EBA

WORKING PAPER AUGUST 2014

THE POVERTY FOCUS OF SWEDISH BILATERAL AID: A COMPARATIVE ANALYSIS

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1. Introduction

The overall goal of Swedish aid is "to create pre-conditions for better living conditions for people living in poverty and under oppression" (Government of Sweden, 2013). Sweden gives around 1% of its GNI as aid and has been praised for being both a generous and transparent aid donor (CGD, 2008, OECD, 2013). Nonetheless the Development Assistance Committee's peer review of 2013 notes that "Sweden's aid remained largely as it was at the time of the last peer review: thinly spread across a wide range of countries and sectors" (DAC, 2013). This review commented that the 2007 policy of focusing Swedish aid on fewer countries and thematic areas has not been successful as it might have been and that the poverty focus of Swedish aid could be sharpened.

This paper has been prepared for the 1 September seminar organised by the Swedish Expert Group for Aid Studies. It considers the poverty focus of Swedish bilateral aid in comparative perspective by constructing aid concentration curves for Sweden, Denmark, the United Kingdom and the United States of America. Poverty is measured using both standard monetary measures of absolute poverty, as well as two non-monetary indicators of deprivation (child mortality and children not attending school).

2. Measuring the Poverty Focus of Aid

This paper assesses the poverty focus of aid using aid concentration curves and the Suits index. Aid concentration curves are a graphical way to show whether the distribution of aid is targeted toward or away from the poorest and most deprived countries. If most of a donor's aid goes to the poorest countries, then its aid concentration curve will lie above the diagonal (45 degree line). On the other hand, if most of a donor's aid goes to relative prosperous developing countries, its aid concentration curve will lie below the diagonal. The use of aid concentration curves for the analysis of the distribution of aid was originally suggested by Mosley (1987) and has been applied and extended by Clark (1992), White and McGillivray (1995) and Baulch (2006).

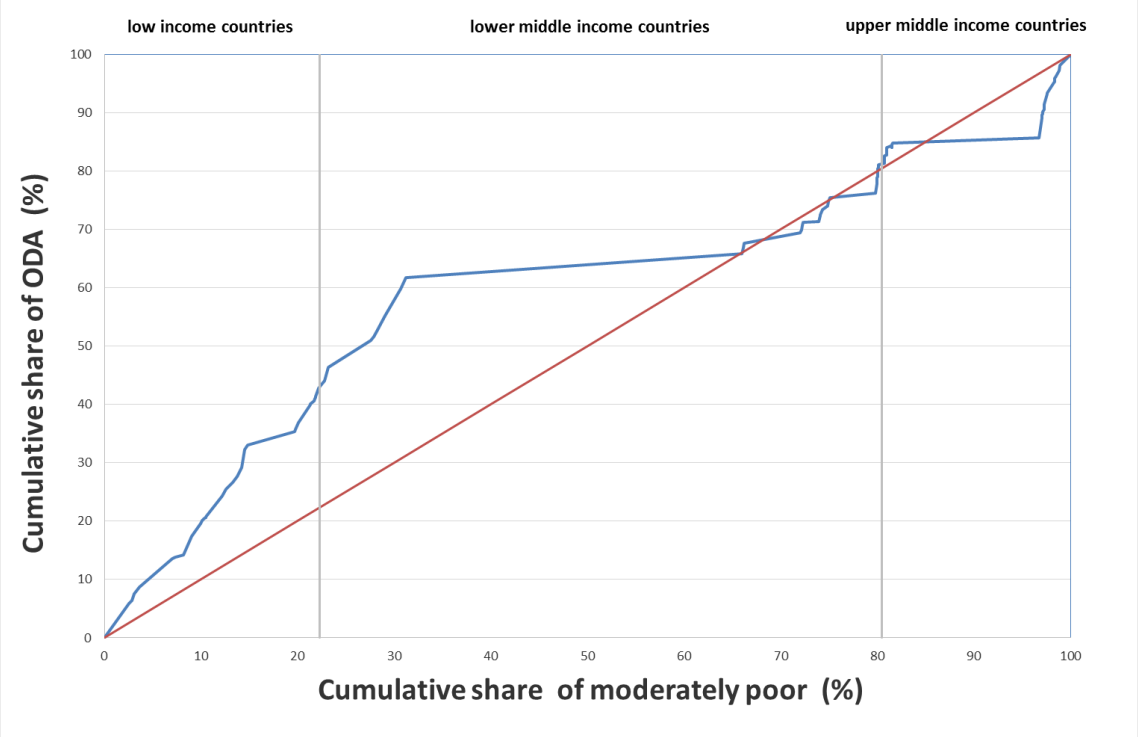
To be more precise, an aid concentration curve plots the cumulative percentage of aid against the cumulative percentage of a measure of the number of people who are poor or deprived. Aid can be measured in a number of different ways but we focus on the most commonly used measure, disbursements of net Official Development Assistance (ODA). For the poverty and deprivation, a number of alternatives measures exist including, *inter alia*, the cumulative percentage of the extreme or moderately poor and the cumulative percentage of people suffering some other kind of deprivation (for example, child mortality or lack of education). Aid concentration curves resemble conventional Lorenz curves but with an additional variable (per capita incomes measured in terms of Atlas GNI) used to rank countries before the cumulative percentages are calculated. [1] This additional ranking allows aid concentration

[1] 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

curves to cross the diagonal when aid is targeted towards the poorest or most deprived countries.

To illustrate, consider the aid concentration curve for 2010-2012 for the 24 members of the OECD's Development Assistance Committee (DAC) (Figure 1). The horizontal axis plots the cumulative proportion of the population living on less than $2 a day (in 2005 PPP terms) for the 106 countries for which we have complete data, while the vertical axis shows the cumulative proportion of net Official Development Assistance received by these countries. The two vertical lines show the thresholds between low income and lower middle income countries ($1005 per capita in 2010) and between lower and upper middle income countries ($3975 per capita in 2010) according the OECD's classification. The position of these vertical lines confirm Sumner's (2012) finding that less than a quarter of the world's poor live in low-income countries, while just under three-fifths live in lower middle income countries.

Figure 1: Aid Concentration Curves for all DAC Countries, 2010-2012



The initial portion of the DAC's aid concentration curve is slightly steeper than the diagonal line indicating that the 31 countries with per capita incomes of less than $1,005 receive more aid than their share of poverty. As indicated by the many short segments in this curve, most of these countries have relatively small populations, although there is a flat segment between the 15th and 20th percentiles corresponding to Bangladesh. Like most countries with large populations, Bangladesh receives less aid, relatively speaking, than its share of the world poverty.

(1992, 1995). The term aid concentration curve seems more precise because a Lorenz curve should not cross the leading diagonal.

Then, follows a relatively step segment, corresponding to 20 lower middle income countries which receive relatively generous aid relative to the size of their poor populations. Two of the countries in this segment (Pakistan and Vietnam) each received approximately 5% of total DAC aid between 2010 and 2012. The follows a long flat segment between the 31st and 66th percentiles of the horizontal axis, corresponding to India, the second most populous country in the world. India is home to almost 35% of the moderately poor people in the world but receives just over 4% of all aid disbursed by the DAC.[2] Other lower middle countries account for a further 25% of moderate poverty in the world.

Thereafter the curve rises again more steeply until the vertical line dividing lower and upper middle-income countries is reached. This portion of the curve contains three flat steps, corresponding to Nigeria, the Philippines and Indonesia, plus 24 smaller countries with populations less than 40,000. Just above the upper middle income line, there is another flat segment between the 82 and 97th percentiles, representing China, which contained almost 15% of the people in the world living on less than $2/day. The final steep portion of the curve contains 26 relatively small countries, located in Eastern Europe, the Midde East, Latin America and the Caribbean, with per capita incomes greater than China, most of whom receive relatively generous aid disbursements. This part of the curve includes Iraq, which in 2010-12 received more than three-and-half times as much aid from the DAC as China (despite having a moderately poor population that is just 2% the size of China's).

The Suits index is a statistic which summarises the progressivity or regressivity of a distribution (Suits, 1977).[3] Unlike the Gini coefficient, of which it is an analogue, the Suits index can vary between -1 and +1. When applied to aid concentration curves, a Suits index of -1 would correspond to the (not necessarily desirable) situation in which a donor gave all its aid to the poorest country in the world. In this, admittedly extreme case, the aid concentration curve would coincide with the left-hand and top axes of Figure 1. Similarly, a Suits index of +1 would correspond to the opposite case, when a donor gave all its aid to the richest developing country. In this case, 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 moderately poor people in the world. 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 -0.181, indicating a distribution of aid that is moderately progressive.

[2] The relatively small share of ODA received by India reflects both the large country effect and the Government of India's policy to reduce the number of donors it cooperates with in recent years.
[3] See Appendix 1 for further information on the calculation and interpretation of the Suits index.

3. Data

Data on poverty and deprivation

Monetary poverty is measured using the number of people living on incomes or expenditures of less than $1.25 and $2/day in 2005 Purchasing Power Parity terms. These are the international poverty lines used by the United Nations and World Bank in measuring progress towards the MDGs (Deaton, 2001), and are likely to be used in monitoring the post 2015 development agenda. People living on less than $1.25/day are called the extremely poor, while those living on less than $2/day are called the moderately poor. Although there is criticism of monetary poverty being a narrow and imperfect measure of poverty (Alkire, 2007; UNDP, 1994), there is also agreement that these international poverty measures are a useful starting point for the analysis of poverty and deprivation (Chen and Ravallion, 2011; Deaton, 2001).

Information on monetary poverty is taken from the World Bank's online poverty analysis tool, PovcalNet, which now contains information on $1.25 and $2/day poverty for around 130 countries. The estimates used in this paper incorporate PovcalNet's latest estimates for $1.25/day and $2/day poverty in China and India (using nationally representative survey data for 2009) plus Indonesia and Zambia (using nationally representative survey data for 2010. For other countries, the latest available survey year, typically 2008, is used. There are, however, several poor and populous countries which do not have estimates of $1.25 and $2/day poverty, including Afghanistan and Myanmar.[4] In addition none of the four countries that have been created during the 2000s (Kosovo, Montenegro, South Sudan, and Timor Leste—two of which are partner countries for Sweden's development cooperation) yet have international poverty estimates. The World Bank estimates that in 2008, the latest year for which comprehensive data is available, there were 1.29 billion people in the world living on less than $1.25/day (in 2005 PPP terms) and 2.47 billion people living on less than $2/day (Chen and Ravallion, 2011).

Data on under-five mortality comes from the World Development Indicators health database, which is itself based on work of the Interagency Group on Child Mortality Estimation (UNICEF et al, 2013). In 2012, it was estimated that 6.6 million children under the age of five died prematurely, thereby undermining the chances of the world achieving Goal 4 of the MDGs. Note that due to improvements in the international statistics, the data for child mortality now covers the same 106 countries for which we have data on monetary poverty.

Data on out of school children of primary age are mostly for 2011 and come from the UNESCO Institute of Statistics, supplemented by information from the World Development Indicators education database. It is estimated that there were approximately 57 million children of primary school age not attending school in 2011 (UNESCO, 2014). Achieving universal primary education is Goal 2 of the MDGs. But there is also some way to go before this target is achieved, especially in sub-Saharan Africa.

[4] Other, less populous countries which do not have international poverty estimates are Cuba, Mongolia, Uzbekistan, and Zimbabwe plus some small islands states in the Caribbean and the Pacific.

Table 1 summarises the data sources used for poverty and deprivation, along with GNI per capita and population, which are used in this paper.

Table 1: Sources of Data for Poverty and Deprivation

Indicator and Reference Population	**Data Source**
GNI per capita, Atlas method (current US$), 2011	World Development Indicators http://databank.worldbank.org
$1.25 and $2 a day poverty headcount (%), latest available year. Total population, 2011	PovcalNet, World Bank http://iresearch.worldbank.org/PovcalNet Health Nutrition and Population Statistics, World Bank http://databank.worldbank.org
Number of under-five deaths, 2011	World Development Indicators http://databank.worldbank.org ('World Development Indicators/ Health/Mortality')
Number of out of school children of primary school age , 2011	UNESCO Institute of Statistics, UIS Stat. http://data.uis.unesco.org/ Supplemented by: World Development Indicators http://databank.worldbank.org ('World Development Indicators/ Education/Out of school, primary age')

Data on Aid Flows

For our overall aid variable, we use net Overseas Development Assistance (ODA). ODA comprises official grants or loans on concessional terms to developing countries and territories on the OECD Development Assistance Committee (DAC)'s list of aid recipients. To be regarded as development assistance, these grants or loans must have the promotion of economic development and welfare as their main objective. To be regarded as official, the assistance must be provided by the official aid agencies or their executive agencies. So grants from non-governmental organisations and private philanthropic agencies are excluded, as is aid from non-DAC donors. To be regarded as concessional, loans must contain a grant element of at least 25%. Note that the multilateral donors, Japan and France typically give a much higher proportion of their aid in loans than the majority of bilateral donors. Some bilateral donors (such as Denmark, Sweden and the UK) now provide most of their aid in grant form.

Data on aid disbursements have been taken from the OECD's Creditor Reporting System (CRS) for the years 2010, 2011 and 2012.[5] The CRS's statistics are based on individual reports of both ODA and other official aid flows received directly from participating official

[5] See http://www.oecd-ilibrary.org/development/data/creditor-reporting-system_dev-cred-data-en/

agencies, including bilateral and multilateral aid agencies, development lending institutions, and export credit agencies. The data available within the CRS is more comprehensive than that provided by the questionnaires completed by donors for the DAC in April and September each year, although it typically does not become available until almost a full calendar year after the year it refers to. As there is variability in individual donor's aid flows to most countries from year to year, we use total aid disbursed by donors between 2010 and 2012 in our analysis.

When the data on aid flows are merged and combined with the data on poverty and deprivation, a data set of 106 countries results.

4. Aid Concentration Curves for Selected Bilateral Donors

This section analyses the poverty focus of Swedish bilateral aid relative to those of three other leading bilateral donors: Denmark, the United Kingdom and the United States.[6] It first analyses the poverty focus of these donors' aid disbursements with respect to monetary poverty and then extends this analysis to two non-monetary poverty indicators (under-five child mortality and out of school children of primary age).

Monetary Poverty

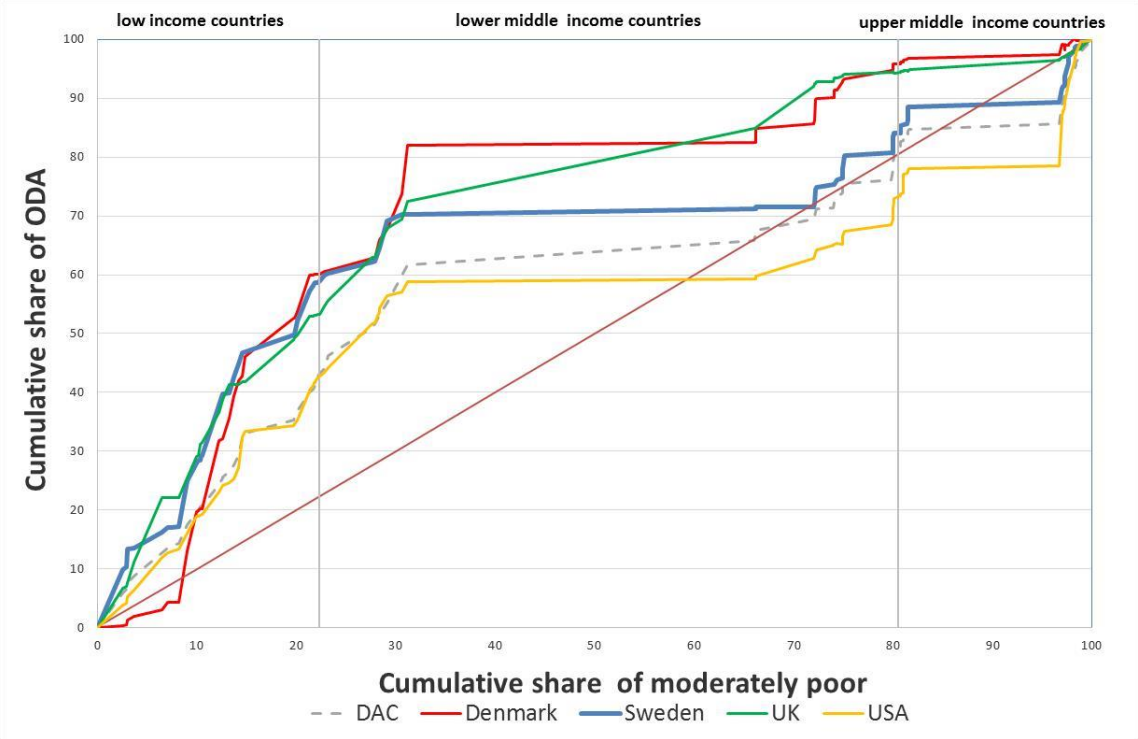
Monetary poverty is measured using the number of people living on incomes or expenditures of less than $1.25 and $2/day in 2005 Purchasing Power Parity terms. People living on less than $1.25/day are called the extremely poor, while those living on less than $2/day are called the moderately poor.

Figure 2 shows the aid concentration curves for the moderately poor for bilateral aid disbursements by Denmark, Sweden, the United Kingdom (UK) and the United States of America (USA) between 2010 and 2012. It can be seen that the curves for Denmark and the UK are the most poverty focused, with virtually all segments of the curve lying above the diagonal line, while the curve for the United States is the least poverty focused. Sweden's aid concentration curve lies in the middle: it tracks that for the UK, and to a lesser extent Denmark, for the low income countries but is much flatter for the lower middle income countries and then rise steeply for the upper middle income countries. The main reason for this is that almost 59% of Sweden's country-specific bilateral aid between 2010 and 2012 was disbursed to low income countries. Among our four donors, only Denmark disbursed a higher share of its bilateral aid (60%) to low income countries.[7] However, Sweden is also relatively generous in the aid it gives to upper middle income countries. Almost 16% of Sweden's country-specific bilateral aid was spent in upper middle income countries, compared to just 4% for Denmark and 6% for the UK. Between these two extremes, Sweden

[6] These bilateral donors were selected as relevant comparators by staff of the Swedish Expert Group for Aid.
[7] It should be noted that the proportion of Swedish bilateral aid that cannot be linked directly to particular developing countries (e.g., assistance for refugees) is higher than for the other donors considered.

spends 25% of its bilateral aid in lower middle income countries but with very little disbursed Nigeria, Indonesia and the Philippines).[8]

Figure 2: Aid Concentration Curves for the Moderately Poor, 2010-2012



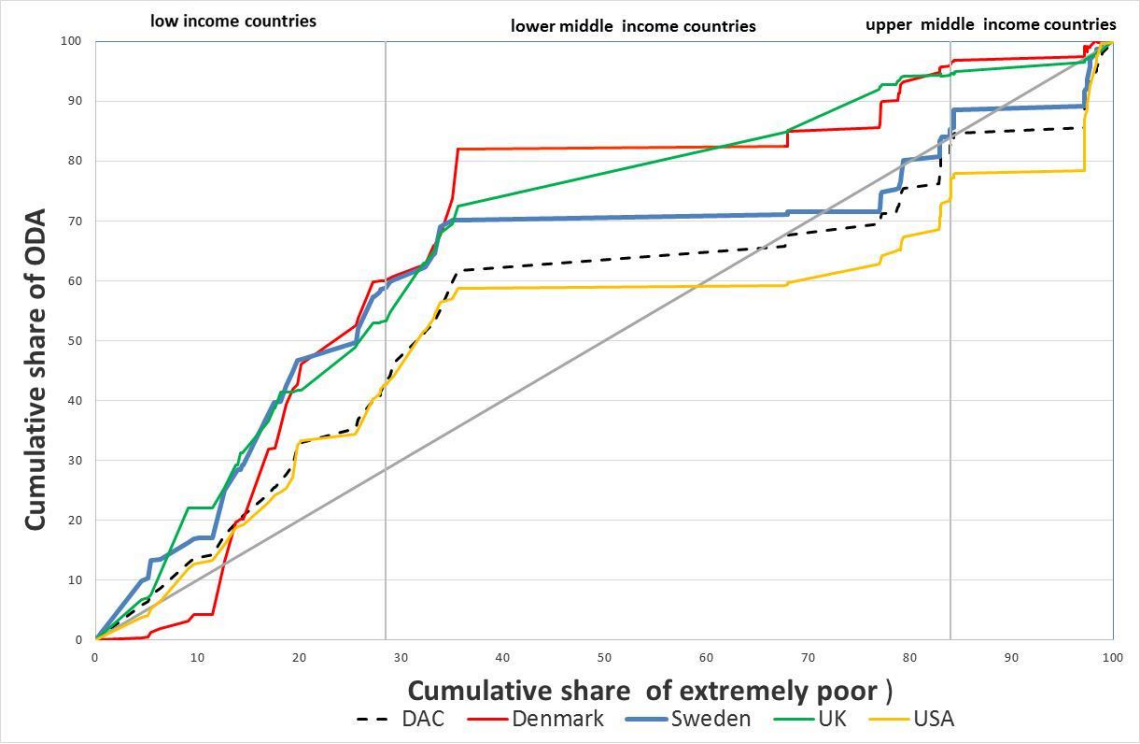
Aid concentration curves for extreme poverty reveal a similar pattern as that for moderate poverty (Figure 3). The distribution of Swedish aid again resembles that for the UK and Denmark for the low income countries but is more like that of the DAC and USA for middle income countries. Swedish aid is therefore highly poverty focused for countries with low per capita incomes but becomes less targeted as per capita incomes rise. This is in turn linked to the number of lower and middle income countries to which Sweden gives aid in support of its three thematic priorities.[9]

There are, of course, many other reasons why donors give aid to developing countries. These include colonial and commercial ties, concerns about governance, institutions and absorptive capacity, recipient governments attitudes toward donors, and geo-political considerations (Alesina and Dollar, 2000; Werker, 2012). It is well known that geo-political and commercial interests dominate the aid allocation decisions of the two largest bilateral donors (the USA and Japan) while many European countries favour former colonies and major trading partners in their aid allocation decisions (Bertelemy et al., 2004; Snyder, 1993). To assess the influence of these and other factors on donor's aid allocation decisions, a multivariate analysis that is beyond the scope of this paper is required. Here we focus on the more narrow

[8] India is home to more than a third of the moderately poor people in the world receives negligible amounts of aid from most bilateral donors, and accounts for the long flat segment in most aid concentration curves.
[9] These are: a) democracy and human rights, gender equality and the role of women, and c) climate and the environment (Government Offices of Sweden, 2008).

and descriptive question of whether selected bilateral donors distribute their aid in accordance with the global profile of poverty and deprivation.

Figure 3: Aid Concentration Curves for the Extremely Poor, 2010-12



These conclusions are confirmed by calculation of the Suits index (Table 2). Sweden's Suits index for moderate poverty is -0.317 while its index for extreme poverty is -0.246. These values are more negative (and therefore more poverty focused) than those for the USA and the DAC as a whole. However, they are also less negative than the Suits indices for Denmark and the UK, whose indices for moderate poverty are just over -0.43. It is also interesting to note from the last column of this table that the number of countries to which Sweden gives bilateral development assistance (101 countries) is also higher than that for Denmark (89 countries), although lower than that for the UK (105) and the USA (106).

Table 2: Suits Indices for Monetary Poverty, 2010-2012

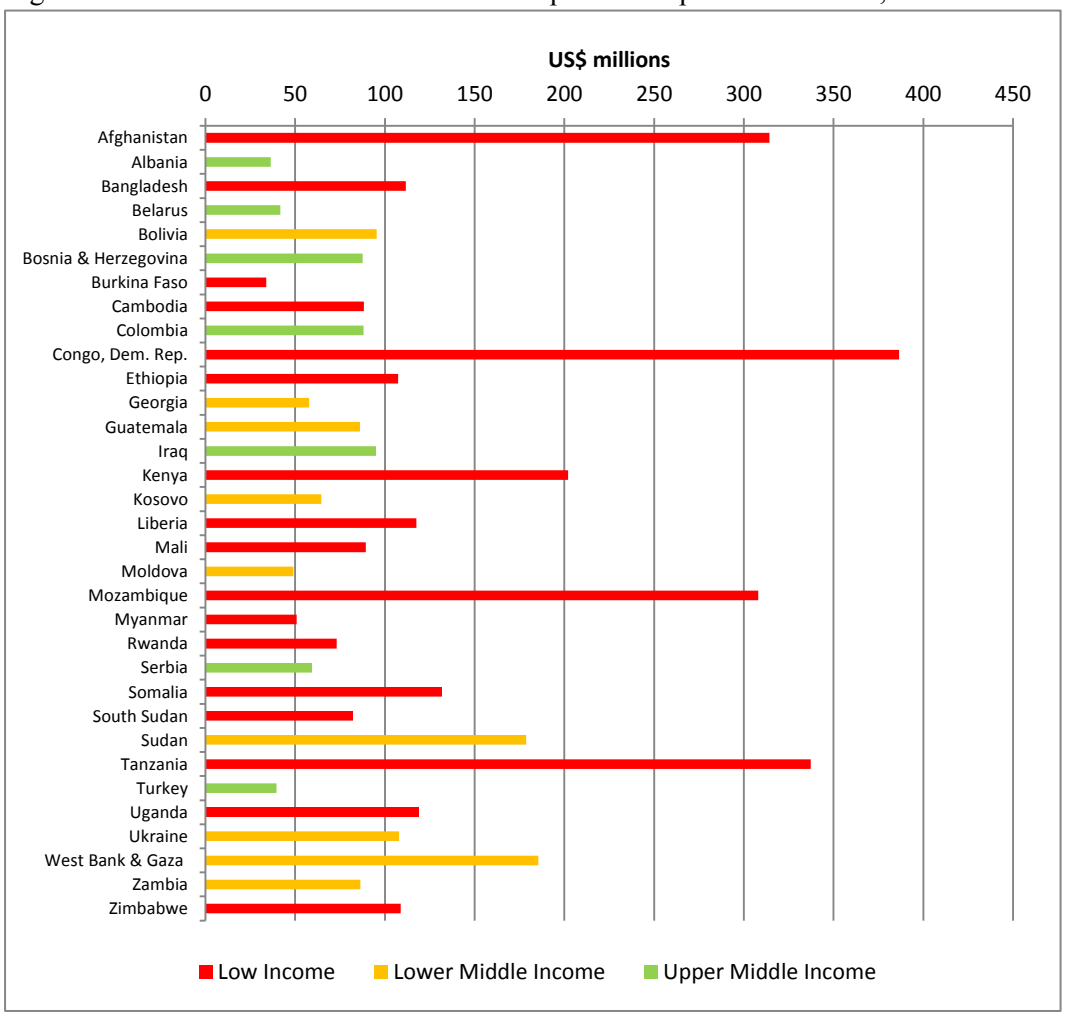
Country	Extreme Poverty	Moderate Poverty	Number of Countries
DAC	- 0.112	- 0.181	106
Denmark	- 0.350	- 0.438	89
Sweden	- 0.246	- 0.317	101
UK	- 0.361	- 0.435	105
USA	- 0.032	- 0.098	106

Source: author's calculations

Between 2010 and 2012, Sweden provided bilateral aid to 118 developing countries compared to 102 developing countries in the 2000-02 period.[10] Concerns that the fragmentation of bilateral aid were reducing aid effectiveness following the Paris Declaraion of 2005, has led Sweden to target its bilateral aid to 33 partner countries since 2007. As more than 80% of Sweden's country specific bilateral ODA disbursements were concentrated on these partner countries in the 2010-2012 period, we now take a closer look at these partner countries.

Figure 4 shows the distribution of Swedish bilateral aid among these partner countries. Sixteen of the 33 countries were low income countries, accounting for just over half (51%) of country specific bilateral aid disbursement from 2010 to 2012.[11] Among these 16 low income countries, there were four countries (Afghanistan, the Democratic Republic of Congo, Mozambique and Tanzania) which received more than $200 million in bilateral official development assistance from Sweden between 2010 and 2012 . Another five low

Figure 4: Sweden's Bilateral Aid to its Development Cooperation Partners, 2010-2012



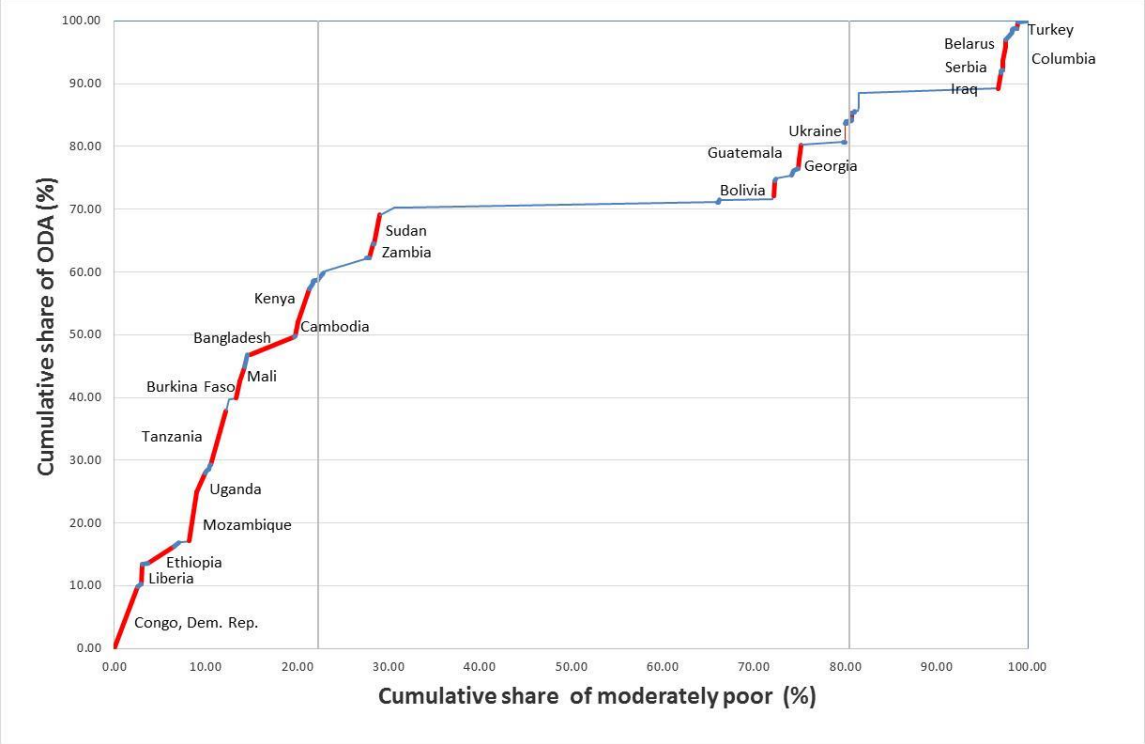
[10] As a consequence, the donor fractionalization index for Sweden, which is 1 minus the sum of squares of the share of total bilateral aid given to each country, increase marginally from 0.965 in 2000-02 to 0.968 in 2010-12. This is in line with the trend for most other DAC donors (Easterly, 2007).

[11] These 33 countries include Burkina Faso, whose development cooperation partnership with Sweden is due to end in 2016.

income countries (Bangladesh, Ethiopia, Liberia, Somalia and Zimbabwe) received between $100 and $200 million in Swedish bilateral aid in these years. Between 2010 and 2012, the remaining 17 middle income partner countries received around three-tenths (29.8%) of Swedish country specific bilateral aid disbursements, with three lower-middle income (Sudan, West Bank and Gaza, and Ukraine) each receiving aid disbursements from Sweden of more than $100 million. Among the sixteen partner countries who received $50 million to $100 million in bilateral aid from Sweden between 2010 and 2012, there are six lower middle income countries (Bolivia, Georgia, Guatemala, Kosovo, Moldova and Zambia) and four upper middle income countries (Bosnia, Colombia, Iraq and Serbia).

An alternative way of looking at the distribution of bilateral aid to Sweden's development cooperation partner is in terms of the aid concentration curves in Figure 5. In this Figure, Sweden's aid partners are shown as red segments while countries receiving bilateral aid who are not partner countries are shown in blue. Unfortunately eight of Sweden's development cooperation partners cannot be included in the figure because of unavailable data on monetary poverty.[12]

Figure 5: Aid Concentration Curve Showing Sweden's Partner Countries: Monetary Poverty



The heavy concentration of red segments in the bottom left hand corner of these figures, confirms that the pro-poor focus of Swedish bilateral aid is largely due to disbursements to poor partner countries in sub-Saharan Africa plus Bangladesh and Cambodia. It is particularly noteworthy that Sweden's gives almost 10% of it country-specific bilateral aid to

[12] These countries are Afghanistan, Kosovo, Moldova, Myanmar, Somalia, South Sudan, West Bank and Gaza, and Zimbabwe.

the Democratic Republic of the Congo, which has the lowest per capita income of any country in the world according to the World Bank.

The red segments in the lower middle income and upper middle income country parts of the aid concentration curve also confirm that Sweden disbursed more than two-fifths of its country specific bilateral aid to middle income development cooperation partners. The most important of these were Sudan and the Ukraine, both lower middle income countries, which each received more than $100 million dollars of Swedish bilateral aid.[13] However, there are also five diverse upper middle income countries (Belarus, Colombia, Iraq, Serbia and Turkey) with per capita incomes between $5,000 and $10,500 per capita who collectively account for one-twelfth (8.1%) of Sweden's bilateral disbursements to partner countries.

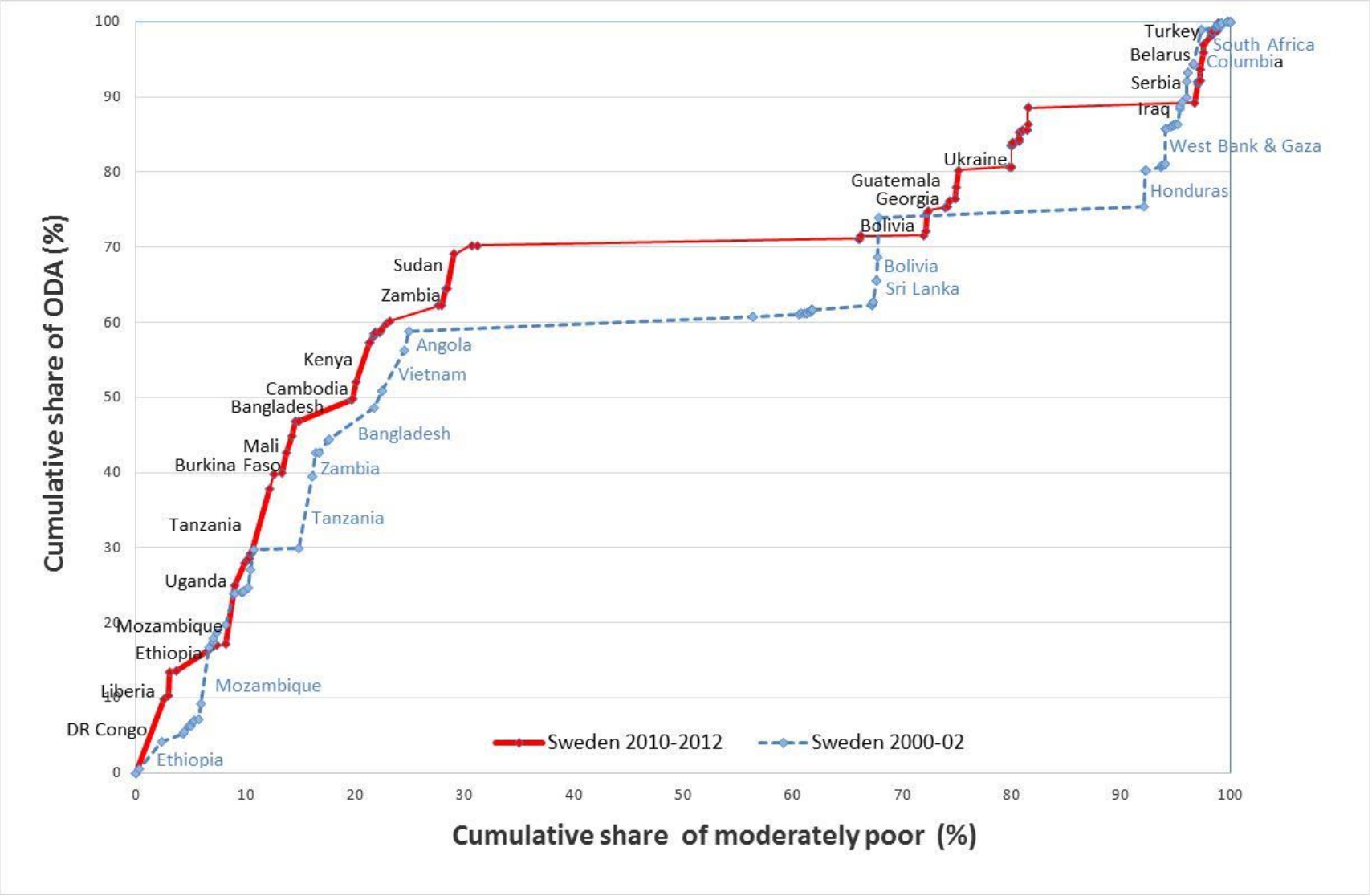
Tracking the changes in the poverty focus of Sweden's bilateral development assistance over time using aid concentration curves is a difficult task because of: (i) missing data for some countries; (ii) substantial revisions to international estimates of monetary poverty or Atlas GNI in other countries; and, (iii) changes to Sweden's development cooperation partners. Figure 6 (next page) is an imperfect attempt to track these changes based on the available data for 2000-02 and 2010-12. The upper solid red curve shows Sweden's aid concentration curve for 2010-12 based on the same 106 countries as our previous analysis. This curve is identical to the aid concentration curve shown in Figure 5. The lower dotted blue curve shows Sweden's aid concentration curve for 2000-02 and is based on data for 96 countries.[14] Note that the country names (in black) to the left of the upper curve refer to Sweden's development cooperation partners in 2010-12, while the names in blue to the right of the lower curve show the main countries receiving bilateral development assistance from Sweden's in 2000-02.

The movement of Sweden's aid concentration curves upwards and to the left between 2000-02 and 2010-12 in Figure 6 provides evidence of an improvement in the poverty focus of Swedish bilateral aid over time. This comparison is not seriously affected by the 10 additional countries included in the 2010-12 curve but it is influenced by the substantial revisions in the World Bank's estimates of moderate (i.e, $2/day) poverty after 2002. China's moderate poverty headcount rate, in particular fell from 51.3% in 2002 to 27.8% in 2009, while India's fell from 77.9% to 68.73% over the same period. So these two countries alone removed almost 3000 million people from the global moderate poverty headcount between 2002 and 2010. This makes segments of the aid concentration curves for China and India much longer in 2000-02 than in the more recent period. Revisions to Nigeria's Atlas GNI (from $310 in 2001 to $1,710 in 2011) also moves the flat segment of the aid concentration curve corresponding to Nigeria substantially to the left. Taken together these changes have the effect of moving Sweden's aid concentration curve for 2000-02 to the right.

[13] One other lower middle income country, the West Bank and Gaza, received $185 million of Swedish bilateral aid in these years but cannot be included in Figure 5 because of missing data on monetary poverty.

[14] While a graph with common set of 92 countries can be produced, it is not particularly helpful as it excludes seven of Sweden's key development cooperation partners (Albania, Belarus, Bosnia and Herzegovina, Serbia, Turkey, Ukraine, and the West Bank and Gaza.)

Figure 6: Aid Concentration Curves for Swedish Bilateral Development Assistance in the early 2000s and early 2010s

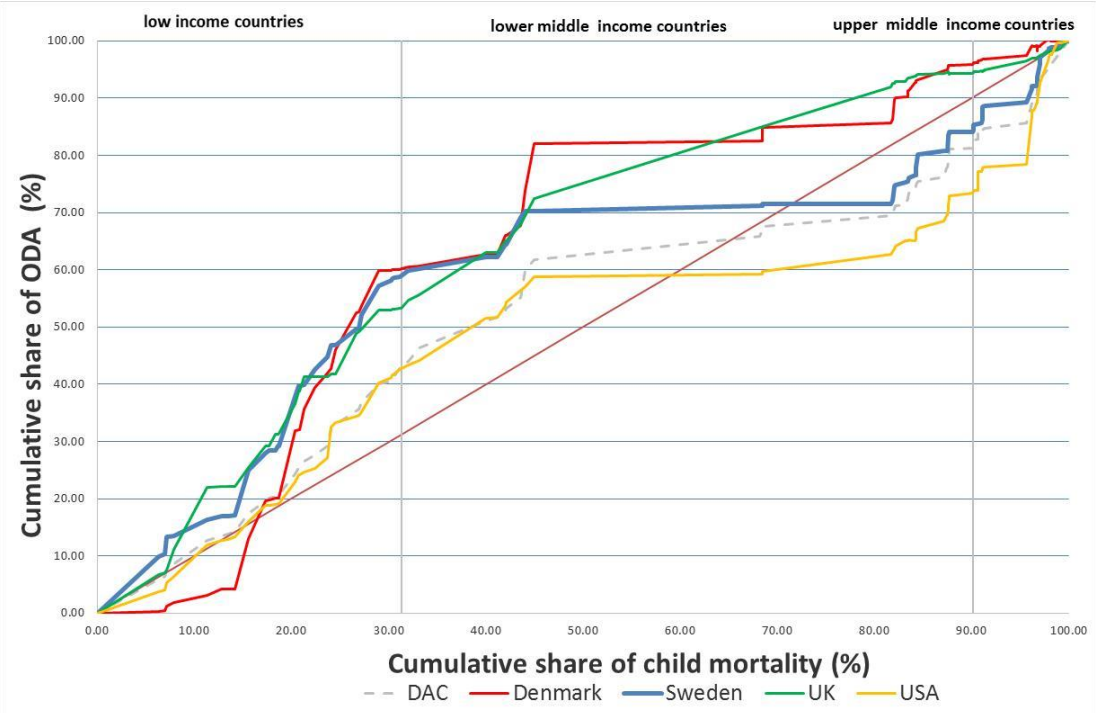


Despite these caveats, several features of Sweden's changing distribution of bilateral aid during the first decade of the 21st Century stand out. First, the substantial expansion of aid to Congo (Democratic Republic) and Liberia can be seen to have improved the poverty focus of Sweden's bilateral development assistance in the lower left hand corner of the figure. The share of bilateral aid Sweden gives to other key low income development cooperation partners in sub-Saharan Africa, such as Mozambique and Tanzania, has been maintained over the decade. Second, there are some countries in the middle of Figure X who received very much less aid from Sweden from 2010-12 than they did in 2000-02. These countries include Angola, Sri Lanka and Vietnam. Two of these countries (Sri Lanka and Vietnam) made the transition from low income to lower middle income status in the late 2000s, while the third (Angola) is a least developed country with a rather high Atlas GNI ($3,970 in 2011). Third, in the top right hand corner of Figure 6, the cumulative share of aid provided to small upper middle income in Central Europe, Latin America and the Middle East has increased between 2000-02 and 2010-12. Some but by no means all of this increase is due to Sweden providing more bilateral aid to Iraq and its neighbours.

Under Five Child Mortality

Poverty can, of course, be measured in non-monetary as well as monetary terms. Figure 7 shows aid concentration curves for under-five child mortality for our four selected bilateral donors. The horizontal axis now shows the cumulative share of child mortality. This is the number of children who die before they are five years old expressed as a percentage of the total child deaths. The developing country sample is the same 106 countries considered in Figures 2 and 3. The Suits indices corresponding to curves are shown in Table 3.

Figure 7: Aid Concentration Curves for Child Mortality, 2010-2012



Several points emerge from this analysis. First, bilateral aid for the four donors considered here is less progressive for child mortality than for moderate and extreme monetary poverty. This is shown by the generally less step slopes of the aid concentration curves for child mortality and Suits indices that are lower (less negative) than for monetary poverty. The main reason why the aid concentration curves for child mortality rise less steeply than for those for monetary poverty is the concentration of deaths among children under-five in low income countries in sub-Saharan Africa.[15]

Nonetheless, for all of the donors in Figure 7 except the USA, more of the child mortality aid concentration curves are above than below the diagonal. Their Suits indices are therefore negative indicating a distribution of bilateral aid that is moderately progressive. The ranking of the donors according to child mortality is also very similar to that for monetary poverty, with Denmark and the UK coming out as the most progressive donors, followed by Sweden, and finally the USA. As shown in Table 3, the UK Suit's index for child mortality is a little higher than for Denmark, suggesting that the UK's development cooperation programme may pay more attention to health and reproductive health issues than Denmark's. The USA's Suits index for child mortality is slightly positive (indicating a slightly bias by US bilateral aid towards more prosperous developing countries). This is surprising given the high share of its bilateral aid which the United States devotes to health and population (OECD, 2013; Baulch and Le, 2013). Unlike the UK's aid programme, the United States programme is, however, not directed to the countries in sub-Saharan Africa and South Asia with the highest child mortality.

Table 3: Suits Indices for Child Mortality and Children Out of School, 2010-2012

Country	Under 5 Child Mortality	Children out of Primary School	Moderate Poverty	Number of Countries
DAC	- 0.043	- 0.162	- 0.181	106
Denmark	- 0.272	- 0.313	- 0.438	89
Sweden	- 0.181	- 0.281	- 0.317	101
UK	- 0.289	- 0.376	- 0.435	105
USA	+ 0.029	- 0.090	- 0.098	106

Source: author's calculations

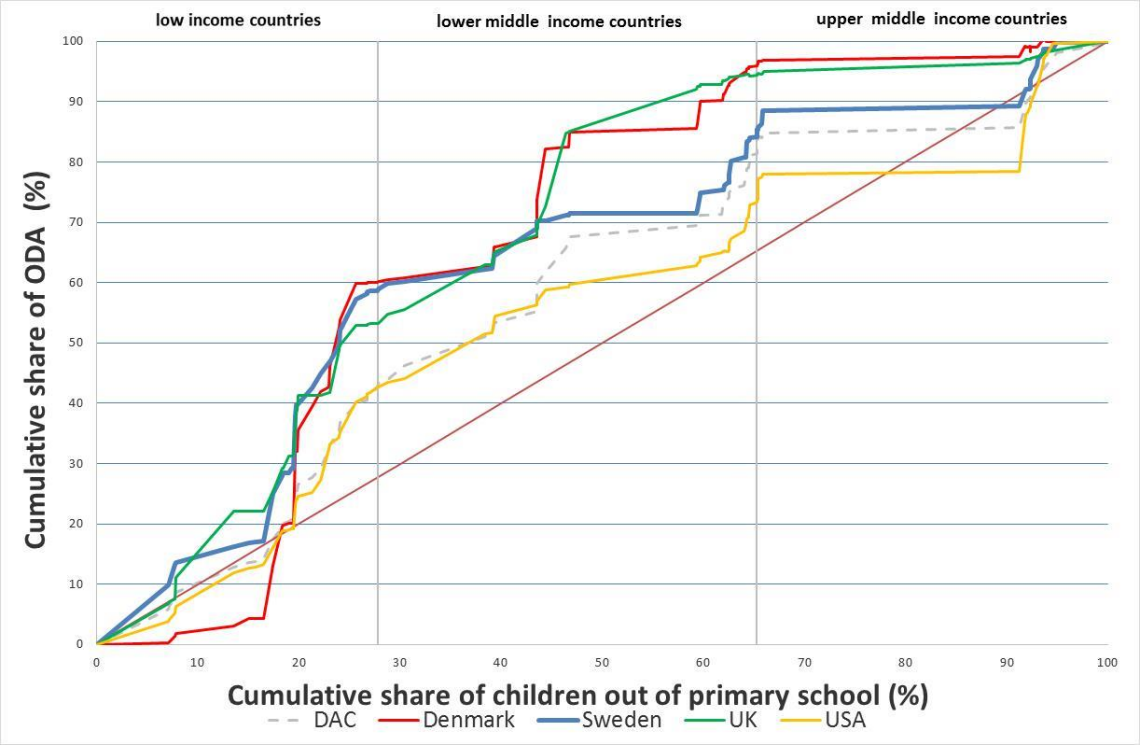
Children out of Primary School

The last measure of deprivation examined in this paper is the number of children of primary school age who are not attending primary school. This is the main indicator used to measure the universal primary school enrolment goal of the MDGs. The aid concentration curves for this measure using the same group of 106 developing countries is shown in Figure 8.

[15] The mortality aid concentration curves also initially rise less steeply because of the shares of child mortality in India and China, which are much lower than their shares of monetary poverty. For example, in 2011 India accounted for 23.2% of the burden of child mortality but 34.8% of moderate poverty in our 106 study countries. The comparative percentages for China are 4.3% for child mortality and 15.2% for moderate poverty.

The aid concentration curves for out of school children generally lie between those for monetary poverty and child mortality. Sweden's aid concentration curve again tracks the UK's quite closely for the low income countries but resembles that of the DAC after per capita incomes of $1450 (equal to that of India) are reached. Two features which make the aid concentration curves for out of school children different from those for monetary poverty and child mortality should be highlighted. First, the segment of the aid concentration curve corresponding to India is quite short for out of school children, while those for Pakistan and Nigeria are much longer. This is a consequence of India accounting for just 2% of the out of school primary school children in our 106 countries, compared to 12.6% in Nigeria and 7.9% in Pakistan. Second, the segment of the aid concentration curve for China is both longer and starts much earlier for children out of school than the curves for other indicators of poverty and deprivation. This is a consequence of the number of children not attending primary school in China having risen substantially in UNESCO most recent estimates. Children in China now account for just over a quarter (25.3%) of the all children of primary school age who are not attending school in our sample of developing countries.[16]

Figure 8: Aid Concentration Curves for Children Out of Primary School, 2010-2012



Nonetheless, the ranking of countries according to the Suits index (Table 3) is broadly consistent with that for monetary poverty and child mortality, with the UK and Denmark showing the more progressive distribution, followed by Sweden and the UK. Note however

[16] As China is an upper middle income country, this also shifts the vertical line showing the threshold between lower and upper middle incomes to the left in Figure 5.

that the UK's Suits index is now more negative (and therefore more progressive) than Denmark's.[17] With a Suits index of -0.281, Sweden again occupies an intermediate position, with bilateral aid that is less progressive than Denmark or the UK's but more progressive than the USA's or the DAC overall.

5. Summary and Conclusions

This paper has analysed the extent to which Sweden's bilateral aid is focused on the poorest and most deprived countries. Using data on aid disbursements to 106 developing countries, and four measures of poverty and deprivations (moderate monetary poverty, extreme monetary poverty, child mortality and children not attending primary school), it has constructed aid concentration curves for Sweden and three other major bilateral donors: Denmark, the UK and the USA. Sweden's bilateral aid is found to be less progressive (that is less poverty and deprivation focused) than the aid programmes of Denmark and the United Kingdom but more progressive than that of the USA. Sweden's bilateral aid programme is also shown to be more progressive than for all DAC donors taken together, especially among low income countries.

What can be concluded about the selectivity of Swedish aid from this analysis? First, Sweden does well in targeting its aid to the poorest countries. Almost 59% of Swedish country-specific bilateral aid was disbursed to low income countries between 2010 and 2012, compared to 43% for all DAC countries. Sixteen of Sweden's priority development cooperation partners are low income countries, and these countries receive almost two-thirds (62.6%) of the bilateral aid disbursed to partner countries. Second, Sweden disburses a modest share (25%) of its country-specific aid to lower middle income countries given that around three fifths of poor and deprived people globally living in these countries. This, in part, reflects the negligible amounts of aid Sweden gives to India but also low disbursements to other lower middle income countries with larger numbers of poor and deprived people such as Nigeria, Indonesia and the Philippines. Finally, Sweden is relatively generous in the aid it gives to upper middle-income countries. Almost 16% of its bilateral aid budget is disbursed to upper middle income countries, compared to just 4% and 6% by Denmark and the UK. Sweden's disbursements to upper middle income countries are again close to the DAC average. The influence of Sweden's three thematic priorities in development cooperation, in particular democracy and human rights, appear to have a strong influence on the selection of its 17 middle income partner countries.

Before closing, it is important to mention several caveats to this analysis. First, there are some important recipients of Swedish aid (in particular Afghanistan and Myanmar) which could not be included in much of the analysis because of missing data. Second, non-country specific aid is not included in the analysis. This is particularly significant for Sweden, which

[17] This is a largely a consequence of the amount of bilateral aid which the UK gives to India and Nigeria, both countries with which the UK has strong historical ties.

devotes almost half of its bilateral aid to non-country specific uses (OECD, 2013).[18] Third, and most importantly, the pattern of aid disbursements tells us very little about the absorptive capacity of recipient countries and development effectiveness. Unlike some other donors, Sweden prioritizes the promotion of democracy and human rights in conflict affected countries and those with oppressive governments. Such governments are generally regarded as having less capacity to absorb aid despite their generally high levels of poverty and deprivation.

[18] Such non-country specific bilateral aid includes support for non-governmental organisations, humanitarian aid, assistance to refugees living in Sweden, and administration cost (DAC, 2013).

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