Aid distribution and the MDGs

Bob Baulch, November 2004

Institute of Development Studies
University of Sussex
Brighton BN1 9RE United Kingdom

CPRC Working Paper 48

Chronic Poverty Research Centre
ISBN Number: 1-904049-47-8

Abstract

The United Nations and other aid agencies are calling for aid to be more than doubled so that the Millennium Development Goals (MDGs) can be achieved by 2015. Unfortunately, as this paper shows, many important donors currently distribute their aid in ways that are not consistent with the MDGs. It constructs aid concentration curves for four of the quantifiable indicators of the MDGs (monetary poverty, child malnutrition, non-enrolment in primary school, and under-five mortality) for the major bilateral and multilateral donors. A common ranking of donors' aid programmes by these indicators is observed. However, there are major contrasts between the progressivity and regressivity of different donor's aid programmes whatever indicator is used. The UK and World Bank have aid programmes which distribute around two-thirds of their concessionary aid to the low income countries. In contrast, the USA and the European Commission spend the majority of their aid budgets in middle income countries. France, Germany, the Netherlands, Japan and the United Nations occupy an intermediate position, distributing between a half and two-thirds of their aid to low income countries but also making substantial disbursements to a few relatively small and well-off countries.

Acknowledgements

Sincere thanks to Makiba Yamano and Wing Lam for excellent research assistance and Jenny Edwards for secretarial support. Stephen Devereux, Karen Moore, and David Hulme made useful comments on an earlier version of this paper.

Initial funding for the research was provided by the Chronic Poverty Research Centre (www.chronicpoverty.org), a Development Research Centre itself funded by the UK Department for International Development.

Table of contents

List of Tables

List of Figures

List of figures cont.

1. Introduction

Following the 2000 Millennium summit and 2002 Monterrey conference, most bilateral and multilateral donors have committed to making substantial increases in the volume of development assistance which they give to developing countries. The UN Millennium Project is currently calling for aid flows to be increased from $68 billion in 2003 to $156 billion in 2005 rising to $188 billion by 2013 (Millennium Project, 2004). Donors believe such increases in the volume of aid, along with committed actions by developing country governments, are critical to achieving the eight Millennium Development Goals (MDGs) by 2015. If the MDGs are to be achieved, however, it is not only essential that aid volume increases but also that this increase is targeted at those countries which need it the most and can use it most effectively. However, as this paper demonstrates, some important donors currently distribute their aid budgets in ways that are not consistent with the priorities set by the MDGs.

Most recent discussions of how to allocate aid to developing countries have focused on the need to stimulate economic growth and reduce extreme poverty (as measured by the $1/day poverty headcount). This is usually combined with a policy or economic management criterion, as aid is known to be more effective in the presence of good economic policies (Burnside and Dollar, 2000; Collier and Dollar, 2002). This paper seeks to move the debate on aid allocation away from a focus on the link between governance, macro-economic stability and extreme monetary poverty toward other, more stable and long-lasting indicators of poverty. While not all the dimensions of poverty (for example, lack of security and powerlessness) are amenable to quantification, some non-monetary indicators of the multidimensional nature of poverty are now well-established. In particular, internationally comparable data is now available on Goal 2 (achieving universal primary education) and Goal 4 (reducing child mortality by two-thirds) of the MDGs.[1]

To assess the extent to which aid is directed toward the poorest countries, this paper constructs aid concentration curves for four of the quantifiable indicators of the MDGs (monetary poverty, child malnutrition, non-enrolment in primary school, and under-five mortality) for the major bilateral and multilateral donors. Such aid concentration curves provide an easy to understand graphic of the extent to which different donors are, or are not, distributing aid to the poorest countries. Section 2 explains the methodology underlying the construction of these curves and their statistical counterpart, the Suits index, in more detail. Section 3 describes the MDG indicators and sources of data used. Section 4 discusses the results, first examining how the distribution of aid varies by indicator for donors as a whole, and then examining the distribution of aid by donors considering each of the four MDG indicators separately. Section 5 concludes with an assessment of the implications of our findings for the achievement of the MDGs.

2. Methodology

The methodology used to examine the distribution of aid in this paper is that of aid concentration curves and their statistical counterpart, the Suits index. Aid concentration curves provide a useful graphical device for showing whether the distribution of a donor's development assistance is targeted toward or away from the poorest countries. If most of a donor's aid goes to the poorest countries, then its aid concentration curve

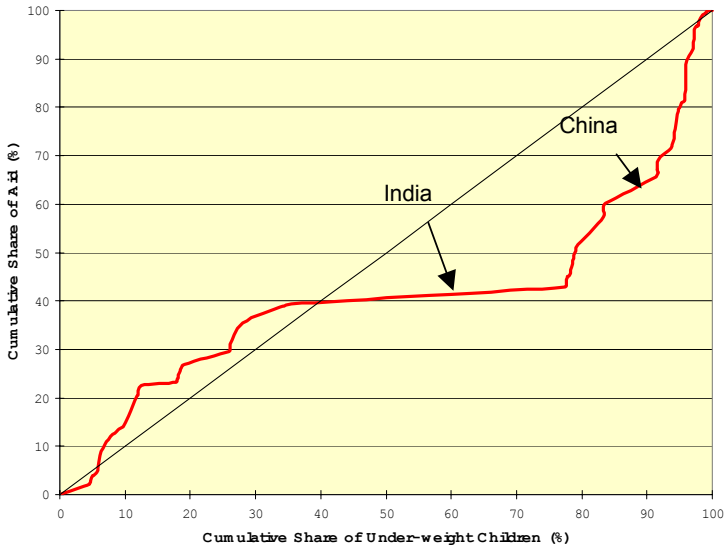
[1] At the present time, it is not possible to construct meaningful aid concentration curves for Goal 3 of the MDGs (gender equality and women's empowerment). We do, however, discuss the gender dimensions of child malnutrition, primary school enrolments, and under-five mortality in Section 4 below.

will lie above the diagonal (and vice-versa). The Suits index, which can vary between -1 and +1 with a negative Suits index indicating that aid is being directed to the poorest countries.

To be more precise, an aid concentration curve plots the cumulative percentage of aid against the cumulative percentage of a population variable. Aid can be measured in a number of different ways but we focus on the most commonly used measure, net Official Development Assistance (ODA), in this paper. For the population variable, a number of alternatives exist including the cumulative percentage of the $1/day poor or the cumulative numbers of people suffering some other kind of deprivation (for example, child malnutrition or mortality, lack of education).[2] It should be noted that, in contrast to a conventional Lorenz curve, an additional ranking variable (per capita incomes measured in terms of Atlas GNI) is involved in constructing an aid concentration curve. This additional ranking allows the aid concentration curve to cross the leading diagonal (45 degree line) if aid is targeted towards the poorest countries.

To illustrate, consider the aid concentration curve for the OECD's Development Assistance Committee (DAC) shown in Figure 1. We focus here on the aid concentration curve relating to child malnutrition – defined as the number of children under five years old who are underweight – whose cumulative share is shown on the horizontal axis of the figure.[3] The vertical axis shows the cumulative share of aid disbursed by the 22 bilateral donors belonging to the DAC to 73 low- and middle-income developing countries between 2000 and 2002. The diagonal line shows what the allocation of aid would look like if aid was allocated in direct proportion to the share of the world's malnourished children living in each country. The solid wavy line is the aid concentration curve, which shows how total multilateral aid from the DAC countries was actually distributed between the developing countries.

Figure 1: Aid Concentration Curve for Child Malnutrition, all DAC donors, 2000-02



[2] When the cumulative percentage of aid is plotted against the cumulative percentage of the population of developing countries, aid concentration curves are also called 'aid Lorenz curves' as in White and McGillivray (1992, 1995). The term aid concentration curve seems more precise because a Lorenz curve should not cross the leading diagonal.
[3] See Section 3 below for a more detailed definition and discussion of this indicator.

Reading from left to right, the first part of the DAC aid concentration curve rises quite steeply indicating that a disproportionate amount of aid is being given to a number of relatively small (in population terms), but also very poor countries. Most, although not all, of these countries are in sub-Saharan Africa and South Asia. Then there follows a long, almost horizontal, flat segment corresponding to India. India is home to over 40 per cent of the world's malnourished children but receives just 3.6 per cent of bilateral aid from the DAC countries. After India, the aid concentration curve again rises steeply, largely because of the amount of aid spent in Indonesia and Central Asia, before reaching a less steeply sloped segment representing China. The length of the Chinese segment of the poverty aid concentration curve is shorter than that for India, because despite having a larger population, a much smaller share of children are estimated to be malnourished in China than in India. After China, the DAC's aid concentration curve rises very steeply. This part of the curve represents the many middle income countries with relatively small numbers of underweight children to which the DAC donors give aid. The most important of these countries, in terms of their share of total bilateral aid, are Egypt and Russia.

The Suits index is a statistical counterpart to the aid concentration curve, which summarises the progressivity or regressivity of a distribution. It was originally developed by the American economist Daniel Suits for analysing the tax system in the United States (Suits, 1977).[4] Unlike the Gini coefficient, of which it is an analogue, the Suits index can vary between -1 and +1. A Suits index of -1 corresponds to the (not necessarily desirable) situation in which a donor gives all its aid to the poorest country in the world. In this, admittedly pathological, case, the aid concentration curve would coincide with the left-hand and top axes of Figure 1. A Suits index of +1 corresponds to the case when a donor gives all its aid to the richest developing country. Here the aid concentration curve would coincide with the bottom and right hand axes of Figure 1. A Suits index of zero corresponds to the situation in which a donor distributes its aid in exact proportion to the number of poor people. In this case, the aid concentration curve coincides with the leading diagonal of the aid concentration curve box. The aid concentration curve for the DAC in Figure 1 has a Suits index of 0.187 indicating a distribution of aid that is moderately regressive.

The use of aid concentration curves for the analysis of aid flows was originally suggested by Mosley (1987) and applied in the early and mid-1990s by Clark (1991, 1992) and White and McGillivray (1995). White and McGillivray also examine possible summary measures of donor allocative performance and recommend the use of either the Suits index or McGillivray's adjusted performance index. An earlier paper by this author (Baulch, 2003) extended and updated White and McGillivray's analysis by constructing aid concentration curves for the cumulative percentage of the population of developing countries and for the cumulative percentage of the world's extreme poor. This paper further extends that analysis by considering three non-monetary indicators of poverty (malnutrition, non-enrolments in primary school, and under-five mortality).

[4] See Appendix 1 for further information on the calculation and interpretation of the Suits index.

3. Data

All the data used for constructing the aid concentration curves presented in this paper is taken from the on-line databases and publications of reputable international organisations. For monetary poverty, estimates of the percentage of the population living on less than $1/day in 2001 are taken from *PovcalNet*, the World Bank's web-based interactive database for monitoring poverty. For child malnutrition (specifically the percentage of children under five with weight-for-age less than two standard deviations from the reference population) data has been taken from the UNDP's *Human Development Indicators 2004*. Data on primary school enrolments and under-fives has been taken from World Bank's *World Development Indicators 2004* supplemented with data from UNICEF's *State of the World's Children 2004*. Appendix 2 describes the data sources and variables used in more detail.

To establish the number of individuals experiencing these forms of poverty, the relevant indicators (which are expressed in term of percentages for all indicators except child mortality, which is measured per thousand live births) must be multiplied by their reference population. The reference population for extreme monetary poverty is the number of people living on less than $1/day in each country, while for child malnutrition it is the number of children under five who are underweight. For primary school enrolments, the reference population is the number of children between 6 and 11 years old, while for under-five mortality the reference population is the total number of live births in the last five years. All reference populations have been taken from the 2002 revision of the UN Secretariat's *World Population Prospects* with the exception of live births, which are taken from the USAID's DOLPHN (*Data Online for Population, Health and Nutrition*) database.

Two remarks on these data sources are needed. First, *PovcalNet* rather than *World Development Indicators 2004* (*WDI04*) have been used as the source of data on extreme poverty because it aligns the survey-based poverty estimates from different years with 2001 (the mid-year covered by our aid flows data) using growth in mean consumption from the national accounts. In all but one case, however, the underlying survey-based estimates of poverty in *PovcalNet* and *WDI04* are identical.[5] It should also be noted that there are 28 developing countries which do not have $1/day poverty estimates in either *PovcalNet* or *WDI04* (or indeed any internationally available statistics). These include a number of populous countries which are likely to have high levels of extreme poverty, such as the Democratic Republic of the Congo, Myanmar, North Korea and Sudan). There are also other less populous countries, such as Iraq and Israel, which receive substantial volumes of aid but for which there are no estimates of $1/day poverty. It would have been preferable to include these countries, all of which have specific geo-political characteristics, in the analysis, but given the dearth of data it is simply not possible to do so. Second, the net primary school enrolment rates in *WDI04* do not include estimates for a number of populous developing countries (most importantly, Nigeria and the Russian Federation). For these countries, gender specific net primary school enrolment rates have been taken from UNICEF's *State of the World's Children 2004* and aggregated using the relevant populations of 6 to 11 year old boys and girls.

[5] The exception is Uganda, for which *WDI04* gives no estimate for $1/day poverty, but *PovcalNet* produces an estimate of 84 per cent based on the 1999-2000 Uganda National Household Survey. This poverty estimate seems extremely high, compared to those for neighbouring Ethiopia (23 per cent) and previous estimates in World Development Indicators, but has been retained in our analysis.

Since we are interested in children aged 6 to 11 who are not enrolled in primary school, the net enrolment rate is deducted from 100 in all cases.[6]

Aid data is taken from the OECD's Development Assistance Committee's on-line database. The variable we use is net Official Development Assistance (ODA) disbursed, which includes grants and concessionary loans to development countries. In most cases, net ODA flows to developing countries are positive but for a few donor-recipient country pairs they are negative (when debt repayments made by a developing country between 2000 to 2002 years exceed the concessionary aid flows it received during the same three years). Disbursements rather than commitments of ODA have been used because this is the best measure of how much a donor is actually spending on aid. It should be noted that our measure of ODA excludes bilateral and multilateral aid flows for which no recipient countries are identified (this amounted to 19 per cent of bilateral ODA between 2000 and 2002). Official loans given on non-concessionary terms (including the vast majority of funds from the IMF) are also excluded.

To facilitate comparisons between different indicators and donors, all aid concentration curves have been constructed using a common set of 73 developing countries (which are listed in Appendix 3). These 73 countries represent 90 per cent of the world's $1/day poor, 80 per cent of all underweight children, 97 per cent of all children not enrolled in primary school, and 81 per cent of all deaths of children under five worldwide.

In addition to examining the distribution of aid by the 22 donors which make up the DAC, we also construct aid concentration curves for the six major bilateral and three major multilateral donors. Average annual disbursements by each of these donors exceed $2 billion and are summarised in Table 1.[7] Total bilateral DAC disbursements averaged just over $40 billion per annum between 2000 and 2002, while total aid disbursed from multilateral sources for this period was just under $16 billion per annum.[8]

Table 1: Average Annual Disbursements of Net ODA, 2000 to 2002

Donor	US $, billions
USA	10,154
Japan	8,050
European Commission	8,188
World Bank (IDA)	5,133
France	3,292
Germany	3,218
United Nations	3,131
UK	3,033
Netherlands	2,359

Source: Calculated from OECD, 2003

[6] In contrast to the gross enrolment rate, the net primary school enrolment rate should never exceed 100 per cent. In Uganda, where *WDI04* lists the net enrolment rate as 109.5 per cent, we have adjusted it down to 100 per cent.

[7] For further information and analysis of the pattern of specific donor's aid flows, see OECD, Randall and German (2001) and Baulch (2003).

[8] The vast majority of bilateral aid takes the form of grants, which recipient countries are not expected to repay. Most multilateral aid takes the form of concessionary finance: loans at favourable interest rates, which aid recipients are expected to repay after a grace period (typically 25 to 30 years).

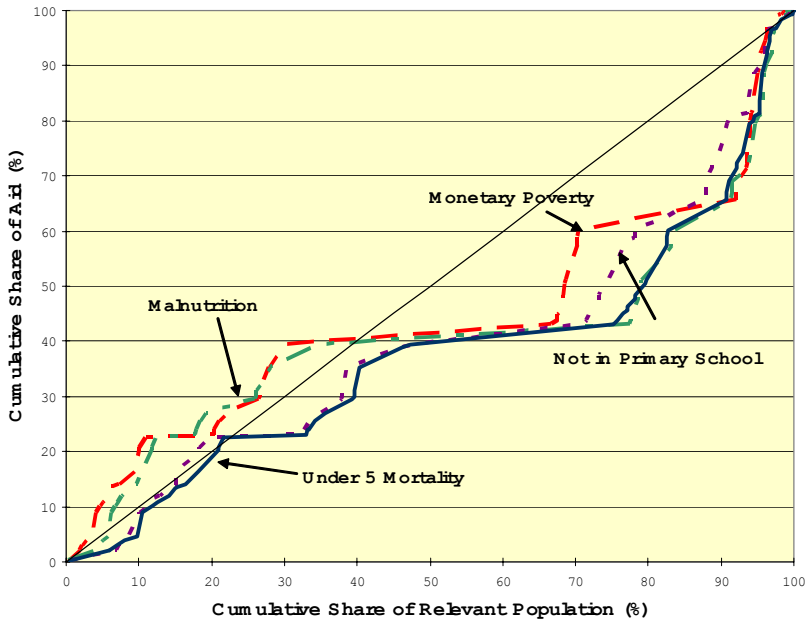
4. Results

Having laid out our methodology and data sources, we now proceed to construct aid concentration curves and compute Suits indices for four of the main indicators used to monitor the MDGs. Sub-section A examines how the distribution of aid varies by indicator for the DAC as a whole. Sub-section B examines how the distribution of aid varies across the leading donors taking each MDG indicator in turn. In all cases, the aid variable corresponds to the cumulative share of net ODA disbursed to the 73 developing countries listed in Appendix 3.

a) Aid Concentration Curves for Different Indicators

The aid concentration curves for each of the four indicators considered in this paper track each other quite closely. This can be seen in Figure 2, which shows the aid concentration curves for total net ODA disbursed by the DAC countries between 2000 and 2002. It can be seen that the aid concentration curve for $1/day poverty is the most progressive while the curve for under-five mortality is the least progressive. The concentration curves for child malnutrition and children not in primary school lie in between these extremes. Note that the curve for child malnutrition tracks that for monetary poverty most closely for the poorest countries, while the curve for child malnutrition lies closest to that for children not in primary school and child mortality among the middle income countries. However, the overall impression is of the bunching of all four concentration curves within a fairly narrow band.

Figure 2: Aid Concentration Curves for the DAC, 2000-02



Such bunching is readily explained. The data used to construct the aid shares on the vertical axis and rank countries by their per capita incomes are identical. As explained above, a common list of 73 developing countries has also been used in the construction of the concentration curves for each indicator. Therefore, it is only differences in the cumulative shares of the relevant population which can alter the position of the aid concentration curves. In particular, if a country has a much higher incidence of one

MDG indicator than another, this will change the horizontal position of the aid concentration for these two indicators. Such shifts are especially important for countries with large populations and low per capita incomes (which will be placed toward the bottom left hand corner of the aid concentration curve box). Consider, for example, Nigeria which had a (total) population of 130 million and a per capita GNI of $290 in 2001. Nigeria's child malnutrition rate is 27 per cent while its poverty rate is 70 per cent. Hence the portion of the aid concentration curve corresponding to Nigeria is much shorter for child malnutrition than for poverty. This opens up a gap in Figure 2 between the concentration curves for malnutrition and poverty for all countries that are richer (in per capita terms) than Nigeria.

The aid concentration curves for the four indicators show a similar ranking to the DAC when the major donors are considered individually. This is confirmed in Table 2, which shows the Suits index for the six major bilateral and three major multilateral donors (again ranked in order of the volume of their aid disbursements). For all donors, the Suits index for $1/day monetary poverty is less than that for child malnutrition, which is in turn less than that for children not attending primary school and then under-five mortality. This common ranking of donors' Suits indices suggests that – despite the rhetoric – different donors do not allocate aid using different indicators of poverty and deprivation.

Table 2: Suits Indices for the Major Bilateral and Multilateral Donors

Donor	Extreme Poverty	Child Malnutrition	Children not in Primary School	Under Five Mortality
USA	0.364	0.416	0.414	0.457
Japan	0.217	0.298	0.319	0.370
European Commission	0.303	0.346	0.359	0.390
World Bank(IDA)	-0.371	-0.308	-0.210	-0.176
France	0.180	0.254	0.237	0.290
Germany	0.152	0.212	0.233	0.275
United Nations	-0.009	0.042	0.099	0.130
UK	-0.314	-0.257	-0.172	-0.138
Netherlands	-0.161	-0.097	-0.046	-0.004
DAC, Total	0.123	0.187	0.210	0.254

Source: Author's calculations

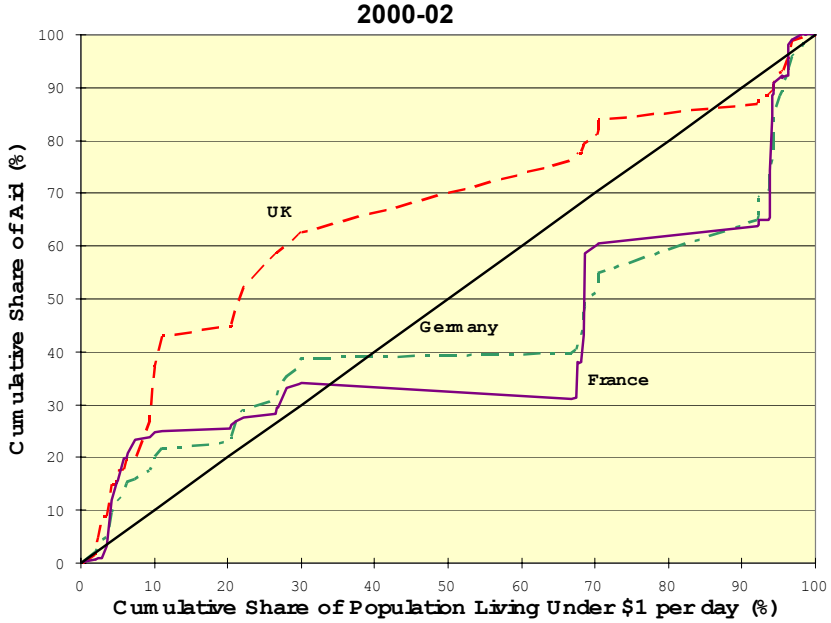
The different signs and magnitudes of their Suit indices does, however, indicate that there are major contrasts between the progressivity and regressivity of different donors' aid programmes (whatever MDG indicator is employed to construct their aid concentration curves). It is to these contrasts that we now turn.

b) Aid Concentration Curves for the Major Donors

i) Monetary Poverty

Goal 1 of the MDGs involves the halving of extreme poverty and hunger by 2015. The indicator used to measure extreme poverty is the percentage of the population living on less than $1/day in 1985 purchasing power parity terms, a standard originally proposed by the World Bank (1990).[9] Figures 3 and 4 show aid concentration curves for monetary poverty for the 'big six' bilateral donors: the United States, Japan, Germany, the UK, France and the Netherlands. It can be seen that the aid concentration curves of the UK and the Netherlands are broadly progressive, with Suits indices of -0.314 and -0.161 respectively. In contrast, Japan and the United States are fairly regressive with Suits indices of +0.217 and +0.364. France and Germany resemble the Netherlands and the UK in giving relatively large amounts of aid to poor (mostly African) countries but also resemble Japan and the US, in giving considerable amounts to relatively prosperous middle income countries (notably, Egypt, Jordan, Morocco and Russia). France's Suits index of +0.180 is also increased by the slight downward slope of the segment of its aid concentration curve corresponding to India, where approximately a third of the 1.1 billion people in the world living on less than $1/day reside. Between 2000 and 2002, France actually received more in debt repayments from India than it gave in development assistance, resulting in a negative net ODA flow between the two countries.

Figure 3: Aid Concentration Curves for Monetary Poverty, 2000-02



[9] For the rationale underlying the $1/day poverty line, see Ravallion, Datt, and van de Walle (1991) and Chen and Ravallion (2004). Critiques of the $1/day line include Deaton (2001), Pogge and Reddy (2003) and UNCTAD (2002).

Figure 4: Aid Concentration Curves for Monetary Poverty, 2000-02

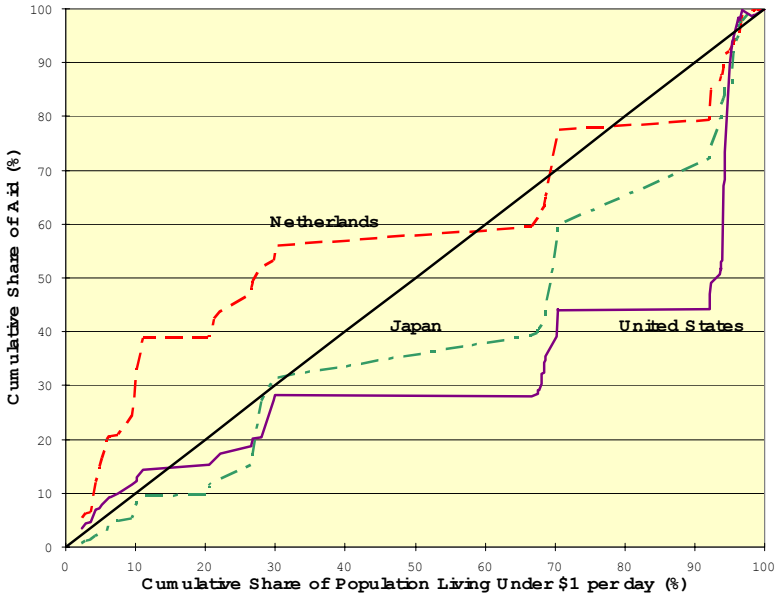
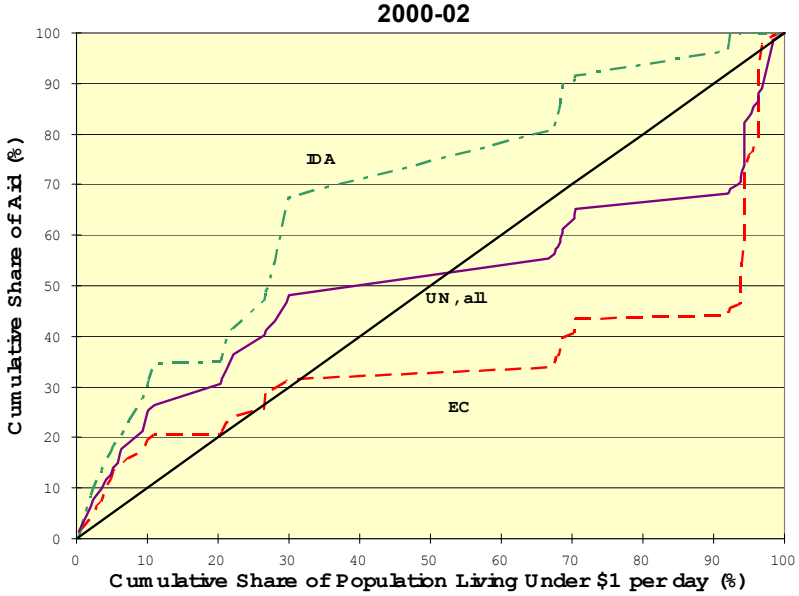


Figure 5 shows aid concentration curves for the three most important multilateral providers of concessionary aid: the World Bank, the European Commission and the United Nations system. The aid which the World Bank provides through its concessionary window (IDA) appears relatively well targeted towards the countries with the highest numbers of people living in extreme poverty, with a Suits index of -0.371 for the $1/day poor.[10] In contrast, the European Commission spends large amounts of its aid on relatively well-off middle income countries (such as Brazil, South Africa, Turkey, Tunisia, and a number of countries in Eastern Europe and Central Asia), which have a relatively low level of $1/day poverty. The EC's Suits index for extreme monetary poverty is therefore +0.303. The third largest multilateral donor, the UN System, has a more or less neutral distribution of aid with a Suits index of -0.009 for extreme monetary poverty.

[10] Note, however, that just over a quarter (26 per cent) of World Bank financial flows to developing countries in 2001 were non-concessional loans, which are focused toward lower middle income and middle income countries.

Figure 5: Aid Concentration Curves for Monetary Poverty, 2000-02



It will be noted that the aid concentrations for extreme monetary poverty for all donors contain three flat segments, corresponding to India, China, and Nigeria which respectively account for 37 per cent, 22 per cent and 9 per cent of the 975 million people living on less than $1/day in the 73 developing countries analysed in this paper.

ii) Child Malnutrition

Goal 1 of the MDGs also involves the halving of hunger by 2015. There are a number of indicators which could be used to measure hunger, but the one which is conventionally used is the percentage of children under five years old whose weight-for-age is less than two standard deviations below the mean of the reference population.[11] This is one of a number of anthropometric measures of children's nutritional status that also includes stunting (height-for-age of less than two or three standard deviations) and wasting (weight-for-height of less than two or three standard deviations). Weight-for-age is commonly regarded as a good overall indicator of child malnutrition although, as is well known among nutritionists, it is a partial indicator of both acute and chronic malnutrition (Svedburg, 2000).

Figures 6 to 8 show the aid concentration curves for child malnutrition. As with monetary poverty, the IDA's and the UK's aid programme are the most targeted to the poorest countries, with Suits indices of -0.308 and -0.257, respectively. The US and EC are again the most regressive, as shown by their Suits indices of +0.416 and +0.346. For all donors, however, the Suits indices for malnutrition are higher (and therefore more regressive) than for extreme poverty.

[11] For malnutrition among the general population, a different indicator (the proportion of the population below the minimum level of dietary energy consumption) is used by the MDGs. This indicator of malnutrition is based on food balance sheets rather than household surveys, and is liable to a wide margin of error.

Figure 6: Aid Concentration Curves for Child Malnutrition: 2000-02

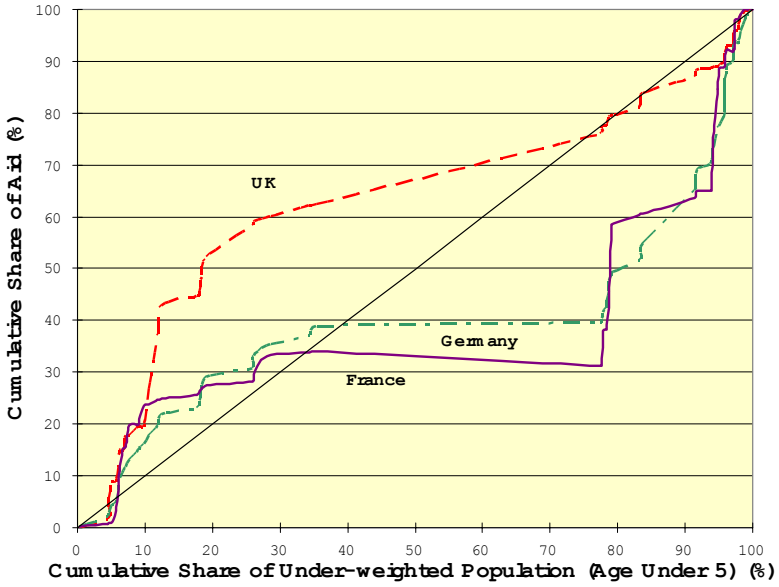


Figure 7: Aid Concentration Curves for Child Malnutrition: 2000-02

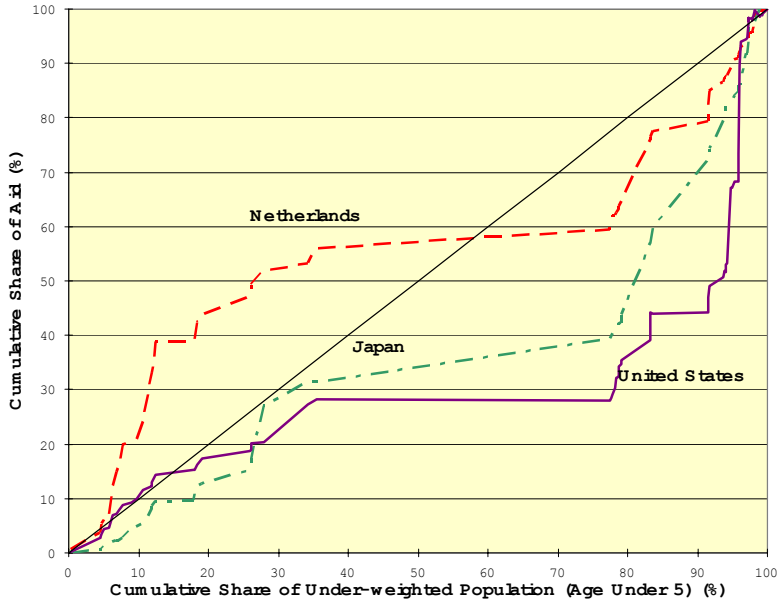
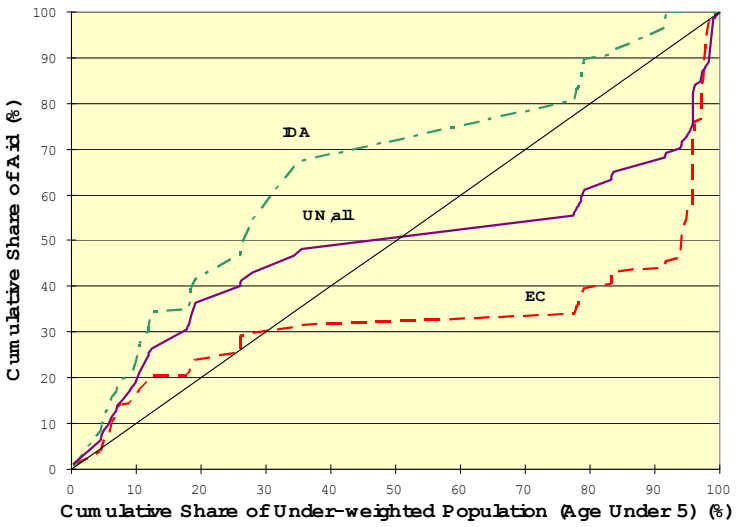


Figure 8: Aid Concentration Curves for Child Malnutrition: 2000-02



In contrast to the aid concentration curves for extreme monetary poverty, those for child malnutrition are dominated by a single flat segment corresponding to India, where almost 43 per cent of the 132.5 million underweight children in the 73 developing countries we consider live. India accounts for such a high share of malnourished children worldwide because its huge population is relatively young and its incidence of child malnutrition is the third highest in the world.[12] China accounts for the next highest share of underweight children (7.3 per cent) followed by Bangladesh (7 per cent) and Pakistan (6 per cent). The data shows that in the majority of countries malnutrition is higher amongst boys than girls under five.

iii) Children Not in School

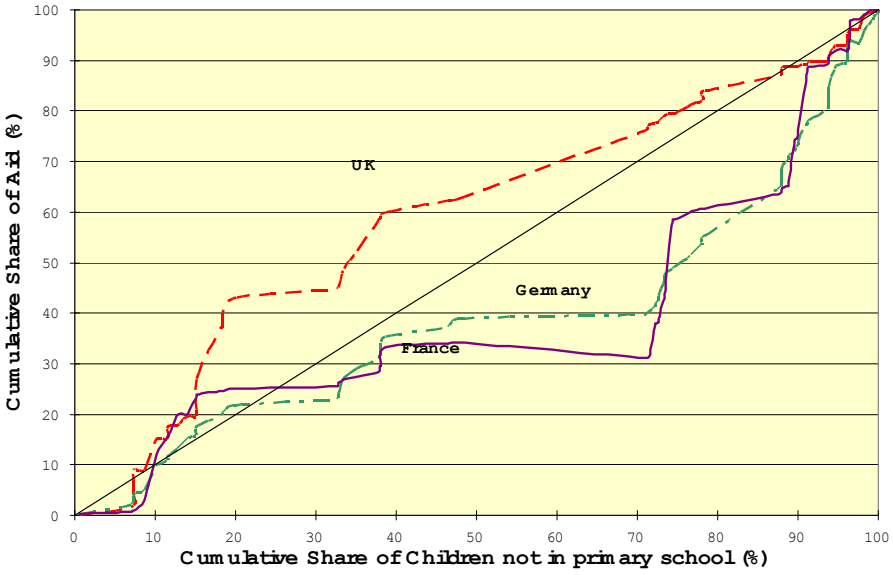
Goal 2 of the MDGs is the achievement of universal primary education by 2015. The indicator that is most commonly used to measure progress towards universal primary education, is the net enrolment rate (NER) in primary schools. This shows the number of primary school age children attending school expressed as a percentage of the primary school age population.[13] Because we are interested in the poverty focus of aid we calculate the number of children who are not enrolled in primary school by deducting the NER from 100 and then multiplying by the total number of children who are 6 to 11 years old.

The aid concentration curves for children not in primary school in Figures 9 to 11 differ in three ways from those for child mortality and malnutrition. First, there are six countries (Uganda, Peru, Ecuador, Mexico, Malawi and Guyana) which *WDI 2004* shows have net primary enrolment rates above 98 per cent. These countries create half a dozen almost vertical portions in the aid concentration curves for children not in school. Second, although India continues to account for the largest percentage (23 per cent) of the 98 million children not attending primary school in our 73 countries,

[12] Five countries have rates for underweight children that exceed 45 per cent. These countries are: Bangladesh (48 per cent), Nepal (48 per cent), India (47 per cent), Ethiopia (47 per cent) and Yemen (46 per cent).
[13] Because the primary school enrolment rate tells us little about school quality or school dropouts, some analysts prefer the primary school completion rate as an indicator of progress toward universal primary education.

Nigeria accounts for a much larger share (13 per cent) of the children not attending primary school worldwide than China (10 per cent). When combined with Nigeria's low per capita income ($290 per capita in 2001, according to the World Bank's Atlas method), this pushes the aid concentration curve for children not in primary school to the right for all donors. This is, in turn, reflected in the higher values of the Suits indices for this indicator. Finally, the aid concentration curves for most donors have an additional "flat" portion for one relatively well off country, Iran. Few donors give Iran much aid, presumably because of its high level of per capita income and low poverty rate ($1680 per capita and 0.2 per cent, respectively). However, Iran's NER is 79 per cent which, when combined with its large and young population, makes it the country with the eighth highest number of children not in primary school.[14]

Figure 9: Aid Concentration Curves for Children Not enrolled in Primary School, 2000-02



[14] Iran also has an adult illiteracy rate (23 per cent) which is much higher than would be expected given its level of income.

Figure 10: Aid Concentration Curves for Children Not enrolled in Primary School, 2000-02

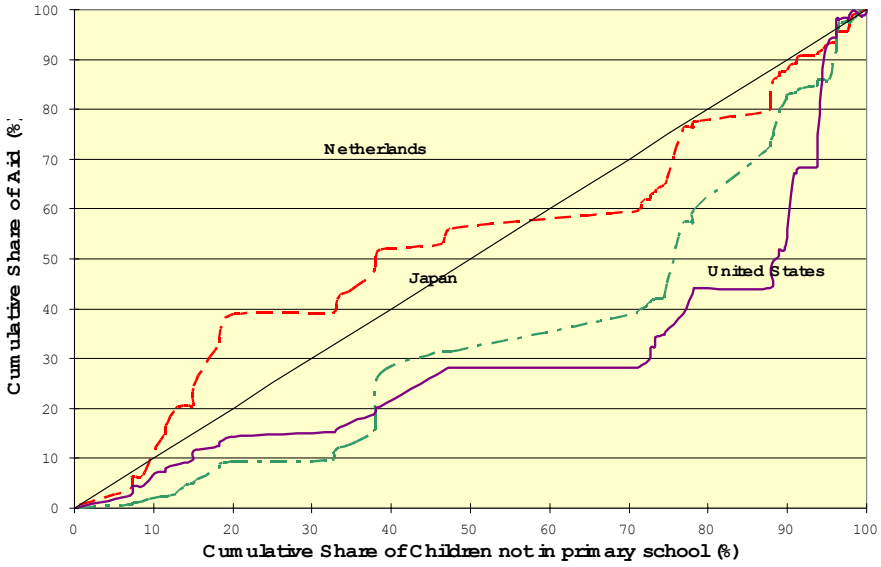
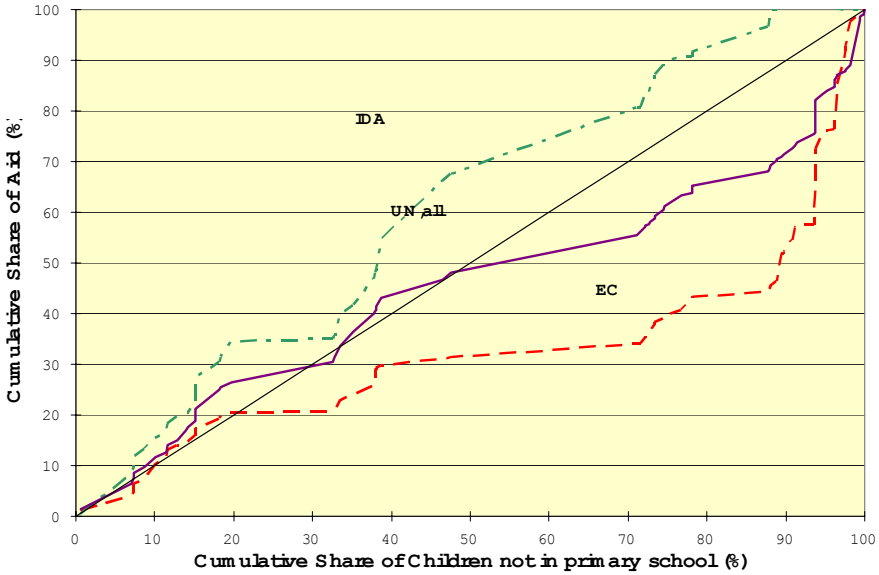


Figure 11: Aid Concentration Curves for Children Not enrolled in Primary School, 2000-02



The aid concentration curves in Figures 9 to 11 reveal a now familiar pattern among donors. The World Bank and UK have progressive aid concentration curves, with Suits indices of -0.201 and -0.172, followed by the Netherlands and the UN whose aid is focused on the least developed countries but also includes a number of middle-income recipients. For Japan, the European Commission, and the USA, all of which have Suits indices above +0.3, aid to middle income countries dominates.

Goal 3 of the MDGs is to promote gender equality and empower women. One of the indicators used to monitor this goal is the ratio of boys to girls in primary, secondary and tertiary education. While it is not possible to construct aid concentration curves for this indicator at the present time, it is obviously related to the primary school enrolment

data used to monitor Goal 2. We have examined the gender specific primary NERs for our 73 countries, and find that 39 countries have primary NERs for girls that are less than that for boys, while in 22 countries, boys' NERs are less than those for girls.[15] However, in those countries where girls' primary enrolment rates are lower than for boys, they tend to be much lower. Of the 39 countries where girls' primary NERs are lower, the difference is greater than five percentage points in 19 countries and greater than 10 percentage points in 10 countries.[16] The countries where gender specific primary NERs differ most markedly are concentrated in South Asia and West Africa.

A natural complement to the number of children not in primary school is the number of illiterate adults. This is an indicator on which there is much less comprehensive data than for primary school enrolments: the 73 developing countries in our sample represent only 59 per cent of all illiterate adults in the world. This may be because the definition of literacy used varies substantially between countries, becoming more stringent as incomes rise. Nonetheless, the aid concentration curves we have constructed for this indicator (not shown) are quite similar to those for extreme poverty.

iv) Under-Five Mortality

Goal 4 of the MDGs is to reduce under-five mortality by two-thirds by 2015. This is widely recognised to be the MDG which will be the hardest to attain because the determinants of child mortality are quite different from those of monetary poverty (Baird and Shetty, 2003; Devarajan et al., 2002). In particular, it is well known that access to clean water and oral rehydration therapy, insecticide treated bed nets and anti-malarial prophylaxis, and early childhood vaccinations are usually associated with dramatic declines in mortality among young children. Pre-and post-natal health care and mothers' education are also known to be key determinants of child mortality rates. The HIV-AIDS pandemic will, however, make achieving a two-thirds reduction in under-five mortality very difficult in most of sub-Saharan Africa without fundamental changes in sexual and reproduction behaviour.

Child mortality is also the most "chronic" of all the MDG indicators, with the cumulative totals of children under five who have died representing many missing billions of adults (CPRC, 2004). In Asia, there is known to be a marked bias in infant mortality rates against girls (Sen, 1990; Croll, 2001).

The under-five mortality rate (U5MR) measures the number of children who die before their fifth birthday out of every thousand live births. According to *WDI 2004*, in the late 1990s U5MRs in developing countries ranged from 316 children per thousand live births in Sierra Leone to 8 children per thousand in Malaysia. The U5MR is usually based on specialist demographic or health related surveys (such as the Demographic and Health Surveys), as the information needed to reliably estimate it is very difficult to collect in conventional income and expenditure surveys (Grosh and Glewwe, 2000). To estimate the numbers of children who have died before their fifth birthday, we multiply the U5MR by the number of live births that are estimated to have occurred between 1998 and 2002 (according to the DOLPHN database).

[15] In the remaining 10 countries, girls' and boys' primary NERs are equal.
[16] In the 22 countries where boys have lower NER than girls, the gender differential exceeds more than 5 percentage points in just three countries.

Figure 12: Aid Concentration Curves for Under-Five Mortality: 2000-02

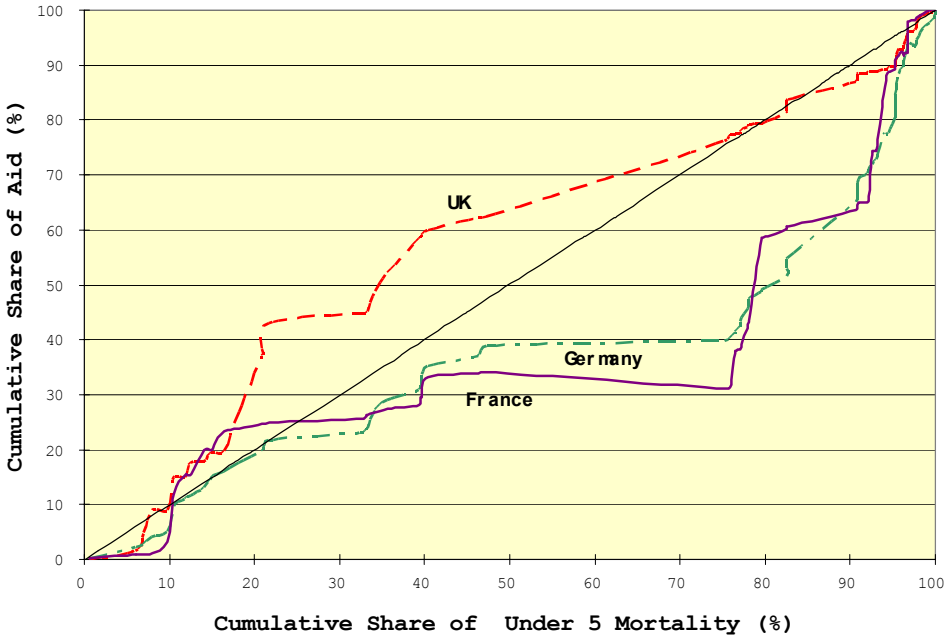


Figure 13: Aid Concentration Curves for Under-Five Mortality: 2000-02

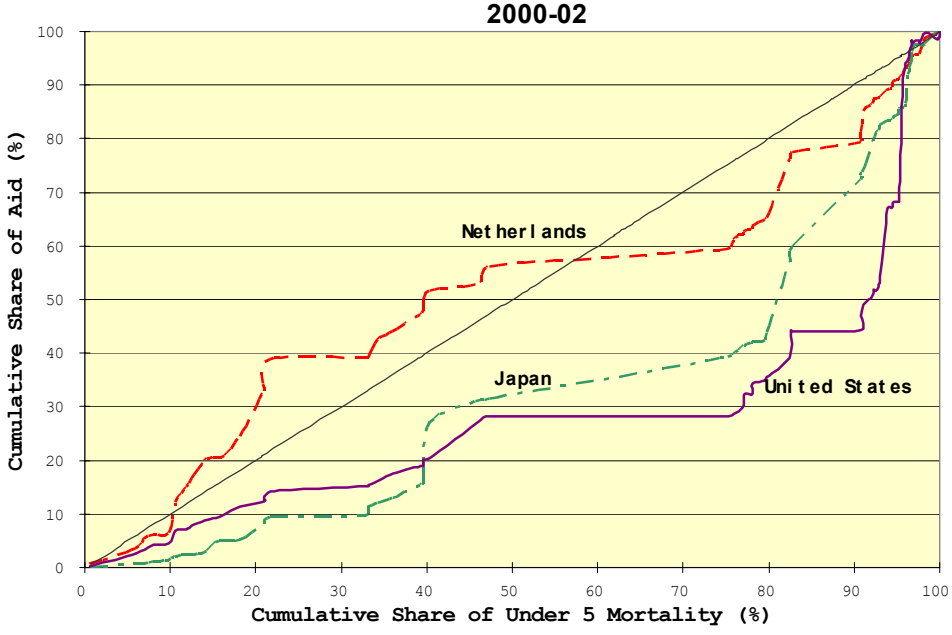
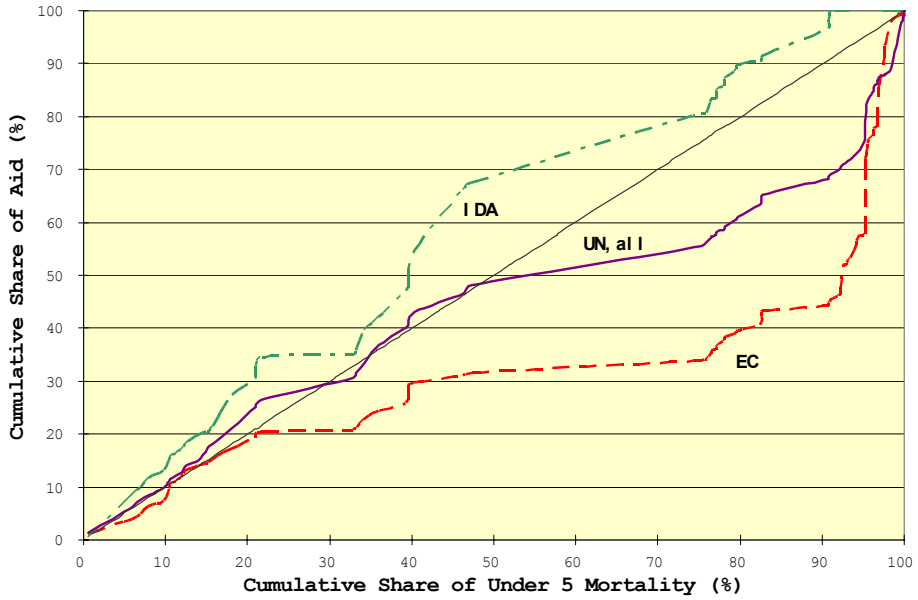


Figure 14: Aid Concentration Curves for Under-Five Mortality: 2000-02



Inspection of Figures 13 to 14 shows that the aid concentration curves for under-five mortality differ in two subtle but important ways from those of the MDG indicators discussed above. First, the shape of all the donors' concentration curves is more regressive than for the other indicators. This is primarily due to the large share of under-five mortality accounted for by India and Nigeria, which account for 28 per cent and 11 per cent of total under-five mortality in the 73 countries. Second, there are several relatively small (in population terms) countries in sub-Saharan Africa which have very high U5MRs. These countries include Mali and Niger (both with populations of just over 11 million, and U5MRs of 231 and 265 children per 1000 live births), Burkina Faso (population 11.5 million, U5MR 197 per thousand) and Sierra Leone (population 5.1 million, U5MR 316 per thousand). The conjunction of high U5MR with low per capita incomes in these countries pushes all donors' aid concentration curves to the right.

Among the bilateral donors, Germany, Japan and the United States have under-five mortality concentration curves that never cross the leading diagonal, and are therefore regressive across all 73 countries. The USA's curve is highly regressive, with a Suits index of +0.457. This is primarily due to massive amounts of aid that the US gives to Jordan, Egypt, Russia and Colombia. Japan's Suits index of +0.37 is also appreciably higher for child mortality than the other non-monetary indicators of poverty. In contrast, the prevalence of under-five mortality in former colonies in West Africa improves the progressivity of the UK and France's aid concentration curves. However, France's aid concentration curve is then dragged down by net debt repayments from India and the aid it gives to Côte d'Ivoire, Egypt, and Tunisia, producing a Suits index of +0.29. In contrast, the UK performance is boosted by the volume of aid it gives to India and other countries in South Asia more generally, giving it a Suits index of -0.138. The Netherlands' aid concentration curve for under-five mortality rises steeply at first because of the volume of aid it gives to Mozambique, Tanzania, Uganda and Ghana. However, it then flattens out until Indonesia (which receives almost 11 per cent of Dutch bilateral aid) is reached.

The distribution of the World Bank's concessionary loans and grants produces a Suits index of -0.176 for under-five mortality. This is partially due to its focus on sub-Saharan Africa and India, but also because no concessionary aid is given to the richest middle income countries – as can be seen by IDA's aid concentration curve reaching the top horizontal axis at around the 88th percentile of cumulative child deaths. In contrast, the European Commission's aid concentration curve is fairly regressive with a Suits index of +0.390. This is due to the large grants the EC gives to middle-income countries in Eastern Europe and North Africa.

Despite these differences, the ranking of the progressivity/regressivity of the main donors' aid programs is the same for the under-five mortality rate as for the other indicators of poverty and deprivation. Once again, the World Bank and the UK have the most progressive aid concentration curves while the USA and EC have the most regressive ones.

5. Conclusions

With just over a decade left until 2015, most donors are waking up to the fact that substantially more aid – along with appropriate policies and commitment in the developing countries – will be required to achieve the MDGs. The UN's Millennium Project is, for example, calling for a new 'big push' in aid with Official Development Assistance more than doubling by 2015. If such huge increases in aid volumes are to have maximum impact, it is essential that the additional aid is targeted to the countries which need it most and which can use it most effectively.[17] Unfortunately, as this paper demonstrates, some donors are not distributing their aid in a way that is consistent with the MDGs.

Using a graphical device known as aid concentration curves together with its statistical counterpart, the Suits index, we have examined four of the quantifiable indicators of the MDGs (extreme monetary poverty, child malnutrition, non-enrolments in primary school and under-five mortality). The aid concentration curves for these four indicators show a common ranking for all the major bilateral and multilateral donors, with the distribution of aid flows being most progressive for $1/day monetary poverty and least progressive for under-five mortality. Despite the rhetoric of their public statements, different donors do not seem to allocate aid using different indicators of poverty and deprivation.

There are, however, major contrasts between the progressivity and regressivity of different donors' aid programmes whatever the MDG indicator chosen. The World Bank and the UK have the most progressive aid programmes directing large shares of their concessionary aid flows to the poorest and most deprived countries. In contrast, the USA and the European Commission spend the majority of their aid budgets in middle-income countries, which have already met or are "on track" to meet the MDGs. The Netherlands and the United Nations System occupy an intermediate position, distributing two-thirds to three-quarters of their aid to the least developed countries but also making substantial large disbursements to a few small, relatively well-off countries. For France, Germany and Japan, the proportion of bilateral aid going to the least developed countries falls to 50 to 60 per cent, with large poor countries (such as India and Nigeria) receiving much less aid than some small former colonies. Indeed, all

[17] In future work, it would be useful to compare the poverty-efficient aid allocations estimated by Collier and Dollar (2002) with donors' actual aid disbursements. Unfortunately, the Collier-Dollar estimates only cover 59 countries, are for the year 1996-7 and only deal with monetary poverty. Furthermore, in calculating the poverty efficient allocation of aid, Collier and Dollar constrain aid to India to its 1996-97 aid allocation.

donors – including the World Bank and the UK – distribute much less aid to the most populous and deprived countries than their shares of global poverty, child malnutrition and under-five mortality suggest is needed.

In the Millennium Declaration, the leading multilateral organisations and OECD countries committed themselves to eight Development Goals. The first seven of these relate to reducing poverty and improving education, gender equality, health and the environment in developing countries. The final goal is to develop a global partnership for development. This goal includes donor targets for increasing aid, dealing comprehensively with debt relief, and implementing measures to address the needs of the least developed and landlocked countries. If the anomalies and inconsistencies in the distribution of bilateral and multilateral aid found in this paper are not addressed, it seems unlikely that either the global partnership for development or the wider MDGs will be achieved.

References

Baird, M. and Shetty, S., 2003, "Getting there: how to accelerate progress toward the Millennium Development Goals", *Finance and Development*, December: 14-19

Baulch, B., 2003, "Aid for the poorest? The distribution and maldistribution of international development assistance", *Chronic Poverty Research Centre Working Paper 35*, University of Manchester

Burnside, C. and Dollar, D., 2000, "Aid, policies, and growth", *American Economic Review*, 90(4): 847-68

Chen, S. and Ravallion, M., 2004, "How have the world's poorest fared since the early 1980s?", *World Bank Policy Research Working Paper 3341*

CPRC, 2004, *Chronic Poverty Report 2004-05*, Manchester: Chronic Poverty Research Centre/Institute of Development Policy and Management

Collier, P. and Dollar, D., 2002, "Aid allocation and poverty reduction", *European Economic Review*, 46: 1475-1500

Clark, D., 1991, "Trade versus aid: distributions of Third World development assistance", *Economic Development and Cultural Change*, 38: 829-37

Clark, D., 1992, "Distributions of official development assistance among developing country aid recipients", *The Developing Economies*, 30(3): 189-97

Croll, E., 2001, "Amartya Sen's 100 million missing women", *Oxford Development Studies*, 29(3): 226-224

Deaton, A., 2001, "Counting the world's poor: problems and possible solutions", *World Bank Research Observer*, 16(2): 125-147

Devarajan, S., Swanson, E. and Miller, 2002, "Goals for development: history, prospects and costs", *World Bank Policy Research Working Paper* 2819

Grosh, M. and Glewwe, P., 2000, *Designing Household Survey Questionnaires for Developing Countries: Lessons from 15 Years of Living Standards Measurement Surveys*, Washington: World Bank

Millennium Project, 2004, *A Global Plan to Achieve the Millennium Development Goals*, Draft Report for Public Consultation, 23 September 2003, New York: Millennium Project, Office of the Secretary General of the United Nations

Mosley, P., 1987, *Overseas Aid: Its Defence and Reform*, Brighton: Wheatsheaf Books

OECD, 2003, *Geographic Distribution of Financial Flows to Aid Recipients* (available on-line at www.oecd.org/dac/stats)

OECD, *Review of Development Cooperation* (various issues)

Pogge, T. and Reddy, T., 2003, "How not to count the poor", Mimeo, Columbia University, New York (http://www.columbia.edu/~sr793/count.pdf)

Randel, J., German, T. *et al.*, 2001, *The Reality of Aid*, London: Earthscan

Ravallion, M., Datt, G. and Van de Walle, D., 1991, 'Quantifying absolute poverty in the developing world', *Review of Income and Wealth*, 37(4): 345-362

Sen, A.K., 1990, "More than 100 million women are missing", *New York Review of Books*, 20 December: 61-60

Svedberg, P., 2000, *Poverty and Undernutrition: Theory, Measurement and Policy*, Oxford: Oxford University Press

Suits, D., 1977, "Measurement of tax progressivity", *American Economic Review*, 67(4): 747-52

United Nations, 2002, *World Population Prospects* (available online at http://esa.un.org/unpp)

UNDP, 2004, *Human Development Indicators*, New York: UNDP

UNICEF, 2004, *State of the World's Children*, New York: United Nations Children's Fund

UNCTAD, 2002, *The Least Developed Countries Report 2002: Escaping the Poverty Trap*, Geneva: United Nations Conference on Trade and Development

USAID, undated, *Data Online for Population Health and Nutrition* (DOLPHN), Washington: United States Agency for International Development (available on-line at www.phnip.com/dolphn)

White, H. and McGillivray, M., 1995, "How well is aid allocated? Descriptive measures of aid allocation", *Development and Change*, 26: 163-183

World Bank, 1990, *World Development Report: Poverty*, Oxford: Oxford University Press

World Bank, 2002 and 2003, *World Development Indicators CD*, Washington, D.C.: World Bank

Appendix 1: Calculation and Interpretation of the Suits Index

For a continuous distribution, the Suits index may be calculated using the following expression:

$$S_d = 1 - \frac{1}{K}\int_0^{100} A_i(y)dy$$

where S_d is the Suits index for donor d, A_i is the cumulative distribution of aid ranked in terms of their per capita incomes, y, and K is the area of right angle triangle bounded by the bottom and right-hand side axes of the aid concentration curve box and the leading diagonal.

For a discrete distribution (of which the distribution of development assistance across developing countries would be an example) the Suits index can be calculated using the following trapezoid approximation:

$$S_d = 1 - \frac{.5p_1CA_1 + .5p_2(CA_2 - CA_1) + p_2CA_1 + ... + .5p_n(CA_n - CA_{n-1}) + p_nCA_{n-1}}{.5}$$

$$= 1 - p_1CA_1 + p_2(CA_2 + CA_1) + ... + p_n(CA_n + CA_{n-1})$$

$$= 1 - \sum p_i(CA_i + CA_{i-1})$$

where p_i is the population share of country i and CA_i is the cumulative aid share of country i and all poorer countries. Notice that unlike previous papers that have calculated the Suits' index (White and McGillivray, 1995) using trapezoid formula involving ranks, this formula allows for the population shares of different countries to differ substantially.

Like the Gini coefficient, the Suits index can be a problematic summary measure of distribution. It is well known that when two Lorenz curves cross, the Gini coefficient is an ambiguous measure of the distribution of income. Similarly, when two aid concentration curves cross, the Suits index is an ambiguous measure of the progressivity or regressivity of the distribution. Nonetheless, just like the Gini coefficient, the Suits index also provides a useful way of summarising a great deal of distributional information into a single summary statistic.

Appendix 2: Indicators, Relevant Populations and Data Sources

Goal	Indicator and Relevant Population	Data Source
Eradicate extreme poverty by	• $1 a day poverty headcount (%), 2001 • Total population, 2001	• PovcalNet, World Bank (http://iresearch.worldbank.org/Povcalnet) • World Development Indicators 2004, World Bank
Eradicate hunger	• Malnutrition prevalence, weight for age (% of children under 5), 1995-2001[5] • Population Aged 0-4, 2000[6]	• Human Development Indicators 2004, United Nations Development Program • World Population Prospects: The 2002 Revision Population Database, United Nations Population Division (http://esa.un.org/unpp)
Achieve universal primary education	• Net primary school enrolment rate, (%), 2000-01[3] • Population Aged 6-11, 2000[4]	• World Development Indicators 2004, World Bank • The State of the World Children 2004, UNICEF • World Population Prospects: The 2002 Revision Population Database, United Nations Population Division (http://esa.un.org/unpp)
Reduce child mortality	• Under-five rate, under-5 (per 1,000 live births), 2001 • Number of live births, 2001	• World Development Indicators 2004, World Bank • DOLPHN Database - Data Online for Population, Health and Nutrition[2] (http://www.phnip.com/dolphn/)

Notes:

1. The DOLPHN database has been developed and is maintained by the Population, Health and Nutrition Information (PHNI) Project, a US Agency for International Development (USAID) resource managed by Jorge Scientific Corporation
2. All estimates are obtained from the WDI 2004, except Cameroon, Guyana, Nigeria, Russian Federation, and Sierra Leone whose data are from UNICEF. Estimates from UNICEF refer to the most recent year available for the period 1995-99.
3. This refers to the *de facto* population aged indicated between 6-11 years old as of July 1, 2000. In other words, children aged 10 years and 364 days are also included in this population group.
4. Data refer to the most recent year available for the period 1995-2001.
6. This referred to the *de facto* population aged indicated below 5 years old as of July 1, 2000. In other words, children aged 4 years and 364 days are also included in this population group.

Appendix 3: List of 73 Developing Countries Included in Analysis

Country Name	GNI per capita, Atlas method (current US$)	Net ODA Received (US$ millions)	$1/day Poverty Headcount (%)	Population Living Under $1 per day	Percentage of Under-weight Children (% of under 5s with weight/age< 2 sd)	Number of Under-weight Children	Net Primary School Enrolment Rate (%)	Number of Children Aged 6 to 11 Not in Primary School	Under 5 Mortality rate, (deaths per 1,000 live births)	Number of Children Dying before the Age of 5	Adult Illiteracy rate (% of people ages 15 and above)	Number of Illiterate Adults
Algeria	1650	213.3	1.37	422440	6	197460	94.2356	253345.3	49	176,967	32.20	6,415,964
Armenia	570	434.9	12.83	396190	3	5010	85.18784	49324.48	35	6,696	1.51	33,330
Azerbaijan	650	451.23	3.67	297861	7	49980	80.25336	223532	96	68,784	3.00	174,477
Bangladesh	360	1715.71	32.8	43737226	48	9278400	87.68477	2615385	77	1,502,582	59.45	49,952,520
Bolivia	950	1348.51	14.52	1236410	10	119000	94.97882	65225.18	77	87,146	14.00	727,315
Botswana	3100	84.45	22.04	373578	13	31850	79.63727	55590.26	110	23,501	21.94	216,757
Brazil	3070	576.87	8.17	14083936	6	986700	94.57769	1091510	36	589,358	12.70	15,692,445
Burkina Faso	220	678.61	48.7	5626102	34	801720	35.00443	1389605	197	561,812	75.18	4,595,997
Burundi	100	180.25	56.97	3952584	45	499050	54.09318	533437.3	190	222,057	50.82	1,904,269
Cameroon	580	924.22	17.1	2598767	21	500850	76	607920	155	425,075	27.61	2,445,114
Central Afr Rep	260	140.55	64.41	2428785	24	146400	54.67	276059.7	180	117,675	51.84	1,126,892
China	890	3544.01	16.6	211127100	11	10624460	92.75689	9427054	39	3,318,867	14.23	136,037,536
Colombia	1890	976.9	8.06	3468635	7	332990	88.50354	634949.7	23	103,986	8.11	2,362,760
Cote d'Ivoire	630	1239.69	16.75	2748688	21	508830	60.94416	1027559	175	578,980	50.33	4,798,280
Dominican Rep	2230	284.65	0	0	5	46850	92.72761	81087.18	47	49,156	15.99	912,412
Ecuador	1080	490.03	17.15	2208749	15	215400	99.44632	9357.139	30	51,398	8.16	699,518
Egypt	1530	3353.34	3.08	2007450	11	911240	89.85736	992660.4	41	373,654	43.88	18,678,173
El Salvador	2040	621.25	31.66	2026240	12	94560	81	165490	39	34,873	20.84	863,263
Ethiopia	100	1235.79	22.98	15124528	47	5544590	43.86888	6361901	172	2,251,339	59.69	21,233,967
Gambia	320	45.5	21.97	294567	17	35700	72.87376	55337.52	126	37,127	62.20	499,675
Georgia	590	481.46	2.71	141570	3	8970	95.22584	21674.67	29	8,088	0.00	0
Ghana	290	1178.19	47.46	9353293	25	717500	57.13652	1350628	100	275,522	27.31	3,064,559
Guatemala	1680	631.06	15.97	1865775	24	444480	84.17791	303942.3	58	137,472	30.79	2,041,901
Guyana	840	131.84	0.42	3218	14	11340	98	1800	72	4,507	1.42	7,579
Honduras	900	1030.84	19.93	1312337	17	164390	87.44696	132811.2	38	39,768	24.44	942,447
India	460	2340.16	34.7	358227185	47	56812660	83.32863	22926465	93	11,489,645	41.99	290,183,667

Country Name	GNI per capita, Atlas method (current US$)	Net ODA Received (US$ millions)	$1/day Poverty Headcount (%)	Population Living Under $1 per day	Percentage of Under-weight Children (% of under 5s with weight/age< 2 sd)	Number of Under-weight Children	Net Primary School Enrolment Rate (%)	Number of Children Aged 6 to 11 Not in Primary School	Under 5 Mortality rate, (deaths per 1,000 live births)	Number of Children Dying before the Age of 5	Adult Illiteracy rate (% of people ages 15 and above)	Number of Illiterate Adults
Indonesia	690	4081.37	7.51	15694481	26	5654220	91.90488	2112665	45	1,139,106	12.66	18,475,667
Iran	1680	285.07	0.16	103245	11	658570	79.17787	2160504	42	249,104	22.93	9,965,575
Jamaica	2800	-31.01	0.35	9065	6	16020	94.9798	16566.67	20	4,830	12.72	228,395
Jordan	1750	1058.26	0.29	14589	5	35450	94	45660	33	21,632	9.66	301,122
Kazakhstan	1350	425.93	0.11	16385	4	47720	87.04327	239051.7	99	143,279	0.59	64,245
Kenya	350	851.51	29.82	9165404	21	963900	68.24803	1652055	122	575,993	16.66	2,924,242
Kyrgyz Rep	280	257.78	0.86	42613	11	57640	82.49349	120619.9	61	37,952	3.00	98917.987
Lao PDR	300	523.72	18.19	982837	40	334400	81.4327	161906.8	100	106,639	34.40	1,070,325
Lesotho	530	80.98	39.05	805106	18	44100	83.41012	47612.95	132	34,191	16.10	200,630
Madagascar	260	402.4	61.03	9750000	33	945780	67.67062	853819	136	463,635	32.69	2,888,762
Malawi	160	689.96	49.73	5234729	25	541750	98.93167	20031.26	183	461,793	39.02	2,282,865
Malaysia	3330	153.55	9.91	2358814	12	328440	96.88472	97040.84	8	22,007	12.12	1,917,455
Mali	230	765.04	64.25	7128113	33	774840	43	1231770	231	617,992	73.60	4,330,134
Mauritania	360	310.43	21.37	587493	32	146240	65.90718	143871.7	183	107,967	59.26	917,346
Mexico	5530	64.88	9.85	9792839	8	904560	99.3988	80651.4	29	4,110	8.57	5,655,672
Moldova	400	226.66	21.78	930006	3	7500	78.55968	90692.57	32	9,466	1.04	34,891
Mongolia	400	433.15	20.18	488630	13	34840	89.97247	36399.93	76	21,334	1.52	24,493
Morocco	1190	853.83	0.53	154601	9	287640	83.69333	618838.2	44	162,886	50.22	9,660,299
Mozambique	210	3004.73	33.71	6091788	26	781560	54.13784	1379993	197	305,717	54.76	5,670,498
Namibia	1960	259.05	32.83	588333	24	73680	77.65389	71284.08	67	21,949	17.35	181,965
Nepal	250	780.87	13.78	3249973	48	1703520	70.46054	1089711	91	384,248	57.14	7,998,419
Niger	180	333.89	64.71	7237251	40	906400	30.73096	1325117	265	706,355	83.49	4,772,553
Nigeria	290	406.83	69.91	90795613	36	7153920	36	12550400	183	4,616,530	34.61	25,265,900
Pakistan	420	2287.6	12	16974012	38	8457660	66.89476	7664194	109	2,459,849	55.96	46,579,682
Panama	3260	52.09	8.01	232050	7	23170	97.82505	8003.809	25	7,787	7.93	158,805
Paraguay	1350	181.97	13.9	749210	5	38550	92.2104	66523.15	30	26,561	6.50	207,015
Peru	1980	1261.19	18.12	4774076	7	215810	99.93757	2233.109	39	128,088	9.80	1,733,364
Philippines	1030	1516.18	15.04	11778881	28	2753520	92.68136	829714.7	38	421,292	4.85	2,401,587

Country Name	GNI per capita, Atlas method (current US$)	Net ODA Received (US$ millions)	$1/day Poverty Headcount (%)	Population Living Under $1 per day	Percentage of Under-weight Children (% of under 5s with weight/age< 2 sd)	Number of Under-weight Children	Net Primary School Enrolment Rate (%)	Number of Children Aged 6 to 11 Not in Primary School	Under 5 Mortality rate, (deaths per 1,000 live births)	Number of Children Dying before the Age of 5	Adult Illiteracy rate (% of people ages 15 and above)	Number of Illiterate Adults
Romania	1720	476.68	1.5	336120	6	68520	92.78002	120718	21	2,710	1.78	329,208
Russian Fed	1750	3360.32	4.79	6933621	3	193350	93	774620	21	142,815	0.43	513,761
Rwanda	220	523.36	38.45	3050239	27	373140	97	39000	183	277,121	31.96	1,220,651
Senegal	490	754.91	15.12	1476888	23	354660	62.48304	600271.4	138	258,480	61.70	3,355,798
Sierra Leone	140	507.69	65.72	3373657	27	214920	65	245700	316	383,234	64.00	1823410.1
South Africa	2820	1042.15	10.71	4631004	12	588000	89.64615	632516.5	71	299,547	14.39	4,224,422
Sri Lanka	880	708.5	1.79	335303	29	439060	97	58980	19	30,571	8.14	1,129,839
Tanzania	270	2625.26	19.9	6855474	29	1759430	49.80051	3056145	165	1,153,792	23.95	4,527,019
Thailand	1940	1234.09	1.93	1180849	19	996930	86.79643	846744.6	28	149,957	4.35	2,031,160
Tunisia	2070	478.49	0.27	26119	4	33480	95.43589	55545.19	27	22,417	27.89	1,917,289
Turkey	2530	167.27	1.22	836054	8	570560	88	1047120	43	261,764	14.49	7,218,723
Uganda	260	1430.53	84.31	19212563	23	1106300	109.46	0	124	708,372	32.03	3,720,365
Ukraine	720	1052.93	1.53	751123	3	65580	67.16816	1263041	20	45,396	0.38	153,167
Uzbekistan	550	393.31	14.17	3552136	19	530670	88	454200	68	223,226	0.76	121,086
Venezuela	4760	136.83	15.37	3785938	5	140500	88.15379	390214.2	22	54,327	7.17	1,175,526
Vietnam	410	2814.3	14.59	11602851	33	2555190	95.36203	515000.3	38	297,884	7.32	3,935,612
Yemen	450	378.82	13.95	2517382	46	1589760	67.14753	1096287	107	419,367	52.34	5,083,540
Zambia	320	1119.87	63.32	6510879	28	526400	66.06033	616683.7	202	409,683	20.96	1,186,048
Zimbabwe	480	518.98	58.26	7469311	13	249730	80.61676	427012.7	123	235,117	10.66	761,769