

Aid allocation and the MDGs

How much should different countries get and why?

Different developing countries receive very different amounts of aid. Even considering just low-income countries, amounts ranged in 2004 from around \$90 per capita in Zambia and Senegal to less than \$5 per capita in Nigeria and less than \$1 per capita in India (World Bank, 2006). Are these differences justified, and if not, what would an improved allocation look like?

Much research has been undertaken already. Several studies have looked at whether donors' allocations are based on recipient country 'need', as measured by per capita GDP or some non-income welfare indicator (Box 1). The main finding is that most donors' allocations are only weakly based on recipient country needs. There is, however, a good deal of variation among donors, with multilaterals generally performing better than bilaterals, and some bilaterals (e.g. the UK, Netherlands) generally performing better than others (e.g. France or Japan).

Although useful, studies of this nature share a drawback: there are few obvious benchmarks by which to judge donors' allocations. What proportion of aid, for instance, should go to the poorest countries? By how much should aid received fall as a country's per capita GDP rises? Recognising this, researchers have begun to think more systematically about what an optimal allocation of aid should look like. In particular, which variables should determine the amounts of aid that different countries receive, and what should be their relative contributions?

In these discussions, two sorts of disagreement have arisen. One is about principles: what are the fundamental principles according to which aid allocations should be determined? This involves deeper questions about the role of aid and notions of equity and fairness. The



Helping hand? Strengthening aid allocation is a key factor to help deliver the MDGs.

second is about evidence and implementation. Even if we agree on the fundamental principles, we may not agree about what those principles imply in practice. This is because the evidence on the effects of aid is not always clear cut.

These issues have particular relevance in the context of recent debates around the Millennium Development Goals (MDGs). In particular, will the large scaling-up of aid volumes, called for and agreed during 2005, be combined with a sound approach to its allocation across countries? This issue was relatively neglected during the 2005 debate, but 2007 – the mid-point between the setting of the MDGs and the key target date of 2015 – will heighten attention on the issue. This Briefing Paper discusses the issues further, and concludes with recommendations for donors.

Principles of aid allocation

One principle which can guide aid allocation decisions is that of 'poverty-efficiency' (Collier and Dollar 2001). This can be stated simply: aid should be allocated so as to achieve the largest

Key points

- 'Poverty-efficiency' is a simple and flexible principle for making aid allocation decisions.
- In terms of the MDGs, it would imply greater emphasis on global as opposed to country-level targets.
- Guidelines for donors can help ensure difficult decisions are evidence-based.

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Box 1: Assessing the allocation of aid

Several studies have looked at whether donors' allocations are based on recipient country 'need'. Methods used include:

- calculating the share of total aid going to countries with per capita GNP below a certain level;
- calculating the correlation coefficient between aid receipts and per capita GNP;
- calculating the 'elasticity' of aid receipts with respect to per capita GNP (i.e. the amount by which aid receipts rise, on average, in countries with proportionally lower per capita GNP);
- constructing aid 'concentration curves'.

Some of the most recent studies using these methods are Nunnenkamp and Thiele (2006), 'Targeting aid to the needy and deserving: nothing but promises?' *World Economy* 29(9); Dollar and Levin (2006), 'The increasing selectivity of foreign aid, 1984-2003', *World Development* 34(12); and Baulch (2006), 'Aid distribution and the MDGs', *World Development* 34(6). Reviews of earlier studies include White and McGillivray (1995), 'How well is aid allocated? Descriptive measures of aid allocation', *Development and Change* 26; and McGillivray (2003), 'Descriptive and prescriptive analyses of aid allocation', WIDER Discussion Paper No. 2003/21.

possible reduction in poverty at the global level.

The principle of poverty-efficiency requires that relatively more aid be allocated to countries with higher levels of poverty. However, it also requires that relatively more aid be given to countries in which the effectiveness of aid at reducing poverty – meaning the amount of poverty reduction achieved per dollar of aid – is higher. Among countries with similar levels of poverty therefore, poverty-efficiency requires that more aid be given to countries in which its effectiveness is relatively high, and less aid be given to countries in which its effectiveness is relatively low.

The appeal of the poverty-efficiency principle lies in its focus on achieving the largest possible reduction in poverty. This matches up well with the view that the over-riding purpose of aid is to eradicate poverty. It is also flexible. It can be applied using measures which reflect the depth or severity, as well as the incidence, of poverty (e.g. the poverty gap), which most observers now accept to be preferable to measures based only on the incidence of poverty (e.g. the poverty head count). It can also be applied to different dimensions of poverty (e.g. mortality or malnutrition as well as \$1-a-day or \$2-a-day), which is important since the poorest countries in one dimension are not always the poorest countries in another. Also, Adrian Wood (2006) has shown how the principle can be modified to take into account a country's likely future as well as current level of poverty.

Nevertheless, the poverty-efficiency principle does have its critics. One concern is that its strict application would cause donors to neglect poor countries in which aid effectiveness is considered to be very low: difficult partnerships or fragile states, for example. An approach not subject to this problem would be to allocate aid so as to achieve, or get as close as possible to achieving, a similar reduction in poverty in all countries. However, such an approach would deviate from the poverty-efficiency principle, and therefore

come at the cost of a smaller reduction in poverty at the global level.

A different concern is that poverty-efficiency fails to take into account the 'unjust' disadvantages that some developing countries face. Examples include location in the tropics and being land-locked, which tend to lower countries' growth rates but are outside the control of government policy. An alternative approach which would take these factors into account is an 'equal-opportunity' aid allocation, proposed by Llavador and Roemer (2001). This would allocate aid so as to compensate countries in which high levels of poverty, or slow rates of poverty reduction, are the result of unjust disadvantages, but not those in which government actions are more responsible.

Which of these different principles – poverty-efficiency, country-by-country targets, or equal-opportunity – is right is of course a normative question involving philosophical and moral considerations. It is, however, a question certainly worth thinking more about, not least to see how much consensus exists on which principle is considered to be right. First, however, we consider the other source of disagreement about optimal aid allocations, namely what the principles imply in practice.

Implementing allocation principles

To apply any aid allocation principle in practice, estimates are required of the effect of aid on poverty reduction, and how this effect varies across recipient countries. This includes the 'direct' effects of aid, as for example when social protection expenditure financed by aid reduces poverty directly, as well as the 'indirect' effects, as for example when infrastructure expenditure financed by aid raises economic growth, which in turn reduces poverty.

Collier and Dollar (2001) provided one set of estimates, focusing on the indirect effects of aid via economic growth. They found this effect to be higher in countries with a more favourable policy and institutional environment. However, there are now upwards of 60 different estimates of the effect of aid on economic growth. Many of these find that aid's effect does not vary much across recipient countries, or that it varies according to other recipient country characteristics, such as vulnerability to external shocks.

Collier and Dollar (2001) also argued that the direct effect of aid on poverty was likely to be minor. The reasoning was that, since aid is fungible, it is difficult for donors to target their aid to sectors, such as social protection, which can reduce poverty directly. More recently however, researchers have found that aid does have significant direct impacts on poverty. This is most evident in low-income countries, where the fungibility of aid is less of a problem (since aid accounts for a much larger share of total government expenditure in low-income than middle-income countries).

This discussion leads to the second source of disagreement about aid allocation. Because there

is relatively little consensus about precisely how aid affects poverty, and about how the effect varies across recipient countries, there is a lot of disagreement about what a poverty-efficient aid allocation would look like in practice. The same applies to an equal-opportunity aid allocation, which also requires estimates of aid's effect on poverty reduction.

Possible ways of resolving this dilemma are proposed in the policy implications section at the end of this Briefing Paper. First, however, what do alternative aid allocation principles imply in the context of recent debates around attaining the Millennium Development Goals?

Relevance to the MDGs: global vs. country-level targets

In debates building up to the MDG Review Summit in 2005, two facts became immediately apparent. One was uneven progress towards the different goals. The second, and more relevant in this context, was uneven progress towards each goal across countries and regions. For instance, while East and South Asia were either on-track towards, or had already met, the target of halving \$1-a-day poverty by 2015, progress in Sub-Saharan Africa had been negative.

The main reaction to this uneven progress was of course to recommend a large scaling-up of aid, precisely to accelerate progress in those countries and regions where progress was lagging. This was backed up by an interpretation of the MDGs as country-level as well as global targets, which was made most explicit in the influential UN Millennium Project:

'The UN Millennium Project interprets the Millennium Development Goals as country goals, since this is the spirit in which they are pursued the world over' (UNMP 2005: 3).

This was despite the fact that the goals were originally specified, at least on paper, as global targets.

The call for a large scaling-up of aid led to a lot of debate about absorptive capacity. In particular, could countries off-track in terms of meeting the MDGs absorb a big increase in aid? This issue was often controversial, but the consensus view arguably was that they could, even though there were various challenges for macro-economic policy, and also governance, which needed to be addressed (see, for example, ODI Briefing Papers 'Scaling up vs. absorptive capacity: challenges and opportunities for reaching the MDGs in Africa', May 2005 and 'What would doubling aid do for macroeconomic management in Africa?', April 2006).

Another issue received less attention, however. This was that a country-level interpretation of the MDGs requires departing from the principle of poverty-efficiency: it requires donors to allocate additional aid to lagging countries, even if that aid could have a larger impact on poverty elsewhere. An approach to aid allocation based on a country-by-country interpretation of the MDGs would therefore

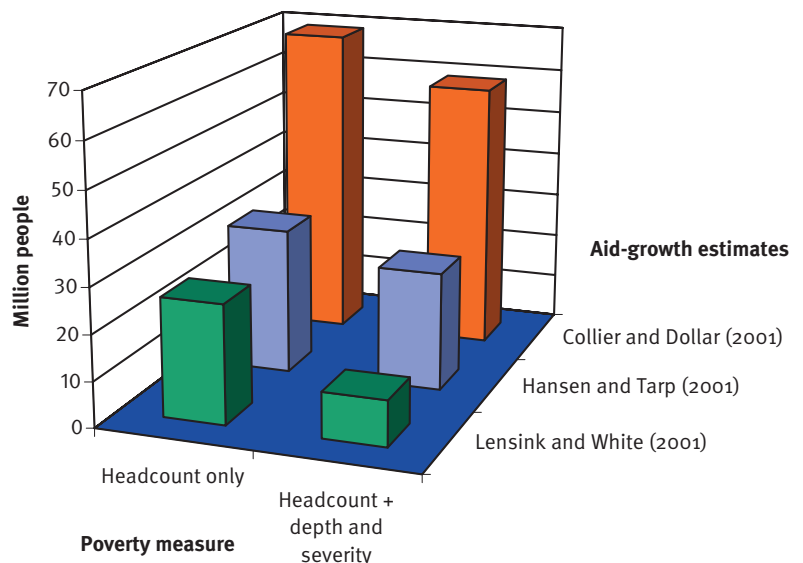
involve a sacrifice – in other words, an 'opportunity cost' – in terms of the total amount of progress towards the MDGs achieved at the global level.

How large is this opportunity cost? A recent ODI Working Paper (Anderson and Waddington, 2006) estimates its size in relation to the target of halving \$1-a-day poverty by 2015. The paper first estimates the total amount of aid required if each low-income country is to halve, or get as close as possible to halving, its \$1-a-day poverty head count by 2015. It then re-allocates this amount on a poverty-efficient basis among all low-income countries. Finally, it estimates the level of the \$1-a-day poverty head count in all low-income countries through to 2015 under the two allocation systems.

The results show that the opportunity cost of a country-by-country approach to meeting MDG 1 could be very significant: it is unlikely to be less than 10 million people, and could be as high as 70 million people (Figure 1). The additional reduction in the poverty head count under a poverty-efficient allocation would be achieved in two main ways. The first would be by allocating relatively more aid (compared to the country-by-country allocation) to South Asia, and relatively less aid to Sub-Saharan Africa. The second would be by allocating relatively more aid to countries within each region in which aid effectiveness is thought to be higher, as opposed to those which are most off-track towards halving poverty by 2015.

The estimated amount of additional reduction in the poverty headcount under a poverty-efficient allocation varies, according to the assumed relationship between aid and economic growth, and which particular measure of poverty is used when calculat-

Figure 1: Additional poverty reduction in low-income countries by 2015 under a poverty-efficient aid allocation (million people)



Notes: Figures refer to the 41 low-income countries with recent \$1-a-day poverty estimates (89% of total population of low-income countries in 2002). The additional amount of poverty reduction is calculated relative to a country-by-country MDG allocation.
Source: Anderson and Waddington (2006).

ing the poverty-efficient allocation. It is higher when using the Collier and Dollar (2001) aid-growth estimates, because these authors find larger differences in levels of aid effectiveness across countries. It is also higher when using the head count measure of poverty to calculate the poverty-efficient allocation, since this maximises the number of people lifted above the poverty line, without considering reductions in the depth or severity of poverty.

Overall, these findings do not necessarily imply that interpreting the MDGs as country-level targets, and allocating aid accordingly, is the wrong approach. This approach may be justified on other grounds: for instance, because it avoids the possibility that countries with low levels of aid effectiveness are by-passed by aid, which many would regard to be ethically wrong. In this case, its opportunity cost, in terms of foregone poverty reduction at the global level, would be a price worth paying. The fact remains, however, that donors should be aware of the size of this cost, even if they regard it to be offset by other normative considerations.

Policy implications

Two sets of implications arise from the issues and results discussed here. First, there are certain guidelines for donors seeking to implement the poverty-efficiency principle in practice.

- Use a measure of poverty which reflects the depth and severity and not just the incidence of poverty, since there is widespread consensus that this is the appropriate way to measure poverty. There is also a strong case that any poverty measure should reflect predicted poverty levels in the near future, and not just current poverty levels.
- Explore the implications of using alternative poverty indicators: not just \$1-a-day or \$2-a-day poverty but also child mortality, under-nourishment or access to water and sanitation, for example. The efficient allocation may well differ according to which indicator is used, and this needs to be recognised. There may, however, be countries which receive less than their optimal allocation whichever indicator is chosen – due, for instance, to small-country bias – and in such cases there would be a very strong case for an increase in aid.
- Explore the implications of using alternative econometric estimates of aid's effect on economic growth. Although different estimates may generate differ-

ent optimal allocations, it may again be possible to identify countries which are under-aided whichever set of estimates are chosen. Also, explore the implications of using recent econometric studies which show significant direct as well as indirect effects of aid on poverty.

- Support attempts at the World Bank to improve the accuracy of purchasing power parity (PPP) exchange rates, leading to more accurate estimates of poverty across recipient countries.

Second, and more broadly, there is a need for more debate about the underlying principles on which aid allocation decisions should be based. Is there a consensus, for example, that an equal-opportunity aid allocation is preferable to a poverty-efficient allocation? Alternatively, is there a consensus that aid should be allocated so as to help achieve the MDGs on a country-by-country basis, or should these targets apply at the global level only? This debate should also consider the underlying principles as to how the total aid budget should be determined, since the two issues cannot be separated.

Of course, it may not be possible to agree on one single principle to guide allocation decisions. It may also not be necessary. In other words, one could simply recognise that there are multiple valid objectives in giving aid. This would have implications for research. In particular, the tasks for researchers would be to:

- look for 'win-win' re-allocations of aid which further progress towards all (or at least most) objectives, and
- make sure donors are aware of the trade-offs between different objectives, so that difficult decisions are at least made on the basis of the best possible evidence.

Overall therefore, the large scaling-up of aid volume called for and agreed during 2005 need not come at the expense of a sound approach to its allocation across countries, as long as donors engage in an open discussion about the principles according to which allocation decisions are made, and apply those principles wisely in practice.

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