The Importance of Aid Fragmentation in Sub-Saharan Africa

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In its more than fifty year history, foreign aid has never suffered from a lack of big ideas, grand schemes, or supposedly fail-safe policy proposals. But any realistic assessment of our knowledge of how foreign aid can be made to work will mainly leave us with a set of policies and practices that have proven to be ineffective at best, and counterproductive at worst. One of the most problematic such practice is aid fragmentation: the tendency for everyone to do everything everywhere.

Like many other damaging aid practices, the lack of coordination among donors has been identified early on and criticized ever since (Easterly 2006). It is one of the most entrenched characteristic of donor agencies, and despite being such a well known problem, little has been done to effectively address it. The principal reasons for this lack of responsiveness are likely to be found in the political economy of official donor agencies: conflicting foreign policy objectives, the need to respond to domestic interest groups in order to maximize budgets, and the incentive to evade responsibilities.

Conflicting policy objectives arise in the context of bilateral aid agencies when foreign aid is used as an additional lever in traditional foreign policy. Donor countries' governments wish to have a stake in more recipient countries than would be sensible from a sole aid efficiency point of view. Empirical studies have shown foreign policy objectives to be an important determinant of bilateral aid flows (Alesina, Dollar 2000). Like most governmental organizations, aid agencies have an incentive to maximize the budget under their control. This can be achieved by taking on as many projects as possible, irrespective of their expected outcomes, and picking those projects that are most likely to resonate with the domestic constituencies who hold the purse strings (Knack, Rahman 2008). The result is a high degree of diversification in the projects portfolio, geographical as well as by different sectors. Finally, all government agencies will try to elude accountability when given the opportunity. Independent project evaluations are still the exception in foreign aid, so policy effectiveness has to be evaluated based on observable aggregate outcomes. The higher the number of aid agencies involved in a certain sector and country, the harder it will be to evaluate the performance of each. Agencies, therefore, have an incentive to become active in areas which are already crowded by other actors (Knack, Rahman 2008).

Aid fragmentation causes a variety of problems on the donor's as well as on the recipient's side. The principal drawbacks for the donor are a lack of specialization and inefficient scale. If a donor is active in almost every developing country and sector, staff will need to be spread over a large number of very different projects. The result is an inability to generate the country/sector specific knowledge that might be necessary to carry out the project in a successful manner. At the same time, the donor will have to maintain a presence in many different locations, incurring high fixed costs for a limited number of projects.

The principal problems on the recipient's side are the bureaucratic costs associated with meeting the administrative requirements imposed by a multitude of donors. The probably most notorious example of this is the case of Tanzania, where the government had to prepare more than 2,000 reports and host more than 1,000 donor missions on a yearly basis (World Bank 2003). Several years ago the government saw itself forced to declare a four month “mission holiday” in order to be able to focus on domestic priorities. A second problem stems directly from the high fixed costs incurred by donors. Each agency that sets up shop will need to hire local staff. Given that the salaries offered are substantially higher than those paid locally, the recipient country government will lose its most talented employees. This effect (“poaching”) further deteriorates the quality of the local bureaucracy.

Given its importance, fragmentation needs to be addressed in any assessment of foreign aid. So far, most of the work in this area has focused on donor’s side. In what follows, I will take a closer look at aid recipients, presenting data on Sub-Saharan Africa’s 48 countries. Ideally, one would want to assess the number of different agencies operating in a country, including NGOs. But given that data of acceptable quality is only available for official flows from the 22 OECD-DAC member countries at the national level, I will restrict myself to these bilateral flows. I present results for gross disbursements of bilateral official development assistance (ODA) in 2008, the data is taken from the public access OECD Credit Reporting System (CRS) database. This source also contains data for multilateral agencies, but, unlike for the 22 member countries, these are not subject to mandatory reporting- which in many cases results in less than reliable data.

Following common practice, fragmentation will be measured by a Herfindahl index. This measure was originally developed to capture the degree of competitiveness in a given market. In the original application it is computed as the sum over the squared market shares (in decimals) of each firm. This will always yield a number between zero and one, where a value of one corresponds to the case of a monopoly, and a value close to zero to perfect competition. The index has the intuitive interpretation that it measures the probability of two randomly drawn dollars spent in the market going to the same firm. In the present application it measures the probability that two randomly drawn aid dollars come from the same donor country, a lower value indicating a higher degree of fragmentation.

Table 1 compares the degree of fragmentation in aid to Sub-Saharan Africa to two other aid intensive regions: Far Eastern Asia (11 countries) and South and Central Asia, excluding the Caucasus (14 countries). The first column shows the average Herfindahl index per country in each region. It appears that in all three regions the index for the average recipient country is around 0.3. What stands out on closer inspection is that Sub-Saharan Africa exhibits the lowest (Mozambique at 0.09) as well has the highest (Republic of Congo at 0.913) values for individual countries across all three regions. Most of the extremely high values stem from a number of small countries with one dominant donor (which is mostly France), such as Mauritius or the Comoros. Once the different Herfindahl indices are weighted by each country’s share in total bilateral aid going to the region the picture changes somewhat: Sub-Saharan Africa now exhibits a far greater degree of aid fragmentation than Far Eastern or South and Central Asia
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Table 1: Fragmentation by donor country (Source: OECD)

	Unweighted	Weighted	Minimum	Maximum
Sub-Saharan Africa	0.297	0.238	0.090	0.913
Far Eastern Asia	0.320	0.279	0.136	0.686
South & Central Asia	0.302	0.293	0.108	0.683

It can of course be argued that fragmentation is less of a problem if donors are specialized by sector, as this would create a high degree of sector specific knowledge on part of the donors and recipient countries would only have to deal with one single partner in each policy area. **Table 2** takes this possibility into account. Like table 1 it presents average Herfindahl indices per recipient country for the same three regions. Unlike table 1 it allows for specialization by sector, by first calculating the index for each of 23 different sectors in each recipient country, and then taking the weighted average for each country, where the weights correspond to the sector's share in bilateral ODA received. In the case of no specialization at all the resulting index would be the same as before, and in the case of perfect specialization (i.e. only one donor country in each sector) it would be equal to one. The averages presented in the table are then taken across countries in the same way as in table 1. What stands out is that the resulting indices are consistently higher than in table 1, which is good news since it shows that specialization does take place to some degree. On the other hand, specialization is far from perfect and Sub-Saharan Africa continues to have a far larger degree of fragmentation than the other two regions.

Table 2: Fragmentation taking into account specialization by sector (Source: OECD)

	Unweighted	Weighted	Minimum	Maximum
Sub-Saharan Africa	0.504	0.401	0.215	0.992
Far Eastern Asia	0.530	0.489	0.319	0.861
South & Central Asia	0.523	0.474	0.179	0.854

For completeness Table 3 presents the indices from tables 1 and 2 for all 48 African countries. The first column presents the Herfindahl index based only on donor countries, and the second shows the weighted averages over all sectors that were used in table 2.

Table 3: Herfindahl indices by recipient country (Source: OECD)

Country	donor only	with sector	Country	donor only	with sector
Angola	0.125	0.301	**Liberia**	0.329	0.356
Benin	0.146	0.310	**Madagascar**	0.231	0.453
Botswana	0.494	0.945	**Malawi**	0.189	0.358
Burkina Faso	0.165	0.306	**Mali**	0.116	0.215
Burundi	0.108	0.328	**Mauritania**	0.217	0.442
Cameroon	0.486	0.677	**Mauritius**	0.882	0.961
Cape Verde	0.219	0.467	**Mozambique**	0.090	0.254
Central African Rep.	0.151	0.401	**Namibia**	0.261	0.561
Chad	0.143	0.292	**Niger**	0.144	0.303
Comoros	0.868	0.992	**Nigeria**	0.298	0.625
Congo, Dem. Rep.	0.130	0.236	**Rwanda**	0.158	0.475
Congo, Rep.	0.913	0.637	**Sao Tome & Principe**	0.238	0.833
Cote d'Ivoire	0.249	0.666	**Senegal**	0.191	0.403
Djibouti	0.643	0.810	**Seychelles**	0.491	0.750
Equatorial Guinea	0.563	0.803	**Sierra Leone**	0.388	0.615
Eritrea	0.178	0.513	**Somalia**	0.226	0.295
Ethiopia	0.241	0.447	**South Africa**	0.228	0.548
Gabon	0.778	0.826	**Sudan**	0.254	0.368
Gambia	0.221	0.629	**Swaziland**	0.242	0.680
Ghana	0.124	0.278	**Tanzania**	0.112	0.329
Guinea	0.276	0.452	**Togo**	0.564	0.594
Guinea-Bissau	0.244	0.461	**Uganda**	0.162	0.362
Kenya	0.200	0.434	**Zambia**	0.159	0.390
Lesotho	0.195	0.427	**Zimbabwe**	0.227	0.367

Finally, it is of interest to briefly discuss the likely reasons for the higher degree of fragmentation of aid going to Sub-Saharan Africa. The most likely culprit is, naturally, low levels of income. For the year 2008 data presented , the coefficient of correlation between the Herfindahl index that takes into account different sectors (column 2 in table 3) and per capita GNI in purchasing power parity (for the 46 African countries for which the latter is available) is 0.566, i.e. higher income is strongly associated with lower levels of fragmentation. Note that this correlation is unaffected by sector specific specialization of donors and, therefore, not the result of poorer countries receiving aid in a larger number of sectors. This is a troublesome result, as it implies that the countries suffering from the highest degree of fragmentation are the ones least likely to be able to cope with it, and should be reason enough to have donor coordination high on the list of priorities.