country effectively gets three times as much aid as the people in the second country. It is in this sense that the outcome is inequitable. Wood makes the general point that *UN*

in different amounts of aid being used across countries to lift one person above the poverty line if we assume that the effectiveness of aid differs across countries, as is the case. The MDG strategy is largely blind to this point, implicitly assuming that the marginal effectiveness of aid is equal across all countries, at all levels of aid.<sup>13</sup> It also does not take into account possible disincentive effects of increased aid. As Wood (2004) notes, aid can make weak states even weaker by reducing the incentives for self-help and diverting effort into rent-seeking.

Cogneau and Naudet (2004) provide an equal opportunity (EOp) model of aid allocation.<sup>14</sup> This model is in part a response to the above mentioned criticism of the Collier-Dollar model, but unlike the *UN Millennium Project Report* takes into account differential aid effectiveness at the country level. Cogneau and Naudet's analysis is based on the recognition that a country's CPIA score (which they call an 'effort' indicator) is influenced by structural disadvantages, over which the country has little or no control. Not to take this into account in the allocation of aid is thought to be inconsistent with notions of fairness. The Cogneau-Naudet model's optimal allocation is one that equalises differences in poverty risk by a chosen point in time between countries facing different disadvantages but making the same degree of effort. Thus, countries with lower projected poverty declines get more aid for any given effort. This equal poverty risk principle leads to an allocation of aid that minimises projected poverty level differences between countries by that point in time. The point of time in Cogneau and Naudet's application is 2015.

A key variable in the Cogneau-Naudet EOp model is an effort variable adjusted for disadvantage. It is a country's CPIA quintile that is predicted by its growth prospects of its region and its initial poverty level. The Cogneau and Naudet prescribed allocation gives more aid to poor countries than that of the Collier-Dollar model. Fragile states typically are prescribed more aid by the former as compared to the latter.<sup>15</sup> But for a number of states the reverse is true, with the former model giving zero aid to them. These outcomes notwithstanding, the Cogneau-Naudet offers some prospects for providing larger shares of aid to fragile states than might otherwise prevail, in an

---

*Millennium Project Report* needs to show a greater awareness of the existing literature on aid effectiveness.

<sup>13</sup> The report does acknowledge that aid should not be given to countries in which it would be ineffective or counterproductive, although these countries are extreme cases ('thugocracies') where the pathology is visible and the leaders are often irrational.

<sup>14</sup> Llavador and Roemer (2001) provide a similar analysis. However, it suffers from serious methodological flaws and prescribes a questionable inter-country allocation of aid. See Cogneau and Naudet (2004) and McGillivray (2003b, 2004c) for further details. McGillivray (2003b, 2004c) also provides a general survey and critique of the approaches discussed in this section.

<sup>15</sup> For example, Laos, Papua New Guinea and the Solomon Islands would receive 6.5, 3.2 and 4.8 million dollars, respectively, from the Collier-Dollar model but under the Cogneau-Naudet model they receive zero aid.

objective and scientific manner. The key question though, is whether the notion of fairness, implicit to the Cogneau-Naudet approach, results in fewer people being lifted out of poverty.

The Collier-Dollar and Cogneau-Naudet models share an important, common feature: saturation levels of aid. They result from the recognition of diminishing returns to aid, and equate to a level of aid at which its incremental impact falls to zero. Diminishing returns to aid effectiveness have been examined closely by most recent aid-growth studies. This tests for non-linearity in the aid-growth relationship, with aid being positively related to growth up to a certain level of aid and negatively related thereafter. That there are diminishing returns is a seemingly highly robust finding, with almost all studies reporting such a relationship, with negative returns setting in when the aid inflow reaches anywhere between 15 and 45 per cent of GDP. This has been interpreted as indicating limited aid absorptive capacities, with recipient governments being limited in the amounts of aid they can use effectively (Clemens and Radelet 2003).<sup>16</sup> This issue is especially relevant to fragile states as they will inevitably have very limited absorptive capacities, as conventionally defined. Increased aid to these countries, in line with proposals to achieve the MDGs, could actually reverse poverty reduction. This is obviously a compelling case against additional aid to fragile states.

Chauvet and Collier (2004) look at whether aid can assist policies and institutions to improve in situations in which they are particularly weak, viewing their analysis as an extension of the Collier-Dollar selectivity model discussed above.<sup>17</sup> Two questions were considered, both in the context of the LICUS group. The first was whether aid is significantly effective in promoting policy and institutional turnarounds sufficient to take a country out of LICUS status on a sustained basis.<sup>18</sup> Collier and Chauvet found that two forms of aid—support that achieves an expansion of secondary education and aid in general other than technical assistance—have significantly favourable effects on the changes of a sustained turnaround. Technical assistance was found to have a negative impact on the chances of such a turnaround. The level of aid required to achieve a turnaround, for any typical LICUS, was estimated to be an additional one per

---

<sup>16</sup> Heller and Gupta (2002) provide a useful discussion of this issue, along with the related problem of Dutch Disease. Killick (2004) cautions against increased aid to Africa on, *inter alia*, absorptive capacity and Dutch Disease grounds. Note though that Gomanee et al. (2003), using a general technique specifically designed to detect threshold effects, struggle to find evidence of such returns and therefore question the inferences drawn by previous studies. They do however find evidence of a non-linear impact of aid on growth.

<sup>17</sup> Note that the Collier and Chauvet (2004) reported throughout this paper are preliminary and for discussion only. They are not yet sufficiently conclusive to use as a basis for policy.

<sup>18</sup> This outcome was deemed to have occurred if a country meets each of the following criteria: has a pre-turnaround CPIA score of no greater than 2.5; achieves an increase in its CPIA of 1.4 points above its pre-turnaround nadir; and can maintain a CPIA score of greater than 3.0 for at least five consecutive years after passing the 2.5 point threshold.

cent of its GDP per year for five years. In present value terms, this cost is US\$240.8 million. The estimated payoff, defined in terms of the reduced costs to the LICUS and neighbouring countries (due to spillovers) in terms of GDP foregone, is US\$3.1 billion.

The second question addressed by Collier and Chauvet was whether aid affects policy during the early stages of a pre-existing reform. Collier and Chauvet addressed this question by looking at countries in the LICUS group that embarked on ‘incipient turnarounds’, defined as a 0.5 point CPIA improvement, asking whether they matured into sustained turnarounds. It was found that both technical assistance and other aid have significant effects on the time which an incipient turnaround takes to become a sustained one. But these effects were quite different in nature. Small amounts of other aid slow down the process of sustained turnaround, but large amounts accelerate it. The threshold at which the effect becomes positive, at which aid begins to accelerate the process, was found to be around 12 per cent of GDP. Technical assistance had the opposite effect, being associated with a slowing down of the time an incipient turnaround becomes a sustained one at around 4 per cent of GDP.

Collier and Chauvet (2004) also examine the LICUS duration and costs. They estimate that once a country meets the criteria for LICUS status it typically remains so for 69 years. They also estimate that the cost of a country descending into this status, to the country itself and its neighbours, is in present value terms approximately US\$100 billion. This is a lower bound cost, and based on a typical LICUS. Most of this cost, which is well in excess of the current annual world aid budget, is met by neighbouring countries. Thirty countries are currently in the LICUS group. There is also the concern that fragile states can descend into conflict. Chalmers (2004) estimates that on average for every GB£1 spent on conflict prevention GB£24 of savings are generated. Added to this of course is the loss of life associated with conflict. These findings do not alone provide a case for allocating aid to fragile states. But they would appear to provide a compelling case for finding ways of making aid work in fragile states, given the potential costs of non-intervention, and if so providing more aid to them.

### **3 How is aid allocated?**

A number of empirical studies have tested for selectivity in aid allocations. Dollar and Levin (2004) provide a comprehensive analysis of this issue, covering aid allocations of 41 donor agencies for the period 1984 to 2002. Based on panel data, they find that selectivity is present in aid allocation, being practiced by most donors, bilateral and multilateral, but that it is a new phenomenon that has emerged since the mid 1990s. Dollar and Levin (2004) also examined the poverty focus of aid, finding that it had

increased as well.<sup>19</sup> They found that the donor agencies that are most selectivity-focused also tended to be the most poverty focused. McGillivray (2004b) looks at evidence from 1968 to 1999 time series data, controlling for a range of developmental and donor self-interests. Evidence of selectivity was found in seven of the 10 recipient countries under consideration. For a number of these countries it became increasingly important from the early 1990s.<sup>20</sup>

The econometric evidence of increased selectivity in aid allocations is consistent with the widespread view that since the end of the Cold War, and especially since the late 1990s and early 2000s, donors have given much greater emphasis to developmental criteria.<sup>21</sup> This view is further supported by survey research. A 2002 survey of ten donors, conducted by DFID indicated that increased emphasis is being given to selectivity, defined broadly as encompassing not only the quality of policy regimes but also a range other developmental concerns, such as governance, programme implementation and absorptive capacity (McGillivray 2003a). Jones et al. (2004) provide a comprehensive survey of donor allocative behaviour, finding that aid allocations and policies have become more poverty-driven as international consensus regarding support for the MDGs has grown.<sup>22</sup> They also found that donors had become more selective as they became more aware of evidence suggesting that policies were important for aid effectiveness. Jones *et al.* looked closely at the allocation processes of nine donors, finding five built formal performance criteria (such as CPIA scores) into allocation decisions.<sup>23</sup> The World Bank has shown increased concern for poorly

---

<sup>19</sup> The IDA, the IMF's Enhanced Structural Adjustment Facility, Denmark, the United Kingdom, Norway, Ireland and the Netherlands were ranked most highly in terms of selectivity- and poverty-focus. France and the United States were among the least selectivity-focused donors.

<sup>20</sup> Dollar and Levin's results appear to be robust with respect to the choice of policy index. Among the indices used was the CPIA. McGillivray's analysis employed an index combining the inflation rate, economic openness and the central government budget deficit. For Kenya, McGillivray observed a negative relationship between policy quality and aid from the early 1990s, contrary to the selectivity approach. Birdsall et al. (2002) struggle to find evidence of selectivity in official net resource transfers to sub-Saharan Africa, although there is a case for suspecting that this result is an outcome of the empirical methods employed by this study.

<sup>21</sup> More recent studies, examining data extending to the mid to late 1990s, do though find that donor non-developmental interests remain important determinants of aid allocation. See, for example, Alesina and Dollar (2000); Alesina and Weder (2002); Berthemely and Tichit (2002); Neumayer (2002, 2003a, 2003b, 2003c, 2003d); Feeny and McGillivray (2004). These studies do, however, report a statistically significant, negative relationship between aid and recipient country income per capita, indicating that donors give preference to poorer countries in allocating aid. This is quite a robust result. Some studies test for population biases in aid allocation, finding biases against larger countries in per capita aid allocation. See, for example, Arvin (1998); Arvin and Drewes (2001). Note that this result is not as robust across studies as that concerning income per capita. Concerns for this bias have been long-standing, and have been observed over many decades. See, in particular, Isenman (1976).

<sup>22</sup> Dollar and Levin (2004) also found that the poverty focus of aid has increased. It was also found that the donor agencies most selectivity-focused tended to be the most poverty focused as well.

<sup>23</sup> The donors were Australia, Canada, the European Commission, France, Germany, Japan, the Netherlands, Norway, Sweden, the United Kingdom and the United States.

performing countries, as evidenced by its LICUS initiative and the IDA's framework for aid delivery to conflict-affected countries (World Bank 2002; IDA 2004).<sup>24</sup>

Jones *et al.* (2004) examined whether greater selectivity had led to a bias against failed states and defined in terms of LICUS group membership. It was concluded that the potential for such a bias between 2000 and 2002 was offset due to not only the provision of humanitarian aid, but by the 'increasing attention to those failed or failing states that are regarded as significant for regional and global security and geo-political reasons' (Jones *et al.* 2004). Evidence presented in partial support of this contention was that the LICUS group had received increased shares of total aid from the nine donor agencies under consideration between 2000 and 2002. This is broadly consistent with the finding of Nunnenkamp *et al.* (2004), that shares of both total bilateral and total multilateral aid to the bottom two CPIA quintile groups remained approximately constant between 1993-98 and 1999-2002.<sup>25</sup> Jones *et al.* note, however, that some difficult partnership countries could be considered as 'aid orphans'. That is, they received very low amounts of aid, in part because the costs of state failure within them was not of sufficient consequence to the international community or to particular donors to justify larger aid amounts. This is in part reflected by a lack of diplomatic engagement, and is made worse by a lack of media attention in many fragile states.<sup>26</sup>

Levin and Dollar (2005) conduct a closer, empirical examination of aid during 1992 to 2002 to difficult partnership countries (DPC). Levin and Dollar look at aid to these countries in the context of their population, poverty, and policy and institutional performance levels. It was concluded that the difficult partnership countries received 58 per cent less bilateral aid and 34 per cent less multilateral aid than predicted by these variables. Overall, these countries received 43 per cent less aid than predicted by their population and poverty levels and policy and institutional environment. This is a particularly incisive finding, and more meaningful than the shares of aid reported above. The extent of under-aiding, in the context considered by Levin and Dollar, varies tremendously among the DPC group. Some countries received substantially less aid than predicted and others received far more. Post-conflict DPCs were found to receive more aid than predicted, and this gap has increased after September 11<sup>th</sup>. Among those countries receiving less aid than predicted were those that are aided by a relatively small number of donors. The under-aided countries (the 'orphans') included Burundi, the

---

<sup>24</sup> The IDA in its IDA13 mid-term review announced that countries eligible for special post-conflict allocations would receive support for four years instead of three, as was previously the case. IDA (2004) acknowledges that further, special consideration may be needed to cover 'failed states' that do not qualify for exceptional post-conflict assistance.

<sup>25</sup> Note though that Nunnenkamp *et al.* (2004) find that the shares aid to the poorest quintile of low-income countries had fallen from 1981-86 to 1999-2002.

<sup>26</sup> ODI (2004) discuss the importance of the media in aid responses to various circumstances, poor country performance among them.

Democratic Republic of Congo, Nigeria and Sudan. The most over-aided countries (the ‘darlings’) included Cambodia, Laos, Papua New Guinea, and Sierra Leone.

Aid flows have been shown to be more volatile than other sources of developing country government revenue (Gemmell and McGillivray 1998). High aid volatility makes budgetary policy more difficult and can increase exchange rate variability, thus potentially offsetting any positive impacts of aid (Buliř and Hamann 2003; Edwards and van Wijnbergen 1989). Levin and Dollar (2005) also examined the volatility of aid per capita to the DPC group. Specific for fragile states would be that results take longer to materialise in these environments, therefore volatility is particularly damaging. It was found that aid to the DPC group was almost twice that of other low-income countries. This result was not altered after controlling for the specific circumstances faced by DPCs, namely rapid changes in policies and institutional strength and the onset or cessation of conflict. There is, however, volatility heterogeneity among the DPC group, and this is of serious concern. The aid volatility faced by the darlings, as defined above, is very close to that experienced by other low-income countries. Strikingly, the volatility of aid to orphans is more than twice that of the darlings. It is therefore the volatility of aid to the orphans that pushes the average volatility of the DPC group to such a comparatively high level.

#### **4 Factoring-in fragility: where to from here?**

This paper has focussed primarily on the research literature on aid allocation and related work on aid effectiveness, taking a special interest in what the literature says about fragile states. It is reasonably clear from the paper’s literature survey that while research on policies and institutions is clearly relevant to these states, the fragile state-specific literature is still an emerging one. Collier and Chauvet (2004), Levin and Dollar (2005) and Jones *et al.* (2004) provide important and comprehensive information, but more fragile state-specific research is clearly needed to sufficiently address the question raised above. This initially, and fairly obviously, requires agreement over the criteria for classifying countries as fragile states. As mentioned earlier in this paper, a consensus on an appropriate definition of this term has not yet been achieved. One also needs to acknowledge that fragility is primarily a matter of degree, not of kind. One should not, however, become bogged down on this issue as that mitigates against further research and policy development and implementation. A reasonably expedient, but seemingly valid approach is that adopted by the DAC, which assigns the fragile state classification to a country if it is in the bottom two quintiles of the CPIA or has not been rated by the World Bank.

The key questions that then need to be addressed are whether aid, in all of its current or historical forms, is either ineffective or not sufficiently effective in fragile states, as defined, and if so, how can it be made to work more effectively in them. Collier and Chauvet (2004) provide an insightful response to this question, by looking at the impact of aid on policy and institutional reform. One might infer from their results that by

being positively associated with such reform, aid to fragile states can be justified on effectiveness criteria. But their analysis is a partial one, to the extent that it does not look at this relationship in the context of a selectivity model, nor relatedly does it look at implications for growth and poverty reduction. It is also a preliminary one, requiring further investigation.

Answering the preceding questions should provide subsequent information on whether these countries are under- or over-aided and, in particular, on their absorptive capacities. It might also tell us, for example, whether the augmentation of the Collier-Dollar selectivity or Cogneau-Naudet EOp models, discussed in this paper, would see changes in aid allocations prescribed for fragile states. Augmenting the selectivity model, for instance, would see more aid to fragile states if they are characterised by stable political regimes, trade shocks, structural vulnerability and the other characteristics mentioned above. Such an augmentation rests on results from research on links between aid and growth. But it needs to be recognised that growth is not the only potential benefit of aid. Prevention of instability and conflict, improvements in human rights, avoiding deterioration of human development indicators and preventing spillovers on neighbouring countries are other benefits. We need to learn more about the impact of aid on these factors, especially as they apply to fragile states.

Donors can factor-in the results of this research as they become available. But they need to move more quickly than this given the magnitude of issues faced with respect to fragile states, the costs of conflict prevention and a return to violent conflict among them. Three issues emerge.

The first concerns the issue of under- and over-aided fragile states (the orphans and darlings, respectively) needs to be addressed. This could involve consideration of:

- (i) donors agreeing on an annual discussion of their ‘partner country’ lists to establish where some countries are in danger of losing all or almost all bilateral partners;
- (ii) compensatory multilateral mechanisms, with some multilateral agencies playing the role of residual by balancing out the decisions of others;
- (iii) more explicit tasking and training of diplomatic missions in development dialogue, and;
- (iv) use of mechanisms such as the proposed UN peace-building commission to maintain a focus on orphans.

Second, aid volatility to fragile states must be checked, especially in the case of the under-aided fragile states, the aid orphans. This is both a matter of individual donors being more conscious of year-on-year variation in aid allocations, but also for greater co-ordination among donors. This co-ordination could involve:

- (i) longer term partnership agreements, possibly facilitated through sector programs;
- and



- (ii) compensatory multilateral mechanisms, specifically focused on sector programs in the 'long-term' sectors such as health and education, allowing other types of aid to be more variable.

Third, diminishing aid returns and related absorptive capacity constraints need to be addressed urgently. The literature on aid tends to assume that all aid is provided via governments, or that donors work with governments rather than working around them. Empirical evidence of diminishing returns is based almost entirely on aid flows which have gone to recipient country governments. Diminishing returns will in principle always be an issue in all countries; an economy can only efficiently absorb aid up to a particular level. But clarity is required over the saturation levels of aid that apply in fragile states, and ways of increasing the optimal share of aid in GDP need to be considered. One method of addressing the second of these issues is to allocate aid via non-government channels, such as NGOs, the private sector or 'independent service authorities'. It can be the case that operating through these channels can make aid effective even when policy and institutional settings are deficient, prior to reforms. These channels have been considered in the literature (see World Bank 2002; ODI 2004; Collier 2002; Collier and Dollar 2004). One can and should explore these channels further, as they apply to fragile states.

## Appendix

### **Aid and growth: a brief literature survey**

For many decades the research literature on the country-level impacts of aid often sent ambiguous messages as to whether aid was effective in promoting growth and reducing poverty. A number of widely cited empirical studies found no evidence that aid contributed to higher growth, while influential writers often provided damning qualitative accounts of aid. The empirical studies include Voivodas (1973), Mosley (1980), Mosley et al. (1987) and Boone (1996). Arguably the best known author critical of aid on qualitative grounds is the late Lord Bauer (see Bauer 1981, 1991). The overall consensus about these impacts was rather pessimistic. This, combined with strong evidence that projects were in general effective in attaining their intended outcomes, led to the well-known ‘micro-macro paradox’ of aid (Mosley 1986).

The late 1990s saw a fundamental change in the literature and aid and growth. Commencing with the publication of the seminal research of Burnside and Dollar (1997), a new stream of empirical studies has emerged that provides a clear, unambiguous message that aid increases growth. This has proved to be an especially robust research finding drawn by practically all of the increasingly large number of empirical studies of aid and growth post-Burnside and Dollar (1997). This is clear, as a number of recent surveys of the aid-growth and related literatures attest. These include Hansen and Tarp (2000); Beynon (2001, 2002); Morrissey (2001); Hermes and Lensink (2001); McGillivray (2003a, 2004a). McGillivray (2004) identifies 35 studies empirical aid-growth studies that have been conducted since Burnside and Dollar (1997) Each these studies provide original empirical results, obtained from either new or updated data sets, similar data sets but employing different empirical methods or both. Thirty-three of these studies find evidence that aid works. The two studies that fail to find this evidence do not reject the proposition that aid increases growth, but simply that in the context of a Burnside and Dollar analysis of aid one cannot observe a relationship between aid and growth.

Roodman (2004) points to the results of some of these studies being fragile, but does not per se reject the conclusion that aid and growth are positively associated. Full bibliographic details of all 35 studies can be found in McGillivray (2004a). Clemens et al. (2004) cite an additional eleven studies that McGillivray (2004a) does not. Seven of these studies find that aid and growth are positively related. One finds no relationship between these variables and two find that the relationship is negative. Clemens et al. (2004) criticise the methods used by those three studies (very heavily so in the case of the two reporting the negative relationship), to such an extent that their results should be treated with great caution. The well-known macro-micro paradox of aid would appear to be dead and buried, well and truly.

The demise of the macro-micro paradox should imply that aid no longer has its critics. A number of researchers have in fact criticised aid on empirical grounds. Easterly (2003), Ovaska (2003) and Brumm (2003), are among them. They are the three studies cited in Clemens et al. (2004) that provide unfavourable accounts of aid effectiveness. Some so far as to claim that aid is actually harmful. Data showing increased aid flows and at broadly the same time decreased growth rates are often used to support this claim (see Easterly 2003, for example). The real issue is not whether growth has declined, but whether these declines would have been lower in the absence of aid.

Some critics point to problems in aid delivery, such as fungibility, donor proliferation, lack of harmonization and tying, citing them as reasons for the failure of aid. These problems are real, and it is valid to criticize aid delivery on the basis of them. But in their proper context, they point to why aid might not have worked better, rather than not having worked at all (McGillivray 2004a). Moreover, as mentioned above, the literature is now very clear in its finding that aid works. While one should always express a degree of skepticism over the findings of most empirical studies, especially econometric analyses of panel data, as Roodman (2004) very skillfully does, the sheer weight of evidence emerging from the literature is such that one can clearly reject the hypothesis that aid, on aggregate, has no beneficial impact on or is harmful for growth. The only context in which this one should not reject this hypothesis is if aid inflows are of such a large magnitude that negative returns prevail, to such an extent that they outweigh any positive impact. This would appear to be a case for improving recipient country absorptive capacities and/or reducing aid to manageable levels, not eliminating it entirely.

## References

- Alesina, A. and D. Dollar (2000). 'Who Gives Foreign Aid to Whom and Why?', *Journal of Economic Growth* 5(1): 33-63.
- Alesina, A. and B. Weder (2002). 'Do Corrupt Governments Receive Less Foreign Aid?', *American Economic Review* 92(4): 1126-37.
- Arvin, M. (1998). 'Biases in the Allocation of Canadian Official Development Assistance', *Applied Economics Letters* 5: 773-5.
- Arvin, B. M. and T. Drewes (2001). 'Are There Biases in German Bilateral Aid Allocations?', *Applied Economics Letters* 8: 173-7.
- Bauer, P.T. (1981). *Equality, the Third World and Economic Delusion*, Weidenfeld: London.
- Bauer, P.T. (1991). *The Development Frontier: Essays in Applied Economics*, Harvard University Press: Cambridge MA.

- Berthelemy, J.C. and A. Tichit (2002). 'Bilateral Donors' Aid Allocation Decisions', *WIDER Discussion Papers* DP2002/123, UNU-WIDER: Helsinki.
- Beynon, J. (1999). 'Assessing Aid' and the Collier-Dollar Poverty Efficient Allocations: A Critique', *Economic Policy and Research Department Discussion Paper*, Department for International Development: London.
- Beynon, J. (2001). 'Policy Implications for Aid Allocations of Recent Research on Aid Effectiveness and Selectivity', paper Presented at the Joint Development Centre/DAC Experts Seminar on Aid Effectiveness, Selectivity and Poor Performers, January, OECD, Paris.
- Beynon, J. (2002). 'Policy Implications for Aid Allocations of Recent Research on Aid Effectiveness and Selectivity', in B. Mak Arvin (ed.), *New Perspectives on Foreign Aid and Economic Development*, Praeger: Westport.
- Bhagwati, J. (1972). 'Amount and Aid Sharing', in R. Frank, J. Bhagwati, R. Shaw and H. Malmgren (eds), *Assisting Development Countries*, Praeger: New York.
- Birdsall, N., S. Claessens and I. Diwan (2002). 'Policy Selectivity Forgone: Debt and Donor Behaviour in Africa', *Centre for Global Development Working Papers* 17, Centre for Global Development: Washington DC.
- Boone, P. (1996). 'Politics and the Effectiveness of Aid', *European Economic Review* 40(2): 289-329.
- Brumm, H.J. (2003). 'Aid, Policies and Growth: Bauer was Right', *Cato Journal* 23(2): 167-74.
- Buliř, A. and A. Hamann (2003). 'Aid Volatility: An Empirical Assessment', *IMF Staff Papers* 50(1): 64-89.
- Burnside, C., and D. Dollar (1997), 'Aid, Policies, and Growth', *Policy Research Working Papers* 1777, World Bank: Washington DC.
- Burnside, C. and D. Dollar (2000). 'Aid, Policies and Growth,' *American Economic Review* 90(4): 847-68.
- Chalmers, M. (2004). *Spending to Save? An Analysis of the Cost Effectiveness of Conflict Prevention versus Intervention after the Onset of Violent Conflict: Phase 2 Synthesis Report*, Centre for International Co-operation and Security, University of Bradford: Bradford.
- Chauvet, L. and P. Collier (2004). *Development Effectiveness in Fragile States: Spillovers and Turnarounds*, Centre for the Study of African Economies, Department of Economics, Oxford University: Oxford.
- Chauvet, L. and P. Guillaumont (2002). 'Aid and Growth Revisited: Policy, Economic Vulnerability and Political Instability', paper presented at the Annual Bank Conference on Development Economics on Towards Pro-poor Policies, June, Oslo.

- Clemens, M. and S. Radelet (2003). 'The Millennium Challenge Account: How Much is Too Much, How Long is Long Enough?', *Centre for Global Development Working Papers 23*, Centre for Global Development: Washington DC.
- Clemens, M. S. Radelet, and R. Bhavnani (2004). 'Counting Chickens When they Hatch: The Short-term Effect of Aid on Growth', *Centre for Global Development Working Papers 44*, Centre for Global Development: Washington DC.
- Cogneau, D. and J.-D. Naudet (2004). 'Who Deserves Aid? Equality of Opportunity, International Aid and Poverty Reduction' (mimeo).
- Collier, P. (2002). 'Making Aid Smart: Institutional Incentives Facing Donor Organizations and their Implications for Aid Effectiveness', *Forum Series on the Roles of Institutions in Promoting Growth*, USAID and IRIS: Washington DC.
- Collier, P. and J. Dehn (2001). 'Aid, Shocks, and Growth', *World Bank Policy Research Working Papers 2688*, World Bank: Washington DC.
- Collier, P. and D. Dollar (1999). 'Aid Allocation and Poverty Reduction', *World Bank Policy Research Working Papers 2041*, World Bank: Washington DC.
- Collier, P. and D. Dollar (2002). 'Aid Allocation and Poverty Reduction', *European Economic Review* 26: 1475-500.
- Collier, P. and D. Dollar (2001). 'Can the World Cut Poverty in Half? How Policy Reform and Effective Aid Can Meet the International Development Goals?', *World Development* 29(11): 1787-802.
- Collier, P. and D. Dollar (2002). 'Aid Allocation and Poverty Reduction', *European Economic Review* 26: 1475-500.
- Collier, P. and D. Dollar (2004). 'Development Effectiveness: What Have We Learnt?', *Economic Journal* 114(496): F244-71.
- Collier, P. and A. Hoeffler (2002). 'Aid, Policy, and Growth in Post-Conflict Societies', *World Bank Policy Research Working Papers 2902*, World Bank: Washington DC.
- Collier, P. and A. Hoeffler (2004). 'Aid, Policy and Growth in post-Conflict Societies', *European Economic Review* 48: 1125-45.
- Dalgaard, C. and H. Hansen (2001). 'On Aid, Growth and Good Policies', *Journal of Development Studies* 37(6): 17-35.
- Dalgaard, C. H. Hansen, and F. Tarp (2004). 'On the Empirics of Foreign Aid and Growth', *Economic Journal* 114(496): F191-216.
- Dollar, D, and V. Levin (2004). 'The Increasing Selectivity of Foreign Aid, 1984-2002', *World Bank Policy Research Working Papers 3299*, World Bank: Washington DC.
- Easterly, W. (2003). 'Can Foreign Aid Buy Growth', *Journal of Economic Perspectives* 17(3): 23-48.

- Edwards, S. and S. van Wijnbergen (1989). 'Disequilibrium and Structural Adjustment', in H. Chenery and T.N. Srinivasan (eds), *Handbook of Development Economics*, North-Holland: Amsterdam.
- Feeny, S. and M. McGillivray (2004). 'Modelling Inter-temporal Aid Allocation: A New Application with an Emphasis on Papua New Guinea', *Oxford Development Studies* 32(2): 233-50.
- Gemmell, N. and M. McGillivray (1998). 'Aid and Tax Instability and the Government Budget Constraint in Developing Countries', *CREDIT Research Papers* 98/1, Centre for Research in Economic Development and International Trade, University of Nottingham: Nottingham.
- Gomanee, K, S. Girma, and O. Morrissey (2003). 'Searching for Aid Threshold Effects: Aid, Growth and the Welfare of the Poor', *CREDIT Research Papers* 02/05, Centre for Research in Economic Development and International Trade, University of Nottingham: Nottingham.
- Guillaumont, P. and L. Chauvet (2001). 'Aid and Performance: A Reassessment', *Journal of Development Studies* 37(6): 66-87.
- Gunning, J.W. (2001). 'Rethinking Aid', in B. Pleskovic and N. Stern (eds), *Annual World Bank Conference on Development Economics 2000*, World Bank: Washington DC.
- Hansen, H. and F. Tarp (2000). 'Aid Effectiveness Disputed', *Journal of International Development* 12: 375-98.
- Hansen, H. and F. Tarp (2001). 'Aid and Growth Regressions', *Journal of Development Economics* 64: 547-70.
- Hermes, N. and R. Lensink (2001). 'Changing the Conditions for Development aid: A New Paradigm?', *Journal of Development Studies* 37(6): 1-16.
- Hudson, J. and P. Mosley (2001). 'Aid, Policies and Growth: In Search of the Holy Grail', *Journal of International Development* 13: 1023-38.
- IDA (2004). *Aid Delivery in Conflict-Affected Countries: The Role of the World Bank*, International Development Association: Washington.
- Isenman, P. (1976). 'Biases in Aid Allocations Against Poorer and Larger Countries', *World Development* 4(8): 631-41.
- Islam, M. (2003). 'Political Regimes and the Effects of Foreign Aid on Growth', *Journal of Developing Areas* 37(1): 35-53.
- Jones, S., R. Riddell, and K. Kotoglou (2004). 'Aid Allocation: Managing for Development Results and Difficult Partnerships', summary paper prepared for the DAC Learning and Advisory Process on Difficult Partnerships, Oxford Policy Management, November, Oxford.

- Kanbur, R. (2004). 'Reforming the Formula: A Modest Proposal for Introducing Developmental Outcomes in IDA Allocation Procedures', paper presented at the 2<sup>nd</sup> AFD-EUDN Conference, November, Paris.
- Killick, T. (2004). 'The Case Against Doubling Aid to Africa', mimeo, notes for House of Commons Presentation, November, London.
- Kosack, S. (2003). 'Effective Aid: How Democracy Allows Development Aid to Improve the Quality of Life', *World Development* 31(1) 1-22.
- Levin, V. and D. Dollar, (2005). 'The Forgotten States: Aid Volumes and Volatility in Difficult Partnership Countries (1992-2002)' (mimeo), summary paper prepared for the DAC Learning and Advisory Process on Difficult Partnerships, Oxford Policy Management, November, Oxford.
- Lu, S. and R. Ram (2001). 'Foreign Aid, Government Policies and Economic Growth: Further Evidence from Cross-country Panel Data for 1970 to 1993', *International Economics* 54: 15-29.
- McGillivray, M. (1989). 'The Allocation of Aid among Developing Countries: A Multidonor Analysis Using a Per Capita Aid Index', *World Development* 17(2): 561-8.
- McGillivray, M (2003a), 'Aid Effectiveness and Selectivity: Integrating Multiple Objectives in Aid Allocations', *DAC Journal* 4(3): 23-36.
- McGillivray, M. (2003b). 'Descriptive and Prescriptive Analyses of Aid Allocation: Approaches, Issues and Consequences', *WIDER Discussion Paper* DP2002/123, UNU-WIDER: Helsinki.
- McGillivray, M. (2004a). 'Is Aid Effective?' (mimeo), UNU-WIDER: Helsinki.
- McGillivray, M. (2004b). 'What Determines African Bilateral Aid Receipts?' (mimeo), UNU-WIDER: Helsinki.
- McGillivray, M. (2004c). 'Descriptive and Prescriptive Analyses of Aid Allocation: Approaches, Issues and Consequences', *International Review of Economics and Finance* 13: 275-92.
- McGillivray, M. and H. White (1994). 'Development Criteria for the Allocation and Aid and Assessment of Donor Performance', *CREDIT Research Papers* 94/7, University of Nottingham: Nottingham.
- Morrissey, O. (2001). 'Does Aid Increase Growth?' *Progress in Development Studies* 1(1): 37-50.
- Morrissey, O. (2002). 'Aid Effectiveness for Growth and Development', *ODI Opinions*, February 2002.
- Mosley, P. (1980). 'Aid, Savings and Growth Revisited', *Oxford Bulletin of Economics and Statistics* 42(2): 79-95.

- Mosley, P. (1986) 'Aid effectiveness: The Micro-Macro Paradox' *Institute of Development Studies Bulletin* 17: 214-25.
- Mosley, P. (1987). *Overseas Aid: Its Defence and Reform*, Wheatsheaf Books: Brighton.
- Mosley, P., J. Hudson, and S. Horrell (1987). 'Aid, the Public Sector and the Market in Less Developed Countries', *Economic Journal* 97(387): 616-41.
- Neumayer, E. (2002). 'Is Good Governance Rewarded? A Cross-National Analysis of Debt Forgiveness', *World Development* 30(6): 913-30.
- Neumayer, E. (2003a). 'Is Respect for Human Rights Rewarded? An Analysis of Bilateral and Multilateral Aid Allocation Before and After the End of the Cold War', *Human Rights Quarterly* 25(2): 510-27.
- Neumayer, E. (2003b). 'The Determinants of Aid Allocation by Regional Multilateral Development Banks and United Nations Agencies', *International Studies Quarterly* 47: 101-27.
- Neumayer, E. (2003c). 'What Determines the Allocation of Aid by Arab Countries and Multilateral Agencies?', *Journal of Development Studies* 39(4): 134-7.
- Neumayer, E. (2003d). *The Pattern of Aid Giving: The Impact of Good Governance on Development Assistance*, Routledge: London.
- Nunnenkamp, P., C. Canavire and L. Triveño (2004). 'Targeting Aid the Needy and Deserving: Nothing but Promises?', *Kiel Working Papers* 1229, Kiel Institute for World Economics: Kiel.
- ODI (2004). *Aid to 'Poorly Performing' Countries: A Critical Review of Debates and Issues*, Overseas Development Institute: London.
- Ovaska, T. (2003). 'The Failure of Development Aid', *Cato Journal* 23(2): 175-88.
- Pettersson, J. (2004). *Foreign Aid, Fungibility, Growth and Poverty Reduction* (mimeo), Department of Economics, Stockholm University.
- Ram, R. (2003). 'Roles of Bilateral and Multilateral Aid in Economic Growth of Developing Countries', *Kyklos* 56: 95-110.
- Ram, R. (2004). 'Recipient Country's 'Policies' and the Effect of Foreign Aid on Economic Growth in Developing Countries: Additional Evidence', *Journal of International Development* 16: 201-11.
- Rao, J.M. (1994). 'Judging Givers: Equity and Scale in Aid Allocation', *World Development* 22(10): 1579-84.
- Rao, J.M. (1997). 'Ranking Foreign Aid Donors: An Index Combining the Scale and Equity of Aid Giving', *World Development* 25(6): 947-61.



- Robinson, S. and F. Tarp (2000). 'Foreign Aid and Development: Summary and Synthesis', in F. Tarp and P. Hjertholm (eds), *Foreign Aid and Development: Lessons Learnt and Directions for the Future*, Routledge: London and New York.
- Roodman, D. (2004). 'The Anarchy of Numbers: Aid, Development and Cross-country Empirics', *CGD Working Paper 32*, Centre for Global Development: Washington DC.
- Svensson, J. (1999). 'Aid, Growth and Democracy,' *Economics and Politics* 11(3): 275-97.
- Torres, M.M. and M. Anderson (2004). 'Fragile States: Defining Difficult Environments for Poverty Reduction', *PRDE Working Papers 1*, Poverty Reduction in Difficult Environments Team, Policy Division, DIFD: London.
- Voivodas, C.S. (1973). Exports, Foreign Capital Inflow and Economic Growth. *Journal of International Economics* 3(4): 337-49.
- Wood, A. (2004). 'UN Millennium Project Report: Comments on 23/9/04 Draft' mimeo, DIFD: London.
- World Bank (2002). *World Bank Group Work in Low-income Countries under Stress: A Task Force Report*, World Bank: Washington DC.
- World Bank (2003). *Allocating IDA Funds Based on Performance: Fourth Annual Report on IDA's Country Assessment and Allocation Process*, World Bank: Washington DC.