# INSTITUTE OF SOCIAL STUDIES

Working Paper Series No. 204

# HOW MUCH AID IS USED FOR POVERTY REDUCTION?

Howard White

October 1995

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# TABLE OF CONTENTS

| 1. | Introduction          | 1  |
|----|-----------------------|----|
| 2. | The Project Approach  | 2  |
| 3. | The Sectoral Approach | 7  |
| 4. | The Country Approach  | 11 |
| 5. | Conclusions           | 14 |
|    | Notes                 |    |
|    | References            |    |



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#### **ABSTRACT**

Poverty reduction is a stated priority objective of many aid donors. So how much aid is directly targeted toward meeting this objective? In fact, this question proves difficult to answer. Three possible measurement techniques are discussed - the project, sector and country approaches - and the results obtained from these techniques compared. It is found that only around 15 per cent of total aid is directly poverty-oriented.

## 1. INTRODUCTION

The reduction of poverty is a recognised objective of development aid and a principal reason for public support of aid giving.<sup>1</sup> Aid can contribute toward poverty reduction either directly or indirectly. The indirect channel is through the trickle down or multiplier effects (or whatever name you wish to choose) from aid's contribution to overall growth. Direct effects come from those parts of the aid programme explicitly targeted at poverty reduction. Donors may be quick to point out that all aid is poverty reducing; however some mix of direct and indirect approaches is desirable - a mix that will vary across time and space. Calculation of the optimal mix requires estimation of the impact of different types of aid on the poor. Research into this area quickly reveals very large gaps in our knowledge, for example the poverty impact of balance of payments support. However, as a starting point, this paper addresses a far narrower question: how much aid is used for direct poverty reduction? Whilst not all aid should be directly targeted at poverty alleviation many of us would have a suspicion that "aid donors ought to do more about poverty". But to turn this suspicion into a recommendation we need to know how much donors are doing already.

There are three approaches to measuring aid's direct poverty focus: the project approach, the sectoral approach and country approach. These are each discussed in turn (in Parts 2, 3 and 4 of the paper respectively). Part 5 concludes by drawing together the different perspectives.

<sup>\*</sup>Revised version of paper presented to IDS Aid and Poverty Reduction Seminar, 8th February 1995 and Poverty, Policy and Aid Workshop, 13th-14th September, 1995; thanks to all at the seminar and workshop, in particular Bob Baulch, Andy Mason, Simon Maxwell and Hans Singer, for useful comments and ideas. Useful comments have also been received from Soniya Carvalho, who also assisted in the provision of data, and referees of the paper at ISS. The author would also like to thank Annemarie Voorvelt for assistance in the preparation of the tables. The usual disclaimer applies.



# 2. THE PROJECT APPROACH

The project approach is the most intuitively appealing: simply add up the total cost of poverty-oriented projects (perhaps adding an imputed share of administration costs) and divide by the total aid budget to get a measure of the donor's poverty focus. There are two main problems with this approach: (i) defining a poverty-oriented project; and (ii) handling multi-component projects, some parts of which are poverty-oriented and others not. These problems are discussed along with the practice of the World Bank, which has previously used this approach and has returned to it with the concept of the Programme of Targeted Interventions (PTIs), and the results from the attempts of the Inter-American Development Bank to measure how much of their money reaches the poor.

The simple question "what is a poverty-oriented project?" may appear to have the simple answer "a project that raises the living standards of the poor"; this definition is adopted by Mosley (1981) in his analysis of British aid.<sup>2</sup> A first problem we encounter is identifying the poor. There are many aspects to poverty, of which low income is just one and, some would argue, by no means the most important; other aspects include standard welfare indicators (health, education and access to water and sanitation) and less tangible items such as spiritual well-being. However, poverty analysis has been dominated by the first of these aspects, which may be denoted income-poverty (Chambers, 1995). Recognising the relevance of the other dimensions of poverty can lead us to revise our opinions of who the poor are, why they are poor and what can and should be done toward the reduction of that poverty. Even if we use the more limited notion of income-poverty, as donor agencies almost invariably do, then data are rarely available to locate the poor, and this absence is often not remedied during project preparation.

Supposing we do know who is poor, then a simple example will show that the above definition - a project which raises the living standards of the poor - does not suffice. Suppose a project raises the annual income of one poor family by one dollar a year and the remaining project benefits accrue to the non-poor (all other poor are unaffected). Surely this is <u>not</u> a poverty-oriented project. Nor does it make sense to say that a project must benefit a certain number - say, one hundred, poor people - since such a definition will discriminate in favour of large projects. A feasible alternative is to set a target for the number of poor beneficiaries as a percentage of the total beneficiary population. This approach is the one that has been favoured by the World Bank.

During the late 1970s and 1980s the World Bank identified poverty oriented projects with rural development projects. Rural development projects were those for which 50 per cent of the direct benefits accrue to, or 50 per cent of the direct beneficiaries are in, the rural target group. As acknowledged in a World Bank review of rural development projects, these two concepts - benefits versus beneficiaries - were used interchangeably, but in fact they most certainly are not equivalent (World Bank, 1988: 4). It is very likely that some (probably the not-so-poor) will benefit more than others. For example, the beneficiaries of a rural road may be counted as the whole population, but the non-poor are likely to realise more substantial benefits (e.g. new commercial opportunities).<sup>3</sup> There are not much data to document the distribution of project

benefits by income group. In one case where data have been reported the results are not promising.

Mosley (1987: 187-201) analysed the distribution of benefits in a UK-supported project (the Agricultural Development Project of Cajamarca) in the Catilluc valley in Peru. He separated the population into rich, medium, poor and destitute, corresponding to the top 10 per cent, the middle 50 and 30 per cents and the bottom 10 per cent respectively. Table 1 shows the distribution of benefits: the bottom 40 per cent of the population got around 16 per cent of the benefits. Mosley also analysed "trickle down" effects through an expenditure multiplier process. Such benefits flow even more disproportionately to the better off, so that the share of the poorest two groups of these second-round benefits is only about 11 per cent.

Table 1 Distribution of benefits from agricultural development project of Cajamarca (000 soles per annum)

|           | Actual p         | project                   | Equal shar round l | ing of first<br>benefits |
|-----------|------------------|---------------------------|--------------------|--------------------------|
| _         | Impact<br>effect | Trickle<br>down<br>effect | Impact<br>effect   | Trickle<br>down effect   |
| Rich      | 400              | 68                        | 125                | 103                      |
| Medium    | 650              | 242                       | 625                | 350                      |
| Poor      | 200              | 35                        | 375                | 106                      |
| Destitute | 0                | 4                         | 125                | 19                       |

Source: Mosley (1987: 194-195)

Although the above data are for only one project, it has been a criticism of donor efforts at rural development that their design often discriminates against the poor. Indeed the World Bank's strategy in the 1970s has been faulted on these grounds. McNamara reoriented the Bank towards agriculture with the intention of reaching the poor; but the rural poor were identified with the small farmer so that the landless were excluded from the benefits of many projects (e.g. Williams, 1981) and such a criticism is increasingly valid as the nature of the poor changes (Lipton and Maxwell, 1992). Mosley and Dahal (1985) showed how a credit scheme intended for small farmers in rural Nepal allocated funds almost entirely to larger farmers. The collection by Madeley (1991) documents a depressing number of cases in which projects missed the poor by, for example, literacy requirements, or can even harm them, such as forced resettlement of the poor to generate electricity for the not-so-poor.

It should be clear then that the number of nominal beneficiaries of a project is not a good indication of whether or not a project is poverty-oriented. Yet the World Bank have returned to this conception in their definition of the Programme of Targeted Interventions (PTIs). As is well known, the World Bank ushered in its New Poverty Agenda with the 1990 World Development Report followed by a policy paper (Assistance Strategies to Reduce Poverty), the Poverty

Handbook and an Operational Directive for staff (OD. 4.15). The policy paper laid out a two prong strategy for poverty reduction: broad-based (i.e. labour-intensive) growth and investing in the poor so that they can participate in growth. (A third prong, or at least half a prong, was the provision of safety nets for the vulnerable). Implementation of the strategy was described in the policy paper and was to be guided by the general principles that (i) the volume of lending should be linked to a country's effort to reduce poverty; and (ii) the composition of lending should support efforts to reduce poverty (World Bank, 1991: 20-1). The second of these was to be informed by analysis of the country situation (hence the importance of the poverty assessments), and to centre around poverty-oriented projects under the label the Programme of Targeted Interventions. Hence monitoring the number of PTIs, as reported in the annual progress report (of which World Bank (1993) was the first), has come to be seen as an important component of monitoring the Bank's implementation of its own poverty reduction strategy.

A project qualifies as a PTI if it is targeted on the poor in either a narrow or a broad sense. This definition is translated into the following criteria for inclusion, either: (i) a specific mechanism for identifying and reaching the poor; or (ii) "projects in which the participation of the poor significantly exceeds the proportion of the poor in the population as a whole" (World Bank, 1993: 18). Table 2 reports the number of projects satisfying this definition. PTIs are from one quarter to one third of all investment lending and rather less of total lending. PTIs account for a larger share of IDA activities than they do of total Bank lending, but still under one third, except for the most recent year.

Table 2 Programme of Targeted Interventions, Fiscal 1992-95

|   | 1992  | 1993  | 1994  | 1995  |
|---|-------|-------|-------|-------|
| Total PTI lending (\$millions)                | 3,837 | 4,674 | 4,441 | 5,437 |
| As share of investment lending (per cent)     | 24    | 27    | 25    | 32    |
| As share of all Bank lending (per cent)       | 18    | 20    | 21    | 24    |
| Total number of PTI projects                  | 57    | 72    | 63    | 75    |
| IDA PTI lending (\$millions)                  | 1,812 | 2,137 | 1,853 | 2,432 |
| As share of IDA investment lending (per cent) | 43    | 41    | 43    | 54    |
| As share of all IDA lending (per cent)        | 28    | 32    | 28    | 43    |
| Number of IDA PTI projects                    | 35    | 44    | 35    | 48    |

Source: World Bank (1995: 37) and data provided by the World Bank.

In addition to the problem discussed above, there are further problems with the definition of a PTI. First is that appraisal documents rarely provide information to decide whether the broad targeting criterion is met. In practice, all projects with either a primary health or education component are included, as are all projects with activities in disadvantaged (most rural) regions. A second problem is that the project component which is targeted to the poor may be a very small part of the total project budget, but the whole amount is counted in showing the share of PTIs in

total lending. Within the Bank a rule of thumb is used that the "poverty component" must be at least 10 per cent of the total project budget for the project to qualify; such a rule still permits a substantial degree of over-counting.

This problem that a small amount of a given aid activity being poverty-oriented causing the whole amount to count as poverty-oriented aid is even more acute in the Bank's treatment of adjustment loans. The Bank implicitly emphasises the consensus position that growth is necessary for sustained poverty reduction and so argues that:

Structural and sector adjustment operations are designed to support macroeconomic and sectoral policy reforms consistent with efficient resource allocation and rapid sustainable growth. These are essential components of an effective poverty reduction strategy.

(World Bank, 1993: 19)

However, it is admitted that some criteria are necessary to define a programme as poverty-focused adjustment lending, and these criteria are: (i) reforming social expenditures to better reach the poor; (ii) removing distortions of particular harm to the poor: (iii) safety nets or other targeted programmes; (iv) introducing poverty monitoring; or (v) developing a poverty policy. Inclusion of just one of these elements is sufficient for the programme to qualify as poverty-oriented; and the last two criteria open up the definition to a wide-range of programmes. If government agrees to undertake a rapid poverty assessment or institute a household survey with a view to monitoring aspects of poverty (both undoubtedly progressive steps) then the whole programme qualifies as poverty-focused adjustment lending. Clearly there is something wrong here. Indeed, we can easily put our finger on the something wrong by returning to the different definitions used by the Bank in the 1970s: it is share of net benefits which accrue to the poor in which we are interested, not the crude number of poor. This point is conceptually obvious that one cannot believe that the Bank overlooked it, more likely that the share of benefits was discarded as an impractical measure. However, the Inter-American Development Bank (IDB) have assessed their projects on precisely this basis.

The IDB have adopted a measure they call the coefficient of income distribution (CID), which is measured as the share of project benefits accruing to the poor. Difficulties in assessing this share have led the IDB to accept some proxies, such as the share of project funds received by the poor (Powers, 1989). Indeed, the policy decision which led to this analysis of IDB projects was that 50 per cent of their resources be directed to low income households. Moreover, in practice the IDB has disregarded benefits received by government, which may be a substantial distortion of the final outcome. Griffith-Jones et al. (1994: 59) question both basis of the calculations (analysis of project documents does not reveal the data necessary for the calculations), and their usefulness (as the exercise does not cover the full IDB portfolio). Table 3 reports CIDs by sector. Over the period shown 45 per cent of benefits have accrued to the poor, this amount having fallen quite substantially between the earlier and later periods. The sectoral picture is quite confused. Projects in some sectors - notably industry, energy and transport - consistently provide the smallest share of benefits to the poor, whereas benefits from projects in the urban development

and health sectors go overwhelmingly to the poor. In other sectors the picture reversed between periods: the performance of agricultural sector deteriorated dramatically (with some recovery in the last period) whereas that for tourism and education greatly improved. Overall, concern must be expressed over the deterioration in recent performance compared to the early 1980s. This trend is particularly surprising considering the increased lending to social sectors (see below).

The CID is an improvement on the PTI approach, but has a problem in that it says nothing about the efficiency of the project. The poor may receive a greater absolute net benefit from a lower share in a project with a high rate of return than from a large share of benefits from a project with a low return. The absolute value of net benefits is therefore a better measure, which may be standardised by a donor's total budget for comparative purposes.

Table 3 Sectoral CIDs for IDB projects, 1979-1989 (per cent of project benefits accruing to poor)

| Sector                 | 1979-82 | 1983-86      | 1987-89 | 1979-89 |
|------------------------|---------|--------------|---------|---------|
| Agriculture            | 74.1    | 48.3         | 63.0    | 61.8    |
| Fisheries              | 35.6    | 59.2         | · •     | 47.4    |
| Forestry               | •       | -            | 20.0    | 20.0    |
| Industry               | 27.2    | 26.0         | -       | 26.6    |
| Tourism                | 24.0    | 82.3         | -       | 53.2    |
| Mining                 | 20.1    | 47.6         | •       | 33.9    |
| Energy                 | 10.3    | 14.6         | 29.0    | 18.0    |
| Transport              | 26.6    | 27.7         | 21.0    | 25.1    |
| Communications         | 54.6    | 83.4         | -       | 69.0    |
| Urban Development      | 83.5    | 74.5         | 81.0    | 79.7    |
| Science and technology | -       | 91.2         | -       | 91.2    |
| Education              | 31.9    | 77.1         | 65.0    | 58.0    |
| Health                 | 87.2    | 87.3         | 71.0    | 81.8    |
| Sanitation             | 51.4    | 45.6         | 55.0    | 50.7    |
| Environment            | 45.0    | <del>-</del> | 50.0    | 47.5    |
| Other                  | -       | -            | 90.0    | 90.0    |
| Total                  | 53.3    | 37.7         | 44.0    | 45.0    |

Note: - not available/applicable.

Sources: Powers (1989: Table 3.4) and Griffith-Jones (1994: Table 2.8)

If CIDs are to be used to monitor poverty-orientation, then what is the threshold at which a project becomes poverty-oriented? If the project is to improve income distribution then the

share of benefits accruing to the poor must exceed their existing income share: in Latin America this would be about 15 per cent (Bacha, 1989: 84). But such a yardstick has an in-built bias towards the existing income distribution: it is easier for a project to qualify as poverty-oriented in more inegalitarian economies. We could instead require that the share of the poor in project benefits be at least equal to their share of the population<sup>9</sup>: so that if the poor are defined as the bottom 50 per cent then for a project to be poverty oriented at least 50 per cent of its benefits must be received by the poor.

Unfortunately we cannot make a broader assessment of how much aid reaches the poor using a CID like measure since, as far as I am aware, IDB is the only institution producing such data. We must therefore turn our attention to measures which are more readily available, such as sectoral ones.

### 3. THE SECTORAL APPROACH

It can well be argued that all aid may potentially benefit the poor, if only by the fact that growth is a necessary prerequisite for reducing poverty. Nonetheless, aid to certain sectors is more directly poverty-oriented than that to others, and this perception has led to a number of attempts to quantify the poverty-orientation of aid by its sectoral allocation.

Mosley (1985) constructs an index of the quality of aid comprising four variables: (i) the proportion of aid given to LLDCs; (ii) the proportion of project aid which is for agriculture and social infrastructure; (iii) proportion of untied aid; and (iv) the grant element. The second of these is justified on the grounds that the higher the share of the aid budget going to these sectors then probably the higher the share which is going to the poor. A first problem with this approach is the choice of sectors. There is "leakage" if sectors are included which deliver substantial benefits to the non-poor (the results reported above showed that as little as one third on the benefits from IDB's education lending had gone to the poor) and under-coverage if sectors benefitting the poor are excluded (for example, urban lending is usually excluded, though this is an sector which has experienced some remarkable successes in reaching lower income deciles).

The World Bank have adopted a similar approach in their attempts to monitor the Bank's efforts at poverty reduction. Three sectors are chosen as being poverty-oriented: agriculture and rural development, water supply and sanitation, and human resource development (health and education). Table 4 reports the changing composition of Bank lending to these categories. At a little over one third, the share going to these three sectors is practically unchanged from the early 1980s to the early 1990s, but has picked up in more recent years. However, the share had fallen to only 29 per cent in the late 1980s: so if we conclude the Bank's performance has shown a marked improvement or not depends on the choice of base period. The figure of 44 per cent of all lending going to these sectors in the most recent period can be compared with the approximately 20 per cent classified as PTIs, indicating that lending to these sectors is a poor proxy for poverty-oriented aid (giving a considerable over-estimate).

Table 4 Average annual lending to poverty-focused sectors, Fiscal 1981-92 (period averages)

|                                   |                   |                   | Market Street, |                   |
|-----------------------------------|-------------------|-------------------|--|-------------------|
|                                   | Fiscal<br>1981-83 | Fiscal<br>1987-89 | Fiscal<br>1990-92  | Fiscal<br>1993-95 |
| Lending (\$ millions)             |                   |                   |  |                   |
| Human resources development       | 659               | 1,059             | 3,028  | 3,610             |
| o/w Education                     | 603               | 756               | 1,874  | 2,057             |
| Population, health and nutrition* | 56                | 303               | 1,154  | 1,553             |
| Agriculture and rural development | 3,513             | 3,638             | 3,753  | 3,274             |
| Water supply and sanitation       | 596               | 765               | 1,023  | 1,056             |
| Total bank lending                | 13,261            | 19,421            | 21,698   | 22,351            |
| As share of Bank Lending (%)      |                   |                   |  |                   |
| Human resources development       | 5                 | 6                 | 14   | 16                |
| Agriculture and rural development | 27                | 19                | 17   | 24                |
| Water supply and sanitation       | 5                 | 4                 | 5  | 4                 |
| Total                             | 37                | 29                | 36   | 44                |

Note: \*includes "social" for 1993-95. Sources: World Bank (1993: 17) and data provided by World Bank.

The UNDP entered the aid and poverty debate with the aid human expenditure ratio, defined as aid going to priority sectors as a percentage of donor GNP (UNDP, 1991). It is acknowledged in the report that aid to other sectors may equally well help the poor (though it is not so readily recognised that aid in priority sectors may not reach the poor). But, to echo the sentiments with which this paper opened, it is thought that not enough is being done:

if only one-third of existing aid were committed to human priority areas, the aid allocation of these sectors would increase fourfold

(UNDP, 1991: 53)

The measure offered by the UNDP, the aid human expenditure ratio  $(A_P/Y)$ , is the product of three factors: (i) aid as a per cent of donor GNP (A/Y); (ii) share of social sector aid in total aid  $(A_s/A)$ ; and (iii) the per cent of social sector aid devoted to human priority areas  $(A_P/A_s)$ . The UNDP's estimates of these ratios are shown in Table 5. Unfortunately the *HDR* is a bit vague over the definition priority sectors ("what is considered a priority will naturally change from one country to another", UNDP, 1991: 49), though the definition seems to encompass primary health care, basic education, family planning and rural water supply. Moreover, the calculations are based on data which are not readily available, the DAC tapes rather than those data published in the more widely available Geographical Distribution of Financial Flows to Developing Countries, 11 and not readily replicable given the necessity of some arbitrary assumptions to cover gaps in the data (UNDP, 1991:

Table 5 UNDP's analysis of aid to priority social sectors, 1989 (percentages)

|                | Aid human   | Aid          | Aid social          | Aid social | Aid social  |
|----------------|-------------|--------------|---------------------|------------|-------------|
|                | expenditure | expenditure  | allocation          | priority   | priority    |
|                | ratio       | ratio        | ratio               | ratio      | as per cent |
|                | (A) V)      | (A) <b>V</b> | (4) 4)              | ( */ */    | all aid     |
|                | (Ap/1)      | (A/I)        | (A <sub>S</sub> /A) | (Ap/Ag)    | (Ap/A)      |
| Average        | 0.026       | 0.32         | 22.6                | 36.6       | 8.3         |
| Netherlands    | 0.128       | 0.94         | 25.2                | 53.8       | 13.6        |
| Denmark        | 0.110       | 0.94         | 22.4                | 52.2       | 7.11        |
| Sweden         | 0.070       | 0.97         | 13.8                | 51.9       | 7.2         |
| France         | 0.053       | 0.54         | 39.1                | 25.1       | 8.6         |
| Finland        | 0.051       | 0.63         | 29.3                | 27.4       | 8.0         |
| Switzerland    | 0.047       | 0:30         | 20.1                | 78.7       | 15.8        |
| Germany        | 0.047       | 0.41         | 25.6                | 44.4       | 11.4        |
| Australia      | 0.029       | 0.38         | 30.7                | 25.2       | 7.7         |
| United Kingdom | 0.028       | 0.31         | 24.8                | 36.6       | 9.1         |
| Canada         | 0.023       | 0.44         | 19.9                | 25.9       | 5.2         |
| Italy          | 0.017       | 0.42         | 18.0                | 22.4       | 4.0         |
| USA            | 0.012       | 0.15         | 17.1                | 46.1       | 7.9         |
|                |             |              |                     |            |             |

Source: UNDP (1992: Table 3.13)

Technical Note 7) and the inaccurate assumption that multilateral aid is allocated in the same proportions as that donor's bilateral aid.<sup>12</sup> The 1993 DAC Report devotes a text box to discussing (though "attacking" might be a better word) the UNDP's analysis and suggest that the estimates made for grants underestimate the amount going to priority sectors (DAC, 1994: 98).<sup>13</sup> The same report also notes that sector classifications involve an inevitable arbitrary element: a rural road may be classified as transport, agriculture or trade (DAC, 1994: 97).

In addition, as argued by White and McGillivray (1995), measures of aid quality should be independent of aid volume: it is good for a donor to give more aid, but there is no need to conflate that fact with the quality of the aid. So, for the purpose of this paper, the share of aid to priority sectors in the total aid budget would be the more appropriate measure. Indeed, a donor's ranking by the UNDP's aid expenditure ratio is largely determined by its aid to GNP ratio: the correlation coefficient of A<sub>P</sub>/Y with A/Y is 0.87, compared with only 0.11 for the correlation of A<sub>P</sub>/Y with A<sub>S</sub>/A and 0.45 of A<sub>P</sub>/Y with A<sub>P</sub>/A<sub>S</sub>. Thus unsurprisingly, the more appropriate measure (A<sub>P</sub>/A, shown in the last column of Table 5) gives a rather different picture to that given when donors are ranked by the human expenditure ratio, with a rank correlation coefficient between the two being 0.57; ranking Switzerland at the top rather than the middle and Germany moving up to third. On average only eight per cent of aid is directed to the social priority areas as identified by UNDP.

A recent study of IDB lending (Griffith-Jones et al.) used the social allocation ratio  $(A_s/A)$  and aid social priority ratio  $(A_p/A_s)$ . The former is shown in Figure 1, and may be seen to have experienced a large upward jump in 1986: the average ratio for the period 1979-85 was 15.2 per cent whereas that for the later period (1986-91) was double (30.8 per cent). The authors also suggest an equity index for analysing the allocation of social aid across countries. The equity index (EI) for country i is defined as:

$$EI_{i} = \frac{A_{S,i} / \sum A_{S,i}}{P_{i} / \sum P_{i}}$$

where P is the number of poor. An index of less than one indicates that a country's share in IDB's social aid to the region is less than that country's share of the region's poor (and implies inequitable allocation of resources devoted to social sector aid). Interpretation of the index is, however, problematic. As countries achieve higher levels of income they may be expected to have access to international capital to undertake the productive investments necessary for development: the rationale for aid is gone. In recognition of this fact the view of many donors is that aid to relatively higher income countries should be focused on humanitarian activities.<sup>14</sup> Put another way, in a very poor country anything you do helps the poor, whereas in a comparatively rich one you must make more strenuous efforts at targeting in order to reach the poor. Equity indices of less than one for poor countries and above one for rich ones are therefore not indicative of "bad aid".<sup>15</sup>

Figure 1 IDB's social allocation ratio, 1979-91

Note: social allocation ratio is share of aid to social sectors in total aid.

Source: Griffith-Jones et al. (1994: Table 3.2).

Shares of different poverty-oriented activities in donor budgets are reported in Randel and German (1994: 147), who also point to the non-availability of such data. The available results are shown in Table 6. The table also shows donors' own assessments of the amount of their aid which is poverty-oriented, though there is no common basis to the production of these figures.

A final problem for the sectoral approach is the treatment of adjustment lending. In Part 2 we saw that the Bank categorises as poverty-focused any adjustment loan which has any poverty component at all, which would include all sectoral adjustment loans for the social sectors and many structural adjustment loans with an element of conditionality covering the social sectors. Whilst such a procedure may be sure to produce over-estimates, UNDP argues that the rise of programme lending has reduced the amount of poverty-oriented aid since, up to 1989, only two sectoral adjustment loans had been for the social sectors. This argument reproduces a common misunderstanding over the nature of sectoral adjustment programmes. A sectoral adjustment programme is so-called because the conditionality relates to a particular sector; but, whilst there may be an element of technical assistance and institution building, the bulk of the finance will be balance of payments support, identical to that obtained with a structural adjustment loan. It is thus misleading to classify sectoral adjustment loans as aid to that sector. Moreover, structural adjustment programmes will frequently have social sector conditionality. For example, since 1990 Zambia has had five adjustment programmes, entitled Economic Recovery I and II, Privatisation and Industrial Rehabilitation I and II and, most recently,

Table 6 Different measures of aid's poverty focus

| Country        | Donor<br>assessment<br>poverty lending<br>as a per cent of<br>ODA | UNDP Social Priority 88-90 per cent of ODA | UNICEF Basic Needs 89 per cent of ODA | Spending on Basic Education per cent of bilateral ODA | Spending on health per cent of hilateral ODA | Spending on population per cent of bilateral ODA | Spending on water and sanitation per cent bilateral ODA | Spending on<br>agriculture per<br>cent of<br>bilateral ODA |
|----------------|---|--|---------------------------------------|---|--|--|---|--|
| Australia      | 40.0  | 2.3  | 7.7                                   | 1.40  | 3.60   | 0.70   | 2.50  | 8.6  |
| Austria        | •   | 8.9  | •                                     | i   | 0.60   | ,  | ı   | 2.5  |
| Belgium        |   | 1  |                                       | 6.22*   | 1  | 1  | 10.11   | 1  |
| Canada         | 34.0  | 9.2  | 5.2                                   | 1   | 2.17   | 1.45   | 1.06  | 5.7  |
| Denmark        | •   | 21.9                                       | 11.7                                  | j   | 8.50   | ,  | 10.50   | &<br>&   |
| Finland        | ı   | 13.6                                       | 8.0                                   | 2.01  | 1.80   | 0.80   | 4.30  | 12.2   |
| France         | ì   | 3.6  | 8.6                                   | ı   | 3.20*  | 1  | ì   | 7.0  |
| <b>Germany</b> | 44.0  | 2.1  | 11.4                                  | 2.90  | 4.40   | 1.30   | ı   | 17.6   |
| Ireland        | ı   | 1  |                                       | ı   | 12.00  | 1  | 9.00  | 10.0   |
| Italy          | i   | 7.8  | 4.0                                   | i   | ı  | •  | •   | ı  |
| Japan          | 33.3  | 3.7  | ı                                     | ı   | 1.80   | 0.10   | 3.80  | 13.5   |
| Netherlands    | 31.0  | 10.4                                       | 13.6                                  | 8.60  | 7.50   | 3.00   | 14.20   | 1  |
| New Zealand    | 1   | 17.0                                       | ı                                     | 90.9  | 1.64   | 0.0  | 0.80  | 4.6  |
| Norway         | ı   | 17.9                                       | 1                                     | 5.80  | *00.8  | •  | 1   | 80<br>80   |
| Portugal       |   | •  | •                                     |   | *00.8  | •  | i   | •  |
| Spain          | •   | 1  | į                                     | i   | •  | •  | •   | •  |
| Sweden         | 1   | 5.9  | 7.2                                   | 3.00  | 9.00   | 9:1  | 2.00  | 0.6  |
| Switzerland    | 1   | 16.8                                       | 15.8                                  | 8.10  | 8.60   | •  | 17.70   | 17.4   |
| UK             | 30.0  | 9.9  | 9.1                                   | 1   | 8.60   | ı  | 4.50  | 10.2   |
| US             | 1   | 8.3  | 7.9                                   |   | ,  | 1  | 4   | 1  |
|                |   |  |                                       |   |  |  |   |  |

Notes: \* includes population; - not available. Source: Randel and German (1994: 147)

Economic and Social Credit, all five of which have had social sector conditionality.

In summary, sectoral allocations are a poor proxy for poverty-orientation for the following reasons: (i) the degree of desirable concentration on these sectors varies from country to country; (ii) some aid in "priority sectors" helps the non-poor, as much "non-priority aid" may help the poor, though these proportions vary across time and space; and (iii) there are necessarily problems in accounting for programme aid.

#### 4. THE COUNTRY APPROACH

The final way in which we may estimate the amount of aid which reaches the poor is by considering how much aid goes to poor countries. Giving aid to poor countries may be interpreted as a way of broad targeting aid to reach poor people, and this approach has been adopted at various times e.g. by the Dutch in 1979, in the Bank under McNamara and in the UK 1975 White Paper More Help For the Poorest; 16 a more recent UK ODA Technical Note on Aid and Poverty states that:

It is ODA policy to direct the majority of UK aid to the poorest countries... The basic rationale behind ODA's concentration of aid on the poorest countries is that increasing the resources available to these countries is necessary to reduce poverty.

(ODA, 1991: 5)

Country allocation is the only measure of aid's poverty orientation that is routinely reported by donors - for example in the *DAC Report* and used to be, but is no longer, given in UK ODA's *British Aid Statistics* (e.g. ODA, 1993, does list recipients by income per capita, reporting their aid per capita - but the headcount is not explicitly given).

Problems of leakage are of course most severe with country allocation measures. Depending on the policies of the recipient government, aid to a poor country may reach very few poor people indeed.

The DAC use a headcount (or, more accurately, a "country-count") measure: that is the per cent of aid going to low income countries. For example, in the 1993 report it is stated that:

Some 90 per cent of bilateral aid and 90 per cent of total aid including flows from the multilateral development institutions go to recipient countries with a per capita income below \$2,500 in 1991. In other words, if ODA were defined in terms of disbursements to low-income countries only, DAC Members' aid would have been recorded as 0.32 per cent of GNP in 1992 instead of 0.33 per cent.

(DAC, 1994: 93)

The problem with the headcount is that it says nothing about the distribution below the cut-off, all aid may go the richest such country. In this case the problem is acute since the DAC have chosen

not the World Bank dividing line between low and middle income countries, but rather that between lower middle and upper middle income.

White and McGillivray (1995) review a range of possible indicators of the inter-country allocation of aid, such as correlation and regression coefficients. The discussion concludes that one of the most appropriate indicators is Suit's index, which is the equivalent of the Gini coefficient from a Lorenz curve with cumulative aid share on the vertical axis.

Figure 2 shows the aid Lorenz curves for the UK, US and total multilateral and DAC bilateral aid to 100 developing countries, averaged over the period 1988-90. The large horizontal sections of these graphs correspond to India and China which together account for over half the developing country sample but receive a much lower share of the aid. Both multilateral and British aid have a reasonably progressive profile - with over 30 per cent of their aid going to the poorest 15 per cent. By contrast, the US gives the poorest 20 per cent only about 10 per cent of their aid. The aid Lorenz curve for the US shows two vertical sections, corresponding to Egypt and Israel. These two, comparatively well off, countries which receive a large share of that country's aid. For example, in 1990 they received 18.0 and 33.3 per cent of US gross ODA respectively, though their per capita incomes were \$10,930 and \$610 (72 per cent of the sample population are in countries with income per capita of less than \$500).

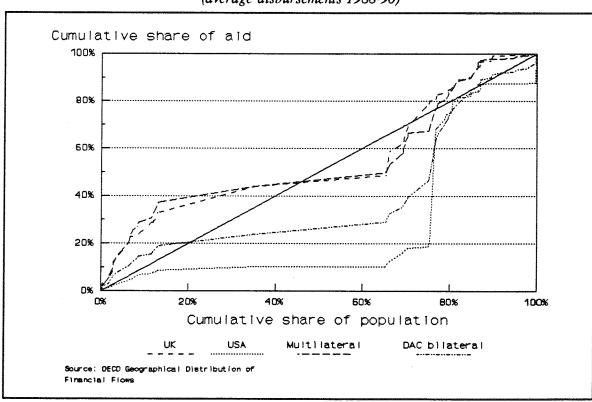


Figure 2 Lorenz curve for aid allocation of selected donors (average disbursements 1988-90)

Source: World Bank Social Indicators of Development and DAC Geographical Distribution of Financial Flows to Developing Countries.

Table 7 shows Suits' index across time for commitments from four donors - France, Japan, United Kingdom and the United States - as well as for total DAC.<sup>17</sup> The ranking of these four donors is the same as that generally given in the comparison of their rankings in 1990. The United Kingdom in consistently the best of the four, and the United States the worst. In the late 1970s, Japan ranked above France; but Japanese performance worsened in the 1980s, whilst that of France improved, so that their positions were reversed in 1983 and have stayed that way since. Both Japan and the UK show a considerable worsening of performance in the early 1980s, which was reversed (particularly for the UK) in the second part of the decade. The DAC total follows this pattern, though with less marked deviations. By contrast the performance of the US has tended to deteriorate whilst, as noted above, that of France improves.

Table 7 Suits' index for selected donors, 1974-90 (commitment data)

|      |      | ,      |       |       | Contract of the Contract of th |
|------|------|--------|-------|-------|--|
|      | DAC  | France | Japan | UK    | US   |
| 1974 | 0.14 |        | -     | -     | -  |
| 1975 | 0.09 | -      | -     | -     | -  |
| 1976 | 0.36 | -      | -     | -     | -  |
| 1977 | 0.24 | 0.28   | 0.21  | -0.19 | 0.46   |
| 1978 | 0.21 | 0.37   | 0.20  | -0.18 | 0.44   |
| 1979 | 0.20 | 0.36   | 0.24  | -0.17 | 0.42   |
| 1980 | 0.17 | 0.36   | 0.20  | -0.05 | 0.31   |
| 1981 | 0.19 | 0.26   | 0.21  | 0.03  | 0.38   |
| 1982 | 0.25 | 0.27   | 0.26  | 0.02  | 0.38   |
| 1983 | 0.26 | 0.23   | 0.31  | -0.12 | 0.45   |
| 1984 | 0.18 | 0.14   | 0.21  | -0.25 | 0.40   |
| 1985 | 0.24 | 0.09   | 0.31  | -0.05 | 0.47   |
| 1986 | 0.14 | 0.10   | 0.14  | -0.19 | 0.50   |
| 1987 | 0.15 | 0.14   | 0.24  | -0.14 | 0.47   |
| 1988 | 0.18 | 0.13   | 0.23  | -0.13 | 0.46   |
| 1989 | 0.15 | 0.18   | 0.25  | -0.24 | 0.35   |
| 1990 | 0.29 | 0.26   | 0.40  | 0.05  | 0.46   |

Note: - not available

Source: calculated from data in OECD (1977-92).

Inspection of the year to year results shows a sharp worsening in the performance for all four donors (and total DAC) in 1990. No common shift underlies this change for all donors. In the case of France, Japan and DAC as a whole, a drop in the share of aid to China (from 4.6 to 0.5; 12.0 to 4.7; and 6.2 to 2.1 per cent respectively) is one important factor (China's share of commitments from the UK and US rose slightly). For all donors, however, the cumulative share for the countries poorer than China had also fallen. Despite the fact that the group poorer than China increased its share of the sample population from 35.5 to 36.4 per cent, this group's share of total DAC commitments fell

from 29.1 to 21.7 per cent, with falls of even greater magnitude for the UK and US and only Japan having a relatively insubstantial decline. Which, relatively richer countries, were therefore increasing their aid shares?

In the case of the United States, the picture is dominated by the extremely large commitment of US\$ 12.4 billion made to Egypt in that year (70 per cent of total commitments). Less dramatic, but nonetheless quite substantial, shifts underlie other donors' allocations. Indonesia increased its share of UK aid from 3.3 to 21.2 per cent; and Malaysia rose from 0.6 to 4.9 per cent. Malaysia also gained a larger part of Japan's aid commitments, rising from 1.0 to 5.2 per cent; a similar increase in Japanese aid was also experienced by Mexico.

The final question I want to address here is how much aid could do. The 1990 WDR estimated that in 1985 there were 633 million extremely poor and 1,116 million poor in the developing world; the extremely poor are those living on \$275 (in 1985 PPP dollars) and \$370 per capita (a dollar a day) for the poor (World Bank, 1990: 29). In 1985 net ODA to developing countries was US\$ 29,428 million. Suppose all this aid was simply to have been handed over to the extreme poor as an income transfer: that would be \$46 each. For low income countries estimates of PPP GNP are typically five to six times the recorded GNP (Atlas method). So the purchasing power of these \$46 would have been, multiplying by five, about \$232 - so that the income of the best off the extreme poor would be nearly doubled, and that of the poorest raised by a far greater factor. What these figures mean is that if all aid were to be successfully targeted at the extremely poor then extreme poverty would be eradicated. If, instead, the aid had been transferred to all the poor then they would have received, in PPP terms, about \$132 each: an increase in income of one third for the best of the poor, and, once again, rather more than this for the less well off of the poor. (These calculations of course ignore the considerable transactions costs which may be encountered in reaching the poor: nonetheless, the figures are indicative of what might be achieved).

Many factors influence aid programmes. Donor country commercial and political interests corrupt the purely developmental objectives of professed by the donors themselves. What these back of an envelope calculations show is that were aid resources to be targeted toward tackling the problem of global poverty then the problem is not so overwhelming that aid is only a drop in an ocean. To the contrary, a total targeting of aid toward poverty reduction would make a very large impression on the living standards of the poor.

#### 5. CONCLUSIONS

This paper has focused on measuring how much aid reaches the poor. There are three approaches to measuring this quantity: the project approach, the sectoral approach and the country approach. These are summarised in Table 8. On a project basis we find that in the case of the World Bank only about one fifth of lending can be classified as poverty-focused, even though the procedures adopted mean that this number is likely to be an overestimate. The IDB on the other hand seems to have managed to ensure that a little under half of its benefits reach the poor.

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|          |  | Table 8 Summary of measures of aid to the poor   | of aid to the poor   |  |
|----------|--|--|--|--|
|          | Measure  | Definition   | Disadvantage(s)  | Results  |
| Project  | World Bank: Programme of Targeted Interventions  | Participation of poor exceeds their share in population  | Based on beneficiaries not<br>benefits   | 21 per cent of Bank lending in FY 1992-95 qualified at PTIs        |
|          | IDB: Coefficient of Income<br>Distribution (CID) | Share of net benefits accruing to the poor   | Takes no account of project efficiency and time consuming (but not impossible) to quantify                                     | In 1979-89 CID was 45 per cent                                     |
| Sectoral | Mosley: one component in aid quality index       | Share of aid to agriculture and social infrastructure  | All sectoral approaches suffer from: (i) choice of appropriate sectors; and (ii) arbitrary element in sectoral classification. |  |
|          | UNDP: Aid social priority ratio                  | Ratio of ODA to priority social sectors and donor GNP  | UNDP's measure also has problem of: (i) data unavailability; and (ii) conflating quantity with quality                         | Around 8 per cent of ODA goes to priority sectors                  |
|          | World Bank: poverty-focused sectors              | Lending to agriculture and rural development; human resource development; and water supply and sanitation. |  | On average, 37 per cent of Bank lending is to these sectors        |
| Country  | DAC: headcount measure                           | Share of ODA to low-income countries   | No allowance for distribution either side of cut-off (DAC use high cut-off).   | 90 per cent of aid to countries with 1991 GNP less than US\$ 2,500 |
|          |  |  | Considerable leakage.  |  |

Lack of data on the project approach has led many to use instead a sectoral approach. The UNDP calculated that only about 8 per cent goes on the social priority sectors most likely to benefit the poor. There are serious shortcomings in the sectoral approach, but it does indicate that rather little aid reaches the poor. One reason for aid not reaching the poor will be the amount of aid going to countries where there are fewer poor people.

However, the share of aid to low income countries is the indication of poverty focus used by some donors (e.g. DAC and UK ODA). Country allocation measures reveal large disparities between donors. The US does notably badly on account of the large share of its aid going to Egypt and Israel. British aid, with its African focus, has the approximately the same progressive profile as multilateral aid.

This paper opened with the question of how much donors are doing toward poverty reduction so that we may have a basis for saying that it is not enough. It was shown that if all aid were targeted to the extreme poor their income would thereby be more than doubled: by which act extreme poverty could be eliminated from the world. Instead we can estimate that the amount of aid going to activities which are intended to directly benefit the poor (though they do not necessarily receive income from them) is at best around one fifth (and this is probably overly generous). Of course, there is the argument that all aid is, indirectly, poverty reducing. It is no doubt quite so that a long-run strategy at meeting the developmental objectives of aid, with poverty reduction ranking high amongst them, should include many activities which are more growth-oriented than poverty-oriented. But it is difficult to believe that a strategy that really emphasised poverty reduction as a foremost concern would not target more than 15 per cent of total resources to direct poverty reduction activities.



#### NOTES

- 1. For an overview of public perceptions of aid see Randel and German (1994: 148-149).
- 2. "... a poverty-focused project [is defined] in the only operational possible way, namely as a project which is expected *ex ante* to improve the economic welfare of the poorest people in a country" (Mosley, 1981: 215).
- 3. The participatory component of the World Bank's Poverty Assessment of Zambia found that the poor value all weather roads for the improved access they allow to health facilities (cited in Chambers, 1995). This finding does not alter the fact that there will be a disproportionate share of benefits to the not-so-poor.
- 4. The analysis used an expenditure coefficient matrix, analogous to coefficient matrices as used in input-output analysis. Just as in input-output analysis, the model may be solved through matrix inversion to determine the total increase in income to each group from an initial income injection.
- 5. The logic of the Bank's approach may be compared with a poorly constructed syllogism poor people live in rural areas; this is a rural project; therefore this project helps the poor.
- 6. "Poverty reduction" is the preferred Bank usage to "poverty alleviation", maybe as the latter sounds to promise too much.
- 7. Board members are particularly keen on this form of monitoring whereas many Bank staff seem now to wish that they hadn't got themselves in this situation.
- 8. In the case of adjustment lending the Bank does not report the value of poverty-oriented adjustment lending, but the number of such operations.
- 9. That is, a similar notion to that adopted by the Bank in defining PTIs, but with respect to benefits rather than beneficiaries.
- 10. Three of these are the same as the measures of donor performance used in White and Woestman (1994), except that we used aid to LICs rather than LLDCs. Our fourth component of donor performance was aid volume, which Mosley correctly excludes as his index concerns quality not quantity.
- 11. This source gives the sectoral allocation of ODF (not ODA) commitments, but only since 1986.
- 12. Sectoral allocations <u>are</u> available for the multilateral institutions, and these figures could be used for calculating imputed shares for the multilateral component.
- 13. Raffer (1995) gives a more extended discussion of the DAC versus UNDP debate.
- 14. Indeed, there is discussion that the DAC list of aid-eligible countries should be revised so as only socially-oriented activities will qualify as ODA in higher income countries.
- 15. In fact no significant correlation between GDP per capita and the equity index emerges from the IDB data.

- 16. The White Paper undertook "to give an increasing emphasis on our bilateral aid to the poorest countries" (quoted in Independent Group on British Aid, 1982: 8).
- 17. These results were calculated using a sample of 100 recipients.
- 18. This calculation ignores the effect aid <u>has</u> had on the income of the poor and so is something of an over-estimate. The over-estimation is less the less aid is reaching the poor.
- 19. The Atlas method is that used by the World Bank for the data reported in the World Development Report and World Tables. The exchange rate used is a three year average, with the annual rate first adjusted for an inflation-differential with the G-5 countries (see the Technical Notes in any edition of the World Development Report for further details).

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