

Nunnenkamp, Peter; Canavire-Bacarreza, Gustavo; Triveño, Luis

Working Paper

Targeting aid to the needy and deserving: nothing but promises?

Kiel Working Paper, No. 1229

Provided in Cooperation with:

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

Suggested Citation: Nunnenkamp, Peter; Canavire-Bacarreza, Gustavo; Triveño, Luis (2004) : Targeting aid to the needy and deserving: nothing but promises?, Kiel Working Paper, No. 1229, Kiel Institute for World Economics (IfW), Kiel

This Version is available at:

<https://hdl.handle.net/10419/3327>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Kiel Institute for World Economics
Duesternbrooker Weg 120
24105 Kiel (Germany)

Kiel Working Paper No. 1229

**Targeting Aid to the Needy and Deserving:
Nothing But Promises?**

by

Peter Nunnenkamp, Gustavo Canavire, Luis Triveño

October 2004

The responsibility for the contents of the working papers rests with the authors, not the Institute. Since working papers are of a preliminary nature, it may be useful to contact the authors of a particular working paper about results or caveats before referring to, or quoting, a paper. Any comments on working papers should be sent directly to the authors.

Targeting Aid to the Needy and Deserving: Nothing But Promises? *

Abstract

By reallocating aid to where it is needed most and where a productive use is most likely, donors could help alleviate poverty in developing countries. The rhetoric of donors suggests that this insight has increasingly shaped the allocation of aid. However, we find little evidence supporting the view that the targeting of aid has improved significantly. Most donors provide higher aid to relatively poor countries, but so far the fight against poverty has not resulted in a stronger focus on recipient countries with particularly high incidence of absolute poverty. Many donors failed to direct aid predominantly to where local conditions were conducive to a productive use of inflows. The response of donors to changing institutional and policy conditions in recipient countries turns out to be fairly weak. In particular, we reject the proposition that multilateral donor institutions provide better targeted aid than bilateral donors.

Keywords: bilateral aid, multilateral aid, poverty, economic policy assessment, quality of institutions

JEL classification: F35

Peter Nunnenkamp
Research Department IV
Kiel Institute for World Economics
Duesternbrooker Weg 120
D-24105 Kiel, Germany
phone: ++49-431-8814209
fax : ++49-431-8814500
e-mail: nunnenkamp@ifw.uni-kiel.de
home: <http://www.uni-kiel.de/ifw/staff/nunnenk.htm>

Gustavo Canavire, Luis Triveño
Advanced Studies Program
Kiel Institute for World Economics
Düsternbrooker Weg 120
D-24105 Kiel, Germany
e-mail: gcanavire@ucb.edu.bo
triveno@asp.ifw-kiel.de

* Critical comments and helpful suggestions by Rolf J. Langhammer are gratefully acknowledged.

Contents

Introduction.....	1
Where Do We Stand?	3
Some Pitfalls in Using Aid Statistics	10
Is Aid Targeted to Poor Countries?	16
Is Aid Concentrated in Countries with Good Policies?.....	24
Do Poor Countries with Better Policies and Institutions Receive More Aid?	31
Do Donors Respond to Changes in Institutional and Policy Conditions?	38
Summary and Conclusions	43
References	47

Introduction

Since the publication of the World Bank study “Assessing Aid: What Works, What Doesn’t, and Why” in 1998, a broad consensus has emerged that the economic effects of external aid in recipient countries could be enhanced if aid flows were better targeted to poor countries which pursue development-friendly economic policies. Accordingly, the challenge for bilateral donors and multilateral donor institutions is not only to provide *more* aid but also to increase the *effectiveness* of a given amount of aid. By reallocating aid to where poverty-related needs are greatest and where a productive use is most likely, donors could improve the much criticized record of aid in the past and contribute to higher income growth and the alleviation of absolute poverty in developing countries.

Recent donor initiatives appear to be built on this insight. For example, President Bush, in his address delivered at the UN Conference on Financing for Development in Monterrey, Mexico, in March 2002, outlined a new approach of the United States to foreign aid. President Bush announced to increase US aid by 50 percent, but “exclusively for countries with good governance, investing in health and education and encouraging economic freedom” (quoted from *The Economist* 2002: 73).

Moreover, important donors such as the World Bank claim that the insights on how to render aid more effective have already been translated into practical aid policies so that the targeting of aid to poor countries offering favourable local conditions has improved considerably (World Bank 2002). However, it is far from obvious whether such claims are well founded. An earlier evaluation of World Bank aid questioned this

institution's own favourable assessment (Nunnenkamp 2002a). The present paper takes a broader perspective: We analyse the actual behaviour of all major donors since the early 1980s. In particular, we assess whether multilateral donor institutions provide more efficient aid than bilateral donors, and whether aid has become more targeted over time.

The paper is structured as follows: First, we summarize the recent literature on the effectiveness of aid. Second, we deal with data problems and describe how we try to overcome some of the pitfalls in using aid data. Third, we raise several questions related to the efficiency of aid allocation. After evaluating whether aid has been targeted to poor countries and to where local conditions are relatively favourable, we combine these two criteria that, according to the calls for more effective aid, should guide the allocation of aid. Finally, we assess whether bilateral donors and multilateral institutions have responded appropriately to *changes* in local conditions, e.g. by increasing aid to countries whose policy and institutional reforms provided better chances for aid being effective.

We conclude with a summary of major findings. All in all, we find little evidence supporting the view that foreign aid is well targeted. Multilateral institutions and most bilateral donors do provide more aid to countries with relatively low per-capita income than to richer countries, but the fight against absolute poverty has not resulted in more focussed aid so far. Many donors have failed to direct aid predominantly to where local conditions rendered it more likely that aid could be used productively. The response of donors to changing institutional and policy conditions in recipient

countries is shown to be fairly weak. In particular, we reject the proposition that multilateral institutions provide better targeted aid than bilateral donors.

Where Do We Stand?

Industrialized countries grant aid to developing countries for a wide variety of reasons. Apart from satisfying humanitarian needs in recipient countries and fostering the recipients' economic development, Schraeder et al. (1998) list several other determinants of bilateral aid considered important in the literature: strategic considerations, i.e., aid being used as a tool to enhance the national security of donors; the contribution of aid to the *donor's* economy, notably the promotion of exports of the donor country to the recipient country; colonial heritage and the ensuing cultural similarity of former colonial powers and their former colonies; as well as the ideological and political stance of developing countries, i.e., aid being used to support recipients who share the ideological beliefs and contribute to the political ends of donors.

Hence, it may be hardly surprising that various studies, especially research conducted in the 1970s and 1980s, found that bilateral donors largely pursue their own interests when allocating aid across recipients and “that developmental or humanitarian concerns, including the reduction of poverty, receive a relatively low or even zero weight in this process” (McGillivray 2003: 7).¹ Some critics even argued that aid was

¹ See also the literature given there.

counterproductive from a developmental point of view.² For example, Boone (1996) found that aid did not add to investment in developing countries, nor benefited the poor, but it did increase the size of government. Perverse incentive effects were also stressed by Easterly (2001), who argued that recipients are tempted to reduce their own efforts at economic development as long as aid is granted to close so-called financing gaps. Langhammer (2004) pointed to the possibility that rising aid inflows adversely affect the quality of economic policy in recipient countries, e.g., by inducing wasteful spending and encouraging rent-seeking. Weder (2000: 297) as well as Nunnenkamp (2002b: 8) showed that the correlation between aid inflows in terms of per capita of the recipient countries' population and the growth rate of per-capita income in these countries was totally insignificant for a large sample of developing countries.

The latter finding does not mean, however, that "foreign aid has not been effective under certain circumstances" (Weder 2000: 297). It rather suggests that there have been as many failures as successes. As a matter of fact, the debate has shifted to the question under which conditions aid could achieve "the ultimate objective of ... poverty reduction or, more broadly, the promotion of human well-being" (McGillivray 2003: 24). Influential contributions to this debate, notably World Bank (1998), Burnside and Dollar (2000) as well as Collier and Dollar (2001), suggested that the effectiveness of aid, in terms of promoting income growth and alleviating absolute poverty in the recipient countries, could be greatly improved if aid was directed

² The late Lord Bauer offered a particularly forceful critique of foreign aid (Bauer 1972).

primarily to poor countries pursuing development friendly economic policies. This view has been challenged from different angles:³

- Apart from the income status of recipients and the quality of their policies, the effectiveness of aid is supposed to depend on additional factors. For example, aid may help contain the social costs of external shocks in countries with high vulnerability to natural disasters and terms-of-trade losses (Guillaumont and Chauvet 2001). Isenman and Ehrenpreis (2003) argue that aid could be effective under conditions of post-conflict reconstruction.
- Roland-Holst and Tarp (2002: 35) criticize that the effectiveness debate has been confined by an “excessive preoccupation with macro performance criteria” and largely ignored that “poverty and its attendant experiences are microeconomic phenomena.”
- According to Ram (2003: 106), the debate suffers from paying insufficient attention to the “substantial differences between bilateral and multilateral aid in terms of donor motives, character of and conditionalities associated with the aid.” Likewise, Harms and Lutz (2004) call for a disaggregated analysis of different types of aid.
- Langhammer (2004) considers it unreasonable to assume that the reallocation of aid in favour of countries with good policies does not deteriorate the quality of these policies.

³ For a recent survey, see Harms and Lutz (2004).

These extensions and qualifications notwithstanding, it is by now widely accepted that, for aid to support economic development, (i) recipients must have in place development friendly governance and institutional structures as well as sound economic policies, and (ii) donors need to be selective in allocating aid. The most frequently mentioned selection criteria are: the level of per-capita income and the degree of absolute poverty in recipient countries and their development performance (Isenman and Ehrenpreis 2003: 7). According to Collier and Dollar (2001: 1787-8), whose research contributed considerably to the recently emerged consensus, “the interaction of aid and policy is good for growth, so that aid enhances the growth effect of policy and good policy increases the growth effect of aid.” It follows that a poverty-efficient aid allocation should target low-income countries, and among them favour countries with a better policy.

This raises the question, on which we concentrate in the following, whether bilateral donors and multilateral institutions have adjusted their aid allocation accordingly. Policy statements by several donors suggest that this has been the case. Most prominently, the United States announced at the UN Conference on Financing for Development that the principle of selectivity would clearly guide the allocation of US aid. The so-called Millennium Challenge Account envisages that good governance and market friendly economic policies will be required for developing countries to receive US aid (Clemens and Radelet 2003). OECD representatives claim that the growing academic consensus has already guided cross-country allocation decisions of

multilateral and bilateral donors (Isenman and Ehrenpreis 2003: 7).⁴ McGillivray refers to a recent survey of ten donors to make the point that developmental criteria are receiving higher priority in aid allocation; multilateral institutions, in particular, are said to have a clearer developmental focus (McGillivray 2003: 28). The favourable perception of multilateral aid is supported by a recent World Bank study; the study contends that the allocation of World Bank aid “has improved dramatically in recent years” (World Bank 2002: 69).

It would not be for the first time that words are in conflict with deeds.⁵ Alesina and Weder (2002: 1136) point to the rhetoric of donors that aid rewards efficient and honest governments. These authors apply various indicators of corruption in recipient countries and come to the conclusion: “Our vast exploration of the data never uncovered any even weak evidence of a negative effect of corruption on received foreign aid.” The results of an earlier comparison of US, Japanese, French and Swedish aid to African countries by Schraeder et al. (1998: 319) “clearly reject the rhetorical statements of policymakers within the industrialized North who publicly assert that foreign aid is an altruistic tool of foreign policy.” Even for Sweden these authors find that words deviated considerably from deeds: Aid by this donor is widely recognized as being guided by humanitarian need of recipients, whereas Schraeder et

⁴ Isenman and Ehrenpreis (2003: 10) reckon: “After the cold war, donors have given more emphasis to development criteria than previously, including selectivity according to both poverty needs and policy performance.”

⁵ Breuning (1995) entitled her study “Words and Deeds: Foreign Assistance Rhetoric and Policy Behavior in the Netherlands, Belgium, and the United Kingdom.”

al. (1998) reveal that the allocation of Swedish aid was increasingly shaped by vocal domestic interests demanding a positive linkage between aid and the promotion of Swedish exports.⁶ Alesina and Dollar (2000) analyse the allocation of aid by bilateral donors by applying panel estimates. They consider various variables as possible determinants of aid, including the income status and size of recipient countries, their openness to trade, the political regime and civil liberties, as well as colonial ties and the voting behaviour of recipients in the United Nations. The major result of this exercise is that foreign aid was dictated as much by political and strategic considerations as by the economic needs and policy performance of the recipients.

Donors claiming that the allocation of aid has improved recently may object that these studies portray a picture that no longer applies. That is why we focus on the most recent past in the subsequent analysis. In any case, there is sufficient reason to be sceptical whether fine words have been translated into noble deeds. A recent evaluation of World Bank aid by Nunnenkamp (2002a) argues that the World Bank's success story rests on extremely weak foundations. According to a simple regression analysis, the allocation of World Bank aid did not improve in the course of the 1990s. Moreover, the claim that poor countries with good policies received much higher per-capita aid than less needy and deserving countries is found unjustified once two outliers with extremely high per-capita aid (Cape Verde and Honduras) are excluded from the sample. Langhammer (2004) questions that the end of the Cold War has

⁶ Grilli and Riess (1992: 214) stress the commercial interests of donor countries in their analysis of EC aid to associated developing countries. However, these authors note a shift in bilateral EC aid policies towards "a more need-oriented type of assistance" in the 1980s.

rendered aid allocation more efficient. Especially after September 11, 2001, “the assumption that aid allocation for strategic reasons has become an issue of the past seems naïve” (Langhammer 2004: 90).⁷

Against this backdrop, we suspect that the starting point of Schraeder et al. (1998), namely that critical analyses of aid allocation based on comprehensive empirical evidence are rare, retains its validity. On the one hand, the results of earlier studies may no longer apply. The analysis of Schraeder et al. (1998) covers only the 1980s, and the data used in Alesina and Dollar (2000) as well as Alesina and Weder (2002) do not extend beyond 1995. Moreover, previous assessments are mostly restricted to bilateral aid⁸, and the recent evaluation of Nunnenkamp (2002a) is confined to World Bank aid. On the other hand, “a simple inspection of aid statistics”, which according to McGillivray (2003: 27) reveals a slight upward trend in aid shares directed to low-income countries, appears to be insufficient to prove that the allocative behaviour of donors has shifted away from non-developmental criteria. As we show in the next section, a simple inspection may lead to biased results.

The subsequent analysis aims at overcoming these shortcomings. We cover aid flows in 1981-2002, with a focus on the recent past. The behaviour of bilateral donors is compared with the behaviour of multilateral institutions, in order to check the

⁷ On the occasion of the spring meeting of the IMF and the World Bank in 2004, *The Economist* (2004) noted that “aid was flowing a little more generously, but a lot more strategically.”

⁸ For example, Breuning (1995) and Schraeder et al. (1998) consider just three and four bilateral donors, respectively.

widespread belief that the latter have a stronger developmental focus.⁹ Moreover, we figure out whether the allocation of aid differs significantly between the nine most important bilateral donors (United States, Japan, France, Germany, United Kingdom, Netherlands, Sweden, Norway and Denmark). We refer to two indicators of humanitarian need for foreign aid: the per-capita income of recipient countries and the incidence of absolute poverty in these countries. In this way, we take into account that both donors and recipients have announced to attach priority to the eradication of absolute poverty. Finally, we apply alternative measures reflecting the local conditions for aid to be used productively in the recipient countries. In addition to drawing on the limited evidence available from the World Bank on its Country Policy and Institutional Assessment (CPIA), we consider several institutional and policy-related variables as possible determinants of the allocation of aid across a large number of developing countries.

Some Pitfalls in Using Aid Statistics

The OECD's Development Assistance Committee (DAC) provides the most frequently used statistics on aid granted by bilateral donors and multilateral institutions to a large number of recipient countries. For example, the important contribution by Alesina and

⁹ It may be argued that political and economic self-interests of donors figure more prominently in the utility functions of bilateral donors. However, we do not attempt to specify and estimate the utility functions of bilateral donors and multilateral institutions. Rather, the role of political and economic self-interests is assessed only indirectly by comparing the extent to which developmental criteria have shaped the allocation of bilateral and multilateral aid, respectively.

Dollar (2000) refers to this standard source. As a matter of fact, a first impression on whether aid has increasingly been targeted to poor recipient countries is quite easy to get from DAC statistics since this source also provides a classification of recipient countries into different income categories. As will be shown in the following, however, the interpretation of these data is subject to various problems.

In Table 1, we present the development of net disbursements of aid by bilateral DAC donors as well as multilateral institutions granted to the group of recipients classified as least developed countries (LDCs) and other low-income countries by the DAC. Aid to these recipients is given as the share in total aid to all recipients by bilateral and multilateral donors, respectively. The distribution of aid portrayed in Table 1 may be read as supporting some widely held beliefs:

- First of all, multilateral aid appears to be better targeted to countries with relatively low per-capita income than aid of all bilateral donors taken together.
- At the same time, the targeting of aid differs widely across bilateral donors.
- It is consistent with conventional wisdom that the Scandinavian countries and the Netherlands reported the highest share of aid directed to countries with relatively low per-capita income until the early 1990s. However, this was no longer true in the more recent past.
- The focus on low-income countries is shown to be weakest for US aid, which invites the conclusion that political and strategic interests dominate the allocation of US aid.

- The share of Japanese aid accounted for by low-income recipients appears to be surprisingly high throughout the period under consideration. However, the high share is largely due to aid given to “other low-income countries”, notably China, Indonesia and Vietnam; Japan’s aid to LDCs accounted for just 13.5 percent of total aid in 1999–2002.

Table 1 — Share of Least Developed Countries and Other Low-income Countries (DAC classification) in Total Aid by Bilateral and Multilateral Donors, 1981–2002 (percent)

	1981–1986	1987–1992	1993–1998	1999–2002
All DAC donors	43.8	45.8	44.5	45.2
United States	23.7	21.3	22.3	30.5
Japan	53.3	55.3	56.3	57.8
France	43.5	49.2	43.2	42.5
Germany	51.0	46.0	51.3	44.9
United Kingdom	58.9	61.1	54.5	54.3
Netherlands	60.2	57.4	39.9	45.8
Sweden	67.3	57.4	46.1	40.0
Norway	70.2	65.9	53.7	44.4
Denmark	79.7	66.0	56.9	55.7
Multilateral donors	69.5	71.9	66.4	62.6

Source:OECD (2004).

The targeting of aid to low-income countries seems to have become weaker over time for many bilateral donors as well as for multilateral donor institutions. Taking into consideration that all LDCs plus other low-income countries account for 72 out of the 174 aid recipients listed in the DAC statistics,¹⁰ and for about 60 percent of the world’s

¹⁰ The total of 174 aid recipients excludes 12 transition countries in Central/Eastern Europe and the former Soviet Union; see below on Part II of the DAC statistics.

population, it even appears to be questionable whether donors really treated these countries more favourably than more advanced countries.

However, the first impression on the allocation of aid, as presented in Table 1 on the basis of official DAC data, may be misleading for various reasons. This standard source of aid flows does not capture important aspects of the much debated efficiency of aid. For example, the data comprise both emergency relief and “regular” aid. Tied aid is included even though it is less useful for recipients than untied aid. The Centre for Global Development discounts tied aid by 20 percent (*The Economist* 2003). Moreover, the commonly used net disbursements of aid comprise loans as well as outright grants by donors; notwithstanding the DAC criterion that loans must have a minimum grant element of 25 percent, the reported aid flows cover transfers that are concessional to a widely different degree.¹¹

While these flaws are difficult to overcome when analysing the distribution of aid by various donors to a large sample of recipient countries, other data problems can and should be taken into account. The distribution of aid in the recent past, on which we concentrate in the following, depends on the treatment of so-called Part II countries (DAC 2004). The DAC has separated this group comprising “more advanced developing countries and territories (MADCT)” plus a dozen relatively advanced transition countries in Central/Eastern Europe and the former Soviet Union from the main list of aid recipients (Part I) since 1993:

¹¹ Langhammer (2004: 82) notes that reported aid flows tend to overstate the true grant content by 25–30 percent.

- Some MADCT that have been shifted from the main list to Part II are major aid recipients. Israel is the most prominent case in point; in 1993–1998, for example, Israel represented by far the most important recipient of US aid, accounting for more than 18 percent of total US aid. At the same time, French Polynesia and New Caledonia (which have also been shifted to Part II) each accounted for almost 7 percent of French aid. Ignoring the shift of MADCT to Part II may result in seriously distorted results. In the case of France, the share of 42.5 percent of aid directed to low-income countries, reported in Table 1, declines to 36.2 percent if aid to MADCT in Part II is taken into account. This is why we include aid to MADCT in the subsequent analysis.
- By contrast, transition countries in Central/Eastern Europe and the former Soviet Union which are now listed in Part II but did not appear on the main list of aid recipients before, are excluded from the subsequent analysis. This seems appropriate since our focus is on aid to developing countries, and we rely on data for the period 1981–2002 in some steps of our analysis. Yet, when discussing aid shares of developing country groups, it should be kept in mind that shares reported since the early 1990s would have to be adjusted downwards if aid flows to relatively advanced transition countries were included. This refers to multilateral donor institutions, in particular, who directed 17 percent of their overall aid in 1999–2002 to transition countries listed in Part II; for all bilateral donors taken together, the corresponding share was just 7.5 percent.

Another data issue concerns “unallocated aid”. The distribution of aid between different income groups may be blurred since unallocated aid constitutes a significant and rising share of total aid, especially for several bilateral donors. For instance, unallocated aid rose from 15 percent in 1981–1986 to 36 percent in 1999–2002 for the United States, and from 23 percent to 40 percent for Sweden. This in itself may raise important questions about the efficiency of aid. Unallocated aid not only comprises items such as research performed in the donor country for the benefit of developing countries but also administrative costs, which are mainly incurred in the donor country (DAC 2004: 9). It is impossible to decide, however, which factor bears major responsibility for the rise in unallocated aid by bilateral donors. Hence, the analysis of aid shares in the next sections is based on adjusted totals which exclude unallocated amounts.

Finally, the distribution of aid between different income groups as given in the DAC statistics is flawed since the same income classification of recipients is applied over the whole period under consideration. This means that a recipient country listed as especially poor or relatively advanced, on the basis of per-capita income data for 1998, is implicitly assumed to have been in the same category almost 20 years before. As shown below, this assumption is highly unrealistic. Therefore, we reclassify recipient countries according to their status in terms of per-capita income (as well as the incidence of absolute poverty) at the beginning of each sub-period. This procedure has as a consequence that the aid share of specific income groups may vary considerably over time, especially when important recipients cross the line from one income group

to another and donors do not adjust their aid allocation accordingly.

In addition to the – adjusted – share analysis just described, we calculate aid flows in terms of per capita of the recipient countries' population. This alternative measure is required to account for the fact that the development of aid shares is dominated by some important recipients of aid in absolute terms, e.g., large countries such as China and India. This is not to ignore that the comparison of aid in per-capita terms has its own problems. As shown in Nunnenkamp (2002a), some outliers may result in a completely misleading picture on whether donors have targeted poor countries or countries with favourable local conditions for aid being used productively. We account for this possibility by (i) presenting the median of per-capita aid for specific country groups in addition to the average, and (ii) running (non-parametric) Spearman rank correlations in addition to Pearson correlations.

Is Aid Targeted to Poor Countries?

In the first step of this section, we analyse the poverty orientation of bilateral donors and multilateral institutions, by calculating aid shares and accounting for the procedural issues raised before. We use two measures to assess whether aid was targeted to countries in particular need of aid: the per-capita income (US\$ in terms of PPP) at the beginning of the sub-periods considered and the percentage of the recipient countries' population living on less than one dollar per day. The second measure reflects the incidence of absolute poverty. In contrast to earlier studies such as Alesina and Dollar (2000), we account for absolute poverty, in addition to per-capita income,

as poverty eradication has become a most important objective which the donor community would like to help achieve.¹² The measure of absolute poverty is taken from Chen and Ravallion (2004) and the online database provided by these authors (<http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>). For both measures we divide the sample countries for which the relevant data are available into quartiles and present, in Table 2 and Annex Table 1, the aid shares of the poorest quartile and the poorer half of the sample.

The evidence for multilateral institutions and all bilateral donors taken together does not support claims that aid has become more focussed on countries with low per-capita income and high incidence of absolute poverty. This is not to ignore that multilateral institutions directed about four fifths of their aid to countries whose per-capita income was below the median, and more than two thirds to countries where the incidence of absolute poverty was above the median.¹³ Furthermore, multilateral aid appears to be better targeted than bilateral aid throughout the period 1981–2002 and in all respects, i.e., independently of whether we consider the poorer half of the sample or the poorest quartile, or whether per-capita income or absolute poverty is taken as an indicator of

¹² The so-called Millennium Development Goals (<http://www.developmentgoals.org/>) as well as the outcome of the UN Conference on Financing for Development in Monterrey are clear indications to this effect (UN 2002).

¹³ It has to be recalled that the totals on the basis of which we calculate shares do not include “unallocated aid”, aid to countries for which income or poverty data are lacking and aid to relatively advanced transition countries (see preceding section on data questions and procedures).

need. Typically, however, poor recipients received a lower share of multilateral aid in the most recent sub-period (1999–2002) than in the more distant past.

Table 2 — Share of Low-income Countries^a in Total Aid by Bilateral and Multilateral Donors,^b 1981–2002 (percent)

Donors	Groups of recipients	1981–1986	1987–1992	1993–1998	1999–2002
All DAC donors	poorest quartile	35.6	31.2	28.5	27.6
	poor half	68.2	71.3	72.9	67.0
United States	poorest quartile	18.1	12.5	18.0	22.3
	poor half	52.0	57.9	54.1	52.0
Japan	poorest quartile	38.3	27.9	15.3	12.6
	poor half	71.0	67.5	73.1	63.1
France	poorest quartile	43.9	38.7	32.3	34.1
	poor half	77.3	80.9	75.0	70.8
Germany	poorest quartile	38.1	28.8	30.9	32.5
	poor half	68.5	68.5	78.5	64.3
United Kingdom	poorest quartile	61.1	52.1	47.9	45.7
	poor half	85.3	91.4	84.0	83.1
Netherlands	poorest quartile	55.0	40.2	51.5	43.6
	poor half	83.2	83.2	77.8	82.1
Sweden	poorest quartile	68.2	53.8	46.3	43.4
	poor half	87.9	86.9	79.0	80.3
Norway	poorest quartile	72.6	57.2	60.9	49.8
	poor half	88.0	86.7	84.8	78.9
Denmark	poorest quartile	75.9	56.2	55.8	48.8
	poor half	95.9	92.7	88.8	84.6
Multilateral donors	poorest quartile	63.8	51.4	40.9	36.6
	poor half	85.9	89.8	85.2	78.7

^aCountry classification according to per-capita income (US\$ in terms of PPP) at the beginning of the respective period. – ^bAid granted to all countries with data on per-capita income in the respective period = 100. Aid reported as unallocated in the source not included in totals.

Source: OECD (2004); World Bank (2004).

The latter observation applies to the poorest quartile in particular, whose share in multilateral aid decreased to 36–38 percent. The poverty focus of multilateral institutions weakened most considerably when the poorest quartile is defined in terms of per-capita income. In 1999–2002, this quartile received less multilateral aid than the next quartile with higher per-capita (though still below the median). This is mainly because some large countries, notably China, India and Pakistan, continued to be among the most important recipients of aid even though they recorded relatively high income growth and, thus, no longer belonged to the poorest quartile.¹⁴ In other words, multilateral institutions were rather hesitant to adjust the allocation of aid to the changing income status of recipients.¹⁵

The targeting of bilateral aid by all DAC donors to the poorest quartile of recipients was weak throughout 1981–2002. Most recently, the poorest quartile received just slightly more than a quarter of bilateral aid. Bilateral aid was rather biased towards countries close to the median. This is most evident when recipients are classified according to absolute poverty. The two quartiles just above and below the median each accounted for a higher share in total bilateral aid than the poorest quartile in 1999–2002. At the same time, Table 2 and Annex Table 1 underscore that there are pronounced differences across bilateral donors in targeting poor countries:

¹⁴ Per-capita income in China even exceeded the median in 1999–2002.

¹⁵ This may be due, at least partly, to country-specific aid commitments extending over several years. Medium-term commitments involve a trade-off between the predictability of project and program financing available to recipients and the possibility of donors to react flexibly to changing conditions.

- The United States stands out in that the poorest quartile received considerably less than a quarter of US aid throughout the period under consideration. Moreover, the next quartile with absolute poverty just above the median was also discriminated against in the allocation of US aid. This corresponds to the widely held view that the developmental orientation of US aid is particularly weak.¹⁶
- The calculations for Japan support the earlier observation of a bias against the poorest countries even though aid was concentrated on countries with per-capita incomes below the median.
- On the other hand, bilateral aid by some donors was at least as targeted to recipients with relatively low per-capita income as multilateral aid. Apart from Scandinavian donors, this also applies to the United Kingdom.
- In 1999–2002, the focus on countries with high incidence of absolute poverty was strongest for UK and Danish aid, and weakest for US and French aid. Most bilateral donors have in common, however, that their aid was more focussed on countries with relatively low per-capita income than on countries with relatively high incidence of absolute poverty. This is true for the most recent past, too, which puts into question that donors have strongly reacted to the widely perceived need to fight absolute poverty by reallocating aid.

As mentioned earlier, the distribution of aid in absolute terms is dominated by comparatively large countries. Hence, we complement the share analysis by

¹⁶ For a qualification of this view, see McGillivray (2003: 28).

correlating aid in terms of per capita of the recipient countries' population with the incidence of absolute poverty and per-capita income, respectively. In this exercise each country observation carries the same weight, which implies that the correlation coefficients may depend heavily on some outliers of typically very small countries receiving outstandingly high aid in per-capita terms. For instance, Cape Verde, Samoa and Tonga each received bilateral aid in the order of US\$ 150 per annum in 1999–2002, whereas the median of bilateral aid to all sample countries amounted to just US\$ 15.6. But outliers are not restricted to very small countries. In the case of US aid, Israel stands out with annual per-capita aid of US\$ 116 in 1999–2002, compared to the median of US\$ 1.5 for all recipients of US aid.

Recipients often received outstandingly high per-capita aid even though they were fairly advanced economically. With a per-capita income of more than US\$ 18000 in 1999, Israel belonged to the richest sample countries. The per-capita income of several very small countries with outstandingly high per-capita aid significantly exceeded the median for the overall sample.¹⁷ Against this backdrop, it is not surprising that the treatment of outliers is critical for assessing whether aid was targeted to poor countries. Typically, the correlation analysis provides stronger support to the proposition of targeted aid when results are based on (non-parametric) Spearman rank correlations, rather than Pearson correlations (Table 3 and Annex Table 2).

¹⁷ For example, the per-capita income of Cape Verde, Samoa and Tonga ranged from US\$ 4400 to US\$ 5800 (1999); the median was US\$ 3350.

Table 3 — Per-capita Aid^a and Per-capita Income of Recipient Countries^b: Correlation Results^c

	Pearson correlations				Spearman rank correlations			
	1981–1986	1987–1992	1993–1998	1999–2002	1981–1986	1987–1992	1993–1998	1999–2000
All DAC donors ^d	–0.01 (–0.16)	–0.04 (–0.20**)	–0.07 (–0.17*)	–0.09 (–0.15*)	–0.14 (–0.17*)	–0.20** (–0.23**)	–0.27*** (–0.29***)	–0.24** (–0.27***)
United States ^d	0.12 (–0.08)	0.20** (–0.06)	0.21** (–0.00)	0.12 (–0.15*)	–0.17* (–0.20**)	–0.19** (–0.20**)	–0.30*** (–0.33***)	–0.33*** (–0.36***)
Japan	–0.07	–0.11	–0.10	–0.01	–0.14	–0.14	–0.13	–0.08
France	–0.10	–0.15	–0.15*	–0.17*	–0.21**	–0.33***	–0.23**	–0.13
Germany	–0.04	–0.02	–0.28***	–0.30***	–0.19*	–0.25***	–0.54***	–0.49***
United Kingdom	–0.10	–0.06	–0.03	–0.04	–0.27***	–0.24***	–0.21**	–0.31***
Netherlands	–0.16	–0.14	–0.13	–0.20**	–0.39***	–0.40***	–0.40***	–0.54***
Sweden	–0.11	–0.11	–0.12	–0.19**	–0.33***	–0.34***	–0.39***	–0.50***
Norway	–0.11	–0.09	–0.17*	–0.24**	–0.51***	–0.52***	–0.52***	–0.50***
Denmark	–0.22**	–0.19**	–0.22**	–0.26***	–0.53***	–0.56***	–0.50***	–0.41***
Multilateral donors	–0.19*	–0.24**	–0.17*	–0.05	–0.31***	–0.39***	–0.31***	–0.31***

^aAnnual average in US\$ per capita of the recipient countries' population at the beginning of the respective period. – ^bPer-capita income in US\$, in terms of PPP, at the beginning of the respective period. – ^c Number of observations ranges from 100 to 129; *** significant at the 1 percent level (two-tailed test); ** 5 percent level; * 10 percent level. – ^dIn parentheses: excluding Israel.

Source: OECD (2004); World Bank (2004).

In particular for bilateral donors, Pearson correlation coefficients reported in Table 3 often remain insignificant. The correlation even turns out to be positive in the case of the United States unless Israel is excluded from the sample. It is only for Denmark that countries with lower per-capita income have consistently received higher per-capita aid. Pearson correlations point to improved targeting of aid over time by some bilateral donors, notably Germany and Norway.

Japan provides an exception in that parametric as well as non-parametric correlations do not reveal any significant relationship between the per-capita income of recipients

and per-capita aid. This corresponds to Japan's unfavourable position in the ranking of bilateral donors with regard to the aid component of the so-called Commitment to Development index, presented by the Centre for Global Development (*The Economist* 2003). However, our results do not support the taillight position of the United States in this ranking once the impact of outliers is reduced by applying Spearman rank correlations.

More generally, the second panel of Table 3 underscores that the targeting of aid differs considerably across bilateral donors. Throughout the period 1981–2002, targeting proved to be fairly strong for Norway and Denmark. Germany, the Netherlands and Sweden have improved the targeting of per-capita aid since the early 1990s and, thereby, caught up with the two Scandinavian donors just mentioned. It is mainly because Japan and France have failed to strengthen the poverty orientation of aid why multilateral aid continued to be targeted more strongly to countries with lower per-capita income in 1999–2002 than bilateral aid of all donors taken together. Yet our correlation results cast further into doubt that multilateral aid has increasingly been directed to countries with low per-capita income.

The comparison between multilateral and bilateral donors turns in favour of the latter if the poverty orientation of aid is measured by the incidence of absolute poverty in recipient countries (Annex table 2).¹⁸ Multilateral institutions and most bilateral donors have in common, however, that the focus on countries with high incidence of absolute

¹⁸ As concerns the comparison between individual bilateral donors, the results presented in Annex Table 2 are largely in line with the pattern observed in Table 3.

poverty lost momentum in 1999–2002, compared to 1993–1998. As a result, the Spearman rank correlation between per-capita aid and absolute poverty for the period 1999–2002 (in Annex Table 2) is typically weaker than the corresponding correlation between per-capita aid and per-capita income of recipient countries (in Table 3). This finding renders it still more questionable that the fight against absolute poverty has increasingly shaped the allocation of aid.

Is Aid Concentrated in Countries with Good Policies?

As indicated earlier, the donors' allegation is not only that the allocation of aid has become more efficient through targeting poor countries. In addition the World Bank (2002: 29) reckons: "Financial assistance is being increasingly allocated to countries that have reasonably good policies and institutions – that is, the countries that can best use aid for poverty alleviation."¹⁹ For evaluating which countries offer promising local conditions for aid to be effective, the World Bank refers to its own Country Policy and Institutional Assessment (CPIA).

The problem for outsiders to critically assess the justification of such claims is that comprehensive information on the CPIA is not made available by the World Bank. We draw on limited evidence presented in Collier and Dollar (2001), who classify more than 100 countries into five CPIA categories ranging from very good to very poor. No exact reference year is given by the authors, but it seems reasonable to assume that the

¹⁹ This statement by the World Bank refers to official development assistance in general, not just to multilateral aid.

information provided refers to the late 1990s. We use this information in two ways in this section: (i) to calculate the share of aid that various donors direct to countries with good and very good policies (CPIA 4 and 5) and those with poor and very poor policies (CPIA 2 and 1), and (ii) to assess whether aid inflows per capita of the recipients' population are higher for the first group than for the second group.

The evidence presented in Table 4 does not support the proposition of a well targeted allocation of aid. The CPIA is rated good or very good for 44 countries out of the overall sample of 96 developing countries for which both aid inflows and the CPIA are available. Hence the share of aid granted to this group should clearly exceed 50 percent if it consisted of strongly preferred recipients of aid. However, multilateral institutions as well as several bilateral donors failed to meet this criterion in 1999–2002:

- Among bilateral donors, the share is shown to be highest for the United States and Japan. This may come as a surprise in the light of the unfavourable rating these donors receive with regard to the aid component of the Commitment to Development index presented by the Centre for Global Development (*The Economist* 2003). In the case of Japan, this result is because of the strong focus of aid on some Asian neighbours whose policies are rated favourably; the share of China, India, the Philippines and Thailand amounted to one third of Japanese aid, compared to 15 percent of aid by all DAC donors taken together. In the case of the United States, one may argue that the three largest recipients in the CPIA 4/5 group (Egypt, Colombia and Jordan, which together accounted for 31 percent of US aid to

all developing countries for which the CPIA classification is available) would have been preferred recipients even if their policies had been rated less favourably, as they were considered strategically or politically important.

- The share of the CPIA 4/5 group is lowest for aid by Scandinavian countries and the Netherlands, which is in sharp contrast to the targeting of poor countries discussed in the previous section and puts into question the conventional wisdom that the developmental orientation of these donors is strongest. The Netherlands actually reported the highest share of aid directed to countries with poor and very poor policies (26 percent in 1999–2002). This is mainly because its former colony Indonesia became the most important recipient of Dutch aid after the outbreak of the Asian financial and currency crisis, even though the World Bank considered the policy and institutional environment in Indonesia to be poor.
- Furthermore, the evidence is in conflict with the World Bank’s claim that multilateral institutions focus their aid more strongly on countries with good policies than bilateral donors, who are said to be more “constrained ... by geopolitical objectives” (World Bank 2002: 32) when deciding on the allocation of aid.

Changes over time in the policy orientation of aid donors are difficult to assess as long as just one observation is available for the CPIA. The comparison of the aid share of countries with a CPIA of 4 or 5 in 1999–2002 with their share in 1993–1998 may be distorted due to unknown changes in the CPIA. Yet, it is striking that the aid share of the CPIA 4/5 group declined for almost all donors (with the notable exception of

France). This could be attributed to a bias against the donors' allegation of an improved allocation over time if major recipients were characterized by better policies and institutional conditions in the late 1990s than in earlier years. The share of the CPIA 4/5 group reported in Table 4 for the period 1993–1998 would then be overstated, which would imply that we portray an overly bleak picture on changes over time in the policy orientation of donors. However, we consider such a bias unlikely in

Table 4 — Distribution of Aid According to Policy Conditions in Recipient Countries (percent)^a

	Share of aid directed to countries with:			
	CPIA 4/5		CPIA 1/2	
	1993–1998	1999–2002	1993–1998	1999–2002
All DAC donors	55.5	50.1	22.0	21.9
United States	67.7	55.9	21.6	23.2
Japan	63.5	55.0	22.8	23.4
France	46.8	51.7	23.1	16.3
Germany	58.1	54.3	17.8	16.7
United Kingdom	52.7	50.1	18.0	16.9
Netherlands	51.4	39.6	11.9	26.2
Sweden	47.0	43.2	14.6	17.0
Norway	41.1	41.8	15.9	20.2
Denmark	47.3	41.9	9.4	9.1
Multilateral donors	49.2	47.5	20.4	20.5

^aAid to all developing countries for which the CPIA classification is available = 100. CPIA ranges from 5 (very good policies) to 1 (very poor policies); for details, see text.

Source: OECD (2004); Collier and Dollar (2001: Table 3).

the light of deteriorating institutional conditions that Kaufmann et al. (2003) report for most developing countries. For all three institutional dimensions discussed in more detail further below, i.e., voice and accountability, rule of law and control of corruption, the number of developing countries with improvements in the period 1996–2002 turns out to be significantly less than the number of countries with deteriorating institutional conditions.

Similar to the procedure applied before, the impact of some large recipients on the policy orientation of aid may be reduced if aid is considered in per-capita terms, rather than absolute terms. The World Bank (2002: 32) uses the per-capita measure to prove that the allocation of aid has improved. As noted by Nunnenkamp (2002a), however, this measure may lead to seriously distorted results unless the treatment of outliers is made explicit. The *average* of per-capita aid may deviate substantially from the *median* since extremely small countries often receive outstandingly high per-capita aid inflows. If these countries are concentrated in either the good policy or the poor policy group, outliers can greatly affect the picture of the policy orientation of aid donors.

Therefore, Table 5 not only reports the average per-capita aid granted to countries with different CPIA ratings, but also the corresponding median. The impact of outliers with particularly high per-capita aid is reflected in that the median always is substantially below the average. This discrepancy is typically larger for the group of countries with good and very good policies (CPIA 4/5). In other words, outliers are concentrated in this group so that average aid flows tend to overstate the policy orientation of donors.

Table 5 — Per-capita Aid in 1999–2002 and Policy Conditions in Recipient Countries (US\$)^a

	CPIA 4/5		CPIA 1/2	
	Median	Average	Median	Average
All DAC donors	11.55	21.69	13.60	21.18
United States	1.12	3.31	1.54	2.52
Japan	2.19	6.93	1.67	3.96
France	0.30	1.93	0.67	3.30
Germany	0.76	1.92	0.67	0.86
United Kingdom	0.25	1.30	0.10	0.70
Netherlands	0.29	0.93	0.27	0.69
Sweden	0.05	0.47	0.06	0.38
Norway	0.07	0.35	0.13	0.30
Denmark	0.06	0.43	0.01	0.15
Multilateral donors	3.77	17.70	10.25	13.22

^aCPIA ranges from 5 (very good policies) to 1 (very poor policies); for details, see text.

Source: OECD (2004); World Bank (2004); Collier and Dollar (2001: Table 3).

This applies to multilateral institutions in particular. Comparing average aid granted to countries in the CPIA 4/5 group and countries in the CPIA 1/2 group seems to validate claims that multilateral institutions preferred the former over the latter. However, this preference is only because the CPIA 4/5 group comprises five countries with a population of substantially less than one million and outstandingly high per-capita aid inflows (in descending order of aid in 1999–2002: St. Kitts and Nevis, St. Lucia, Cape Verde, Guyana, and the Maldives). If these five recipients were excluded, the average reported for the CPIA 4/5 group would fall from US\$ 17.7 to US\$ 7.5. This adjustment underlines the impression to be gained from comparing the median, namely that countries with good policies were treated *less* favourably by multilateral institutions.

A similar picture is shown for all bilateral donors taken together, although the median suggests that bilateral donors discriminated less severely against recipients with good policies than multilateral institutions. For some bilateral donors, the median of aid granted to countries in the CPIA 4/5 group exceeded the median of aid granted to countries in the CPIA 1/2 group, as one would expect if donors favoured recipients with development-friendly policies. Japan, the United Kingdom and Denmark represent notable examples. The case of Denmark raises a puzzle:

- There is some evidence pointing to a relatively selective distribution of Danish aid compared to other bilateral donors. Denmark appears to be most reluctant to provide aid to countries with unfavourable policies; in 1999–2002, 12 out of 31 countries with a CPIA of 1 or 2 did not receive any Danish aid (or repayments of earlier loans even resulted in negative net disbursements).
- This finding seems to conflict with the earlier result, reported in Table 4 above, of a relatively low share of Danish aid channelled to the CPIA 4/5 group.

The ambiguity with regard to Denmark can be attributed to the prominent role of some poor countries with a CPIA of 3 (“moderate”) as recipients of Danish aid. Three countries out of the four most important recipients in 1999–2002 belong to this category: Mozambique, Tanzania and Vietnam, which together accounted for 26 percent of Danish aid to all developing countries for which the CPIA classification is

available.²⁰ This invites the next step of our analysis in which we evaluate the allocation of aid by considering the income status of recipient countries in combination with the policy and institutional conditions prevailing in these countries.

Do Poor Countries with Better Policies and Institutions Receive More Aid?

In the following, we assess whether donors discriminate between more favourable and less favourable policy and institutional conditions *within* groups of recipient countries with similarly high per-capita income. For a start, we replicate the results of Table 5 for sub-samples of relatively poor recipient countries. We restrict the sample by applying two alternative thresholds of per-capita income, US\$ 4000 and US\$ 2000 (Table 6).²¹ This reduces the number of countries with a CPIA of 4 or 5 from 44 countries to 20 and 8 countries, respectively, whereas the number of countries with a CPIA of 1 or 2 is only reduced from 31 countries to 27 and 21 countries, respectively. In other words, aid recipients with better policies are concentrated in the higher income categories.

²⁰ Another 16 percent is accounted for by Burkina Faso, Malawi, Nicaragua and Zambia, which were also characterized by a CPIA of 3 and a relatively low per-capita income in 1999.

²¹ For the reasons given above, we restrict the presentation and interpretation of results to the median.

Table 6 — Per-capita Income, Policy Conditions and Aid Inflows in 1999–2002 (Median; US\$)^a

	Per-capita income in 1999:			
	Below US\$ 4000		Below US\$ 2000	
	CPIA 4/5 (20 countries)	CPIA 1/2 (27 countries)	CPIA 4/5 (8 countries)	CPIA 1/2 (21 countries)
All DAC donors	18.86	13.60	19.85	13.60
United States	2.98	1.60	2.98	1.60
Japan	3.07	1.61	2.43	1.22
France	0.22	0.67	0.26	0.86
Germany	1.30	0.78	1.61	0.90
United Kingdom	0.40	0.17	0.49	0.20
Netherlands	0.46	0.34	0.88	0.35
Sweden	0.09	0.07	0.16	0.22
Norway	0.16	0.13	0.17	0.16
Denmark	0.24	0.01	0.24	0.01
Multilateral donors	8.05	11.10	12.03	11.89
^a CPIA ranges from 5 (very good policies) to 1 (very poor policies); for details, see text.				

Source: OECD (2004); World Bank (2004); Collier and Dollar (2001: Table 3).

Against this backdrop, it is not surprising that the median for the CPIA 4/5 group in Table 6 deviates more strongly from the median of the unrestricted sample in Table 5 than the median for the CPIA 1/2 group. With few exceptions, the median of per-capita aid increases when the calculation is restricted to recipients with lower per-capita income. This confirms that most donors grant more aid to poorer countries. In line with evidence presented in preceding sections, Japan and France are notable exceptions: Japan provided less aid to poor countries with a CPIA of 1 or 2 than to all

countries in that CPIA group; the median of French aid in 1999–2002 turns out to be lower for the restricted sample with a CPIA of 4 or 5.

At the same time, French aid remains biased *against* countries with better policies if we control for per-capita income of the recipients. This result may be attributed to close post-colonial ties of France with poor performers in Sub-Saharan Africa. More surprisingly perhaps, a similar bias can be observed for Sweden when the sample is restricted to countries with per-capita income below US\$ 2000. This may be in conflict with conventional wisdom, but underscores the earlier finding of Schraeder et al. (1998) that the allocation of Swedish aid left much to be desired. By contrast, the distribution of US aid and Norwegian aid is no longer biased against recipients with better policies. Once again the policy orientation of Danish aid appears to be strongest in Table 6. The United Kingdom ranks second in terms of targeting aid to poor recipients with better policies. The United States, Japan and Germany granted about twice as much aid to poor countries with better policies, independently of whether the income threshold is set at US\$ 4000 or US\$ 2000.

The differences in the policy orientation of individual bilateral donors have as a consequence that the median of aid is just about US\$ 5-6 higher for poor countries with better policies if all bilateral donors are taken together. Compared to multilateral donor institutions, however, Table 6 points to a relatively strong policy orientation of bilateral donors. This result contrasts sharply with the World Bank's assertion that multilateral institutions are less constrained by geopolitical objectives (World Bank 2002: 32). As a matter of fact, the distribution of multilateral aid remains biased

against countries with a CPIA of 4 or 5 if countries with per-capita income below US\$ 4000 are considered. This discrimination disappears only if the sample is further restricted to countries with per-capita income below US\$ 2000; but even then poor countries with better policies did not receive significantly more aid from multilateral institutions than poor countries whose policies are rated poor or very poor.

In contrast to the limited information that is publicly available with respect to the World Bank's CPIA, Kaufmann et al. (2003) offer a wealth of information on the institutional conditions prevailing in a large number of countries.²² Two out of the six institutional indicators presented in this widely used source, namely control of corruption and the rule of law, are of particular interest for assessing in more detail whether aid donors preferred recipient countries in which the institutional framework rendered it more likely that external aid could be used productively. A third indicator, voice and accountability, is considered in the following to check whether donors granted more aid to countries where democratic values appear to be more advanced. Each indicator ranges from -2.5 to 2.5, with higher values corresponding to better institutional conditions. In this section, we use the indicator values presented for 2000 in Kaufmann et al. (2003), reflecting the stage of institutional development across developing countries at that time.

In addition to these institutional indicators, two policy-related variables are considered in the following: (i) annual average consumer price inflation in 1999-2002 is taken as a

²² Harms and Lutz (2004: 21) stress the advantages of the data set presented by Kaufmann et al. (2003), compared to the ad-hoc nature of policy variables used by Burnside and Dollar (2000).

proxy of macroeconomic stability in recipient countries; (ii) the share of exports plus imports in GDP of recipient countries in 1999–2002 is supposed to reflect their openness to trade. Conventional wisdom suggests that aid can be used more productively in countries that are macro-economically stable and more open to trade. Hence, aid should be related negatively with inflation, and positively with the trade share if donors took these policy-related variables into account when deciding on the allocation of aid.

The relevance of the five institutional and policy-related indicators for the distribution of bilateral and multilateral aid in 1999–2002 is assessed by applying correlation analysis. We calculate Spearman rank correlation coefficients, rather than parametric correlation coefficients, since the institutional indicators by definition have a limited variation. All correlations are calculated for the restricted sample of developing countries with per-capita income below US\$ 4000 in 1999. This is not only because of the focus on relatively poor developing countries in this section. At the same time, this restriction, which reduces the number of observations to 64–74, seems required to avoid seriously biased results, taking into account that more advanced countries are typically characterized by better institutions.

Most of the correlations of per-capita aid in 1999–2002 with institutional indicator values in 2000 turn out to be insignificant (Table 7: columns 1–3). The interpretation of this finding is ambiguous, however. Even though we restrict the sample as indicated above, all three institutional indicators are still positively related with the per-capita income of aid recipients (these correlations are not shown). As a consequence, we may

understate the relevance of institutional conditions for the allocation of aid. The coefficients reported in Table 7 (columns 1–3) tend to capture two opposing effects: On the one hand better institutional conditions may encourage higher aid *ceteris paribus*; on the other hand donors tend to allocate less aid to countries that are economically more advanced and, thus, have better institutions.

Yet one can get some tentative clues as concerns the reaction of donors to institutional conditions in recipient countries. First, institutional conditions appear to have been more relevant for Japanese aid than for aid from other bilateral donors. This may be a side effect of Japan's low engagement in least developed countries (see above) and its focus on Asian neighbours with more advanced institutions. Second, bilateral donors seem to be less concerned about legal conditions and corruption than about democratic values and political institutions, proxied by voice and accountability. The observation that all correlations between bilateral aid and control of corruption are insignificant is in line with the earlier finding of Alesina and Weder (2002: 1136), who conclude: "There is no evidence that less corrupt governments receive more foreign aid." Third, in contrast to Alesina and Weder (2002) who did not find systematic differences between bilateral and multilateral donors in 1975–1995, the correlation results for aid in recent years indicate that corruption had a stronger impact on the allocation of multilateral aid.

Table 7 — Per-capita Aid and Institutional Conditions in Low-income Recipient Countries^a: Correlation Results^b

	Aid in 1999–2002 with:			Difference of aid (1999–2002 vs. 1993–1998) with difference (2002 vs. 1996) of:		
	(1) voice and accounta- bility (2000)	(2) rule of law (2000)	(3) control of corruption (2000)	(4) voice and accounta- bility	(5) rule of law	(6) control of corruption
All DAC donors	0.40***	0.19	0.18	0.19*	0.06	0.14
United States	0.19*	0.01	0.04	0.19*	–0.05	–0.01
Japan	0.36***	0.26**	0.03	0.19	0.01	–0.07
France	0.01	0.01	0.06	–0.03	–0.13	0.04
Germany	0.18	0.15	0.16	0.21*	0.11	0.12
United Kingdom	0.10	0.19*	0.13	0.15	0.08	0.02
Netherlands	0.15	0.03	–0.01	0.11	–0.05	–0.11
Sweden	–0.06	–0.06	–0.00	0.13	–0.15	0.14
Norway	0.03	0.01	–0.11	0.01	–0.11	0.08
Denmark	0.31***	0.16	0.16	–0.06	0.01	0.05
Multilateral donors	0.28**	0.06	0.27**	0.31***	0.00	0.04
^a Per-capita income in 1999 below US\$ 4000 (PPP). – ^b Spearman rank correlation coefficients; *** significant at 1 percent level (two-tailed test), ** 5 percent level, * 10 percent level. Number of observations: 74 for correlations with voice and accountability, rule of law, control of corruption, as well as the difference of voice and accountability; 70 for correlations with the difference of the rule of law; 62 for correlations with the difference of control of corruption.						

Source: OECD (2004); Kaufmann et al. (2003).

As concerns macroeconomic stability and openness to trade, the behaviour of multilateral institutions did not differ significantly from the behaviour of all bilateral donors taken together. Similar to the findings on the relevance of institutional conditions, most of the correlation coefficients presented in columns 1 and 2 of Table 8 are insignificant. Some bilateral donors granted even higher aid to countries

characterized by high inflation. More open countries appear to have received more aid from bilateral and multilateral donors. However, this finding would probably turn out to be superficial if country-size effects were taken into account: Relatively small countries, which tend to receive higher per-capita aid than large countries, are typically characterized by a relatively high share of external trade in GDP.

Do Donors Respond to Changes in Institutional and Policy Conditions?

In this section, we redefine the institutional and policy-related variables, as well as the aid variable, in order to overcome some of the limitations of the previous step of our analysis. The possibility that the relevance of institutions has been understated so far may be checked by taking the *difference* between indicator values reported for 2002 and those for 1996 as a measure of institutional changes. Unlike the indicator values for one particular year, institutional changes are not correlated with per-capita income of recipient countries. Positive differences reveal institutional improvements and should be associated with an increase in per-capita aid. Changes in aid are defined as the difference between per-capita aid in 1999–2002 and per-capita aid in 1993–1998. Likewise, macroeconomic variables are redefined as the difference in inflation and the trade-to-GDP ratio, respectively, between the period 1999–2002 and the period 1993–1998.

Table 8 — Per-capita Aid, Macroeconomic Stability and Openness to Trade in Low-income Recipient Countries^a: Correlation Results^b

	Aid in 1999–2002 with:		Difference of aid (1999–2002 vs. 1993–1998) with:	
	(1) inflation, 1999–2002 ^c	(2) openness to trade, 1999–2002 ^d	(3) change in inflation ^e	(4) change in openness to trade ^e
All DAC donors	0.02	0.23*	–0.30**	0.06
United States	0.16	0.19	–0.15	–0.10
Japan	0.07	0.37***	–0.25*	0.16
France	–0.37***	–0.05	–0.19	–0.14
Germany	–0.11	0.02	–0.18	0.11
United Kingdom	0.24*	0.04	–0.25*	0.02
Netherlands	0.19	–0.03	–0.18	0.17
Sweden	0.22*	0.06	–0.01	0.03
Norway	0.29**	0.02	–0.15	–0.08
Denmark	0.15	–0.03	–0.17	0.10
Multilateral donors	–0.08	0.29**	–0.03	0.14

^aPer-capita income in 1999 below US\$ 4000 (PPP). – ^bSpearman rank correlation coefficients; *** significant at 1 percent level (two-tailed test), ** 5 percent level, * 10 percent level. Number of observations: 72 for correlations with openness to trade and change in openness; 64 (61) for correlations with inflation (change in inflation). – ^cAnnual average of consumer price inflation. – ^dAnnual average of the percentage share of the sum of exports and imports in GDP. – ^e1999–2002 minus 1993–1998.

Source: OECD (2004); World Bank (2004).

In Table 9 we exemplify the reaction of aid donors to particularly pronounced changes in institutional conditions in selected recipient countries with low per-capita income. We present three cases for which institutional conditions with regard to voice and accountability, rule of law and control of corruption improved significantly as well as three cases for which institutional conditions deteriorated most seriously. With the exception of Haiti, the countries considered are located in Sub-Saharan Africa. This is

because low-income countries with pronounced changes in institutional conditions are concentrated in this region.

Table 9 — Change of Per-capita Aid^a to Selected Recipients with Significant Institutional Changes^b

	Improvement of:			Deterioration of:		
	voice and accountability in Nigeria (0.71)	rule of law in Madagascar (0.61)	control of corruption in Ethiopia (0.57)	voice and accountability in Haiti (−0.67)	rule of law in Zimbabwe (−1.11)	control of corruption in Côte d'Ivoire (−1.24)
All DAC donors	+	−	−	−	−	−
United States	+	0	+	−	−	0
Japan	+	−	−	0	+	−
France	0	−	−	−	−	−
Germany	0	−	−	−	−	−
United Kingdom	+	0	−	−	−	+
Netherlands	0	−	−	0	−	+
Sweden	0	0	−	−	−	0
Norway	0	−	−	+	−	−
Denmark	0	−	−	0	−	+
Multilateral donors	−	+	+	−	−	−

^aDifference between per-capita aid granted in 1999–2002 and that granted in 1993–1998; “0” if the difference, in absolute terms, is not higher than US\$ 0.01 or below 10 percent. – ^bDifference between institutional indicator values reported for 2002 and those reported for 1996; see numbers in parentheses for selected recipients.

Source: OECD (2004); Kaufmann et al. (2003).

The proposition that the allocation of aid has become more efficient implies that institutional improvements went along with increased aid (“+” in Table 9), whereas deteriorating institutional conditions should have been associated with reduced aid (“−”). However, a large number of entries in Table 9 is in conflict with this

proposition. Less than half of all entries (30 out of 66) point to an efficient reallocation of aid in response to institutional changes. One third of all entries (shaded cells) suggest that donors reacted inappropriately to such changes, and another 14 entries indicate just marginal changes in aid (“0”). More specifically, the country episodes may be summarized as follows:

- The reaction of donors to institutional *improvements* is shown to be particularly deficient. In 26 out of 33 cases, aid did not respond or even declined. Madagascar was not rewarded by increased bilateral aid although it made considerable progress in enforcing the rule of law. Ethiopia did not benefit from higher bilateral aid, except from the United States, in response to better control of corruption.
- The reaction to *deteriorating* institutional conditions turns out to be more appropriate, even though aid increased in some instances. All donors except Japan reacted strongly by cutting aid to Zimbabwe where the rule of law was seriously compromised.
- Among the three institutional aspects under consideration, it was especially with regard to control of *corruption* that bilateral donors did not react as strongly as one might have expected, in the light of the strong views the development community holds on the detrimental effects of corruption.²³ Rather, the episodes of Ethiopia and Côte d’Ivoire add further evidence to the

²³ For example, Weder (2000: 293) argues that “corruption is one of the most important obstacles to development.”

earlier findings of Alesina and Weder (2002). Comparing the ratio of “appropriate” to “inappropriate” reactions in Table 9, bilateral donors seem to be more concerned about democratisation in recipient countries, reflected in changes for voice and accountability, than about corruption and the rule of law.

- The reactions of *multilateral* institutions were similar to those of all bilateral donors taken together when institutional conditions deteriorated in recipient countries. Yet a somewhat different pattern emerges for multilateral institutions. They reacted more favourably to stricter enforcement of the rule of law in Madagascar and better control of corruption in Ethiopia. On the other hand, the comparison of bilateral and multilateral donors turns out to be in favour of the former when it comes to voice and accountability in Nigeria.
- Finally, there are some interesting differences between the reaction patterns of individual *bilateral* donors. In contrast to the taillight position of the United States in the ranking of the Centre for Global Development, the United States is the only bilateral donor for which none of the entries has a “wrong” sign. At the same time, three “wrong” signs each for the Netherlands, Norway, Denmark and Japan indicate that the allocation of aid leaves much to be desired even for donors whose aid was shown to be well targeted in some respects.

In the light of the evidence discussed for particularly pronounced cases of institutional change, it is no longer surprising that there are very few statistically significant correlations between changes in institutional conditions and changes in per-capita aid (Table 7: columns 4–6). Hence, it is rather unlikely that the relevance of institutions

for the allocation of aid was seriously understated before. All four significant correlation coefficients relate to the same institutional aspect, voice and accountability. None of the major donors responded to changes concerning the rule of law and control of corruption in a way that would have improved the allocation of aid.

The same applies to one of the two policy-related variables, namely the change in the trade-to-GDP ratio (Table 8: columns 3–4). In other words, neither bilateral nor multilateral donors systematically supported the process of opening up to trade of various developing countries by increasing aid to these countries. Multilateral institutions as well as many bilateral donors also failed to reward successful macroeconomic stabilization efforts, reflected in lower inflation in 1999–2002, by increasing aid. Taken together, the reactions of most major donors to changes in institutional and policy conditions proved to be fairly weak.

Summary and Conclusions

Multilateral institutions and most bilateral donors provide more aid to relatively poor countries. Yet we find little evidence supporting the view that foreign aid is well targeted (Table 10). The targeting of aid to low-income countries has become weaker, rather than stronger in recent years. Various donors, including multilateral institutions, were hesitant to adjust the allocation of aid to the changing income status of recipients. While the targeting of aid differs considerably across important bilateral donors, it is highly questionable that the fight against absolute poverty has increasingly shaped the allocation of aid.

Table 10 — Summary of Results^a

	Focus on poor countries	Focus on countries with good policies	Focus on poor countries with good policies/institutions ^b	Reaction to changing policies/institutions
All DAC donors	0	–	0 (+)	0
United States	0	0	0 (+)	0
Japan	–	0	+ (+)	–
France	–	–	– (–)	–
Germany	+	0	0 (+)	0
United Kingdom	++	0	0 (++)	0
Netherlands	++	–	0 (+)	–
Sweden	++	–	– (–)	–
Norway	++	–	– (0)	–
Denmark	++	0	0 (++)	–
Multilateral donors	+	–	0 (–)	0

^aAssessment refers mainly to aid allocation in 1999–2002; strong: ++, moderate: +, ambiguous: 0, weak: –, very weak: --. ^bIn parentheses: based on CPIA exclusively (Table 6).

Furthermore, the distribution of aid across all developing countries is in serious conflict with the proposition that aid has been granted predominantly to where the institutional and policy framework rendered it more likely that aid could be used productively. Judging local conditions in recipient countries by the World Bank's Country Policy and Institutional Assessment (CPIA), two findings stand out:

- Once we adjust for some outliers, it turns out that recipients with good policies were often treated *less* favourably. The World Bank's claim that multilateral aid has a stronger policy orientation than bilateral aid is rejected.

- The widely held belief that Scandinavian donors and the Netherlands provide more efficient aid, particularly compared to Japan and the United States, ignores that at least some of the allegedly superior donors discriminate against recipients with a favourable CPIA.

Aid by some bilateral donors (notably France, but also Sweden) remains biased against countries with better local conditions even if the sample of recipients is restricted to poor countries. In the case of France, this result might have been expected because of close post-colonial ties between France and poor performers in Sub-Saharan Africa. The case of Sweden may be more surprising, even though an earlier investigation came to a similar result (Schraeder et al. 1998). At the same time, the finding that multilateral institutions did not have a stronger policy orientation proves to be robust if we control for the income status of recipients, and if we complement the CPIA by more specific institutional and policy-related indicators to assess the targeting towards poor countries with good local conditions for aid to be effective. The relation between aid and institutional as well as policy-related indicators turns out to be ambiguous. Bilateral donors appear to be less concerned about the rule of law and control of corruption in recipient countries than about democratic values and political institutions (“voice and accountability”). As concerns the relevance of policy-related indicators, some donors granted even higher aid to countries characterized by macroeconomic instability.

Finally, the response of both, bilateral and multilateral donors to changing institutional and policy conditions in recipient countries proved to be disappointingly weak, in the

light of the widespread rhetoric that policy reforms and institutional development would be supported. Selected country episodes point to an efficient reallocation of aid in response to institutional changes for less than half of all observations. In that regard, especially the reaction patterns of allegedly superior donors such as Denmark, Norway and the Netherlands left much to be desired. According to cross-country correlations, none of the major donors responded to changes concerning the rule of law and control of corruption in a way that would have improved the allocation of aid; and donors have failed to systematically support the process of opening up to trade in developing countries by increasing aid.

References

- Alesina, Alberto, and David Dollar (2000). Who Gives Foreign Aid to Whom and Why? *Journal of Economic Growth* 5 (March): 33–63.
- Alesina, Alberto, and Beatrice Weder (2002). Do Corrupt Governments Receive Less Foreign Aid? *American Economic Review* 92 (4): 1126–1137.
- Bauer, Peter T. (1972). *Dissent on Development: Studies and Debates in Development Economics*. Cambridge, MA (Harvard University Press).
- Boone, Peter (1996). Politics and the Effectiveness of Foreign Aid. *European Economic Review* 40: 289–329.
- Breuning, Marijke (1995). Words and Deeds: Foreign Assistance Rhetoric and Policy Behavior in the Netherlands, Belgium, and the United Kingdom. *International Studies Quarterly* 39 (2): 235–254.
- Burnside, Craig, and David Dollar (2000). Aid, Policies and Growth. *American Economic Review* 90 (4): 847–868.
- Chen, Shaohua, and Martin Ravallion (2004). How Have the World's Poorest Fared Since the Early 1980s? Via Internet: http://www.worldbank.org/research/povmonitor/MartinPapers/How_have_the_poorest_fared_since_the_early_1980s.pdf.
- Clemens, Michael, and Steven Radelet (2003). The Millennium Challenge Account: How Much Is Too Much, How Long is Long Enough? Center for Global Development Working Paper 23. Washington, D.C.
- Collier, Paul, and David Dollar (2001). Can the World Cut Poverty in Half? How Policy Reform and Effective Aid Can Meet International Development Goals. *World Development* 29 (11): 1787–1802.
- DAC (Development Assistance Committee)(2004). *Geographical Distribution of Financial Flows to Aid Recipients 1998–2002*. Paris (OECD).
- Easterly, William (2001). *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, MA (MIT Press).
- Grilli, Enzo, and Markus Riess (1992). EC Aid to Associated Countries: Distribution and Determinants. *Review of World Economics* 128 (2): 202–220.

- Guillaumont, Patrick, and Lisa Chauvet (2001). Aid and Performance: A Reassessment. *Journal of Development Studies* 37 (6): 66–87.
- Harms, Philipp, and Matthias Lutz (2004). The Macroeconomic Effects of Foreign Aid: A Survey. Discussion Paper 2004-11, University of St. Gallen, Department of Economics, St. Gallen.
- Isenman, Paul, and Dag Ehrenpreis (2003). Results of the OECD DAC/Development Centre Experts' Seminar on "Aid Effectiveness and Selectivity: Integrating Multiple Objectives into Aid Allocations". *DAC Journal* 4 (3): 7-25.
- Kaufmann, Daniel, Aart Kraay and Massimo Mastruzzi (2003). Governance Matters III: Governance Indicators for 1996-2002. World Bank Policy Research Working Paper 3106. Washington, D.C. (<http://www.worldbank.org/wbi/governance>).
- Langhammer, Rolf J. (2004). Halving Poverty by Doubling Aid: Is There Reason for Optimism? *The World Economy* 27 (1): 81–98.
- McGillivray, Mark (2003). Aid Effectiveness and Selectivity: Integrating Multiple Objectives into Aid Allocations. *DAC Journal* 4 (3): 27-40.
- Nunnenkamp, Peter (2002a). Shooting the Messenger of Good News: A Critical Look at the World Bank's Success Story of Effective Aid. Kiel Working Papers 1103, Institute for World Economics, Kiel.
- Nunnenkamp, Peter (2002b). IWF und Weltbank: Trotz aller Mängel weiterhin gebraucht? Kiel Discussion Papers 388. Institute for World Economics, Kiel.
- OECD (2004). International Development Statistics CD-ROM, Paris.
- Ram, Rati (2003). Roles of Bilateral and Multilateral Aid in Economic Growth of Developing Countries. *Kyklos* 56 (1): 95–110.
- Roland-Holst, David, and Finn Tarp (2002). New Perspectives on Aid Effectiveness. Paper presented at the ABCDE-Europe 2002 Conference of the World Bank in Oslo, mimeo.
- Schraeder, Peter J., Steven W. Hook, and Bruce Taylor (1998). Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows. *World Politics* 50 (January): 294–323.
- The Economist* (2002). Foreign Aid: A Feast of Giving. March 23: 73.

The Economist (2003). Gauging Generosity: Which Rich Countries Do Most to Help Poor Countries? May 1.

The Economist (2004). The Best Use of Aid? April 26.

UN (2002). Final Outcome of the International Conference on Financing for Development. New York (United Nations). Via Internet: <http://www.un.org/esa/ffd/0302finalMonterreyConsensus.pdf>

Weder, Beatrice (2000). Foreign Aid, Institutions and Development: Lessons from Four Decades of International Development Cooperation. *Aussenwirtschaft* 55 (2): 291-303.

World Bank (1998). *Assessing Aid: What Works, What Doesn't, and Why*. Oxford (Oxford University Press).

World Bank (2002). The Role and Effectiveness of Development Assistance: Lessons from World Bank Experience. Research Paper from the Development Economics Vice Presidency. Washington, D.C., mimeo.

World Bank (2004). World Development Indicators CD-ROM. Washington, D.C.

Annex Table 1 — Share of Recipient Countries with High Incidence of Absolute Poverty^a in Total Aid by Bilateral and Multilateral Donors,^b 1981–2002 (percent)

Donors	Groups of recipients	1981–1986	1987–1992	1993–1998	1999–2002
All DAC donors	poorest quartile	29.4	18.3	28.3	27.4
	poor half	53.1	57.1	66.6	58.5
United States	poorest quartile	11.2	15.3	21.8	18.9
	poor half	30.9	31.8	44.2	39.1
Japan	poorest quartile	37.6	10.3	18.8	18.8
	poor half	52.8	58.4	75.1	57.0
France	poorest quartile	31.2	17.8	23.3	16.4
	poor half	49.1	52.3	51.4	47.5
Germany	poorest quartile	33.5	20.1	29.3	25.4
	poor half	54.0	52.6	66.4	62.0
United Kingdom	poorest quartile	41.5	36.0	50.1	60.8
	poor half	75.8	85.5	82.1	80.6
Netherlands	poorest quartile	44.1	25.9	43.0	41.5
	poor half	75.5	75.3	67.3	66.1
Sweden	poorest quartile	48.8	29.5	50.0	43.8
	poor half	89.9	86.9	77.7	77.0
Norway	poorest quartile	41.0	36.8	58.2	45.8
	poor half	88.8	89.1	84.2	73.3
Denmark	poorest quartile	44.8	39.7	59.6	55.6
	poor half	85.8	85.7	83.5	81.8
Multilateral donors	poorest quartile	48.3	30.0	37.3	37.5
	poor half	76.0	79.1	73.0	66.7

^aCountry classification according to percentage of population living on less than US\$ 1 per day at the beginning of the respective period. – ^bAid granted to all countries with data on incidence of absolute poverty in the respective period = 100. Aid reported as unallocated in the source not included in totals.

Source: OECD (2004); online data base on absolute poverty (<http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>)

Annex Table 2 — Per-capita Aid^a and Incidence of Absolute Poverty in Recipient Countries^b: Correlation Results^c

	Pearson correlations				Spearman rank correlations			
	1981–1986	1987–1992	1993–1998	1999–2002	1981–1986	1987–1992	1993–1998	1999–2002
All DAC donors	–0.07	0.06	0.25**	0.12	–0.01	0.13	0.39***	0.26**
United States	–0.18	–0.10	–0.01	–0.08	–0.04	0.14	0.29***	0.19*
Japan	–0.24**	–0.18	0.06	–0.00	–0.13	–0.03	0.26**	0.02
France	0.17	0.18	0.18*	0.07	–0.09	0.16	0.21*	0.12
Germany	–0.06	0.00	0.25**	0.12	–0.08	0.12	0.34***	0.28***
United Kingdom	0.05	0.17	0.04	0.13	0.04	0.25**	0.32***	0.30***
Netherlands	0.07	0.26**	0.25**	0.20*	0.12	0.33***	0.32***	0.38***
Sweden	0.09	0.17	0.27**	0.24**	0.09	0.02	0.28**	0.31***
Norway	0.07	0.15	0.38***	0.31***	0.25**	0.43***	0.57***	0.36***
Denmark	0.14	0.23*	0.47***	0.42***	0.33***	0.48***	0.53***	0.38***
Multilateral donors	0.11	0.28**	0.21*	0.04	0.24**	0.40***	0.32***	0.20*

^aAnnual average in US\$ per capita of the recipient countries' population at the beginning of the respective period. –
^bPercentage of the recipient countries' population living on less than US\$ 1 per day. – ^cNumber of observations ranges from 70 to 84; *** significant at the 1 percent level (two-tailed test); ** 5 percent level; * 10 percent level.

Source: OECD (2004); Collier and Dollar (2001: Table 3); online data base on poverty (<http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>)