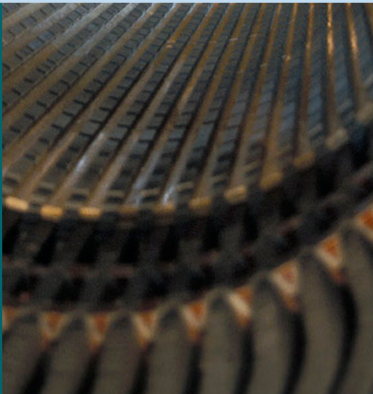


HOW MUCH OF OFFICIAL DEVELOPMENT ASSISTANCE IS EARMARKED?



Abebe Adugna

How Much of Official Development Assistance is Earmarked?

Abebe Adugna

July 2009

Abstract:

While the issue of earmarking has been widely studied in the context of public finance, there is little analysis of the extent and potential implications of earmarking of foreign aid. This paper attempts to fill this gap by first defining “earmarked foreign aid” as Official Development Assistance (ODA) whose uses are pre-determined by the funding source ("ODA earmarked at source"), and then by examining its evolution since the mid 1990s. Using ODA data reported to the OECD-DAC, the paper finds that the share of earmarked ODA in total ODA increased from 29 percent in 1995-2000 to about 38 percent during 2001-2006. For IDA-eligible countries as a group, earmarking increased from about 17 percent to about 25 percent of ODA during the same period. Finally, the paper discusses how earmarking of aid might impact fiscal policy and resource allocation in recipient countries and suggests that further country level studies would be needed to corroborate some identified hypotheses.

.

The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s). They do not necessarily represent the views of the World Bank Group, its Executive Directors, or the countries that they represent and should not be attributed to them.

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune-Deficiency Syndrome
CGIAR	Consultative Group on International Agricultural Research
CPA	Country Programmable AID
CRS	Country Reporting System
DAC	Development Assistance Committee
FTC	Free-standing Technical Cooperation
FTI	Fast Track Initiative
GAVI	Global Alliance for Vaccines and Immunizations
GAVI	Global Alliance for Vaccines and Immunizations
GBS	General Budget Support
GEF	Global Environment Facility
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GPF	Global Program Fund
HIV	Human Immunodeficiency Virus
IDA	International Development Association
MFIMP	Multilateral Fund to Implement the Montreal Protocol
NGO	Non-Governmental Organization
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PEPFAR	US President's Emergency Program for AIDS Relief
PFM	Public Financial Management
STD	Sexually Transmitted Diseases
SWAP	Sector-Wide Approach
UN	United Nations

ACKNOWLEDGEMENTS

This paper has been prepared by Abebe Adugna as part of the Concessional Finance and Global Partnerships Vice Presidency's (CFP) research program on aid architecture. As the unit responsible for conducting the replenishment negotiations for the International Development Association (IDA) and for monitoring and coordinating the provision of ODA through concessional finance by the World Bank Group, CFP's research agenda aims at continuing to generate knowledge and understanding about the nature, size, and complexity of ODA flows.

This paper has benefited from several comments at various stages. Philippe Le Houérou (CFPVP), Akihiko Nishio, and Gaiv Tata (CFPIR) provided guidance and support throughout the preparation of the report. Gaiv Tata and the CFPIR staff in particular provided several rounds of comments that greatly improved the quality and presentation of the report. In addition, valuable comments were received from three peer reviewers, Jorge Araujo (MNSD), F. Halsey Rogers (DECRG), and Marinus Verhoeven (PRMPS). Other helpful comments were also received from Soonhwa Yi, Robert Utz, Stefano Migliorisi, Rocio Castro, Jane Kirby-Zaki, Elizabeth White, Edward Mountfield, Vera Wilhelm, Ernesto May, and Gregor Binkert. The support of Kathia Couprie Sloan, Roziah Baba and Angela Furtado in document preparation and dissemination is gratefully acknowledged.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
1. INTRODUCTION.....	1
2. EARMARKING: DEFINITIONS, RATIONALE.....	2
2.1. CONCEPTS AND DEFINITIONS	2
2.2. THE CASE FOR AND AGAINST EARMARKING	3
3. HOW MUCH OF THE OFFICIAL DEVELOPMENT ASSISTANCE IS EARMARKED?	6
3.1. DATA SOURCES AND ASSUMPTIONS.....	6
3.2. THE GLOBAL VIEW	11
3.3. WHICH IDA COUNTRIES ARE MOST EARMARKED?	14
3.4. WHICH IDA COUNTRIES MAY BE SUITABLE FOR FURTHER IMPACT STUDY?.....	18
4. SUMMARY AND CONCLUSIONS	19
REFERENCES.....	22
ANNEXES	26
ANNEX 1: THE PROS AND CONS OF EARMARKING: LITERATURE REVIEW	26
ANNEX 2: EARMARKED-AT-SOURCE AND NON-EARMARKED ODA IN IDA-ELIGIBLE COUNTRIES, 2001-06 (AVERAGE)	29
ANNEX 3: EARMARKING THROUGH GLOBAL PROGRAM FUNDS IN IDA-ELIGIBLE COUNTRIES, 2001-07 (COMMITMENTS IN MILLIONS OF US\$).....	32
ANNEX 4: POSSIBLE APPROACHES TO ASSESSING COUNTRY LEVEL IMPACT OF EARMARKING.....	36

Tables

Table 1: Share of Country Programmable ODA, 1995-2006	10
Table 2: Global Earmarked-at-source and Non-earmarked ODA (Average commitments per year, millions of US\$)	11
Table 3: FTC by Sector (Commitment, millions of US\$)	12
Table 4: Global Program Funds (Commitments in millions of US\$).....	13
Table 5: IDA Countries: Earmarked-at-source and Non-earmarked ODA (Commit, millions of US\$)	15
Table 6: Possible IDA Countries for further Case Studies	19

Figures

Figure 1: Definitions of Country Programmable and Earmarked-at-source ODA	8
Figure 2: Share of Bilateral and Multilateral ODA by Type of Aid.....	10
Figure 3: Highly Earmarked IDA Countries, 2001-06 (Average)	15
Figure 4: Typology of Highly Earmarked-at-source IDA Countries.....	16
Figure 5: The 20 Largest Recipients of Global Program Funds, 2001-07 (Cumulative commitments, millions of US\$).....	17

EXECUTIVE SUMMARY

1. **The global aid architecture has become increasingly complex over the last four decades.** The global development aid has been marked by proliferation of bilateral and multilateral aid agencies, with the average number of donors per country rising from about 12 in the 1960s to about 33 during 2001-2005. This *source* proliferation has in turn been accompanied by significant *use* proliferation or fragmentation—the division of aid among a wide variety of small packet end-uses—which has contributed to increased transaction costs at the country level.¹
2. **Further, recent years have witnessed the increasing importance of global program funds and specific-purpose trust funds in development financing.** In particular, the recent creation of large “vertical funds” in the health and education sectors such as the Global Fund for Aids, Tuberculosis and Malaria (GFATM), Global Alliance for Vaccines and Immunization (GAVI), and the Fast Track Initiative (FTI), has led to the view that earmarking of official development assistance (ODA) may have been increasing. This paper seeks to establish more formally how much of the ODA is globally earmarked-at-source, and whether and to what extent earmarked ODA has indeed been increasing globally and in IDA-eligible countries.
3. **Earmarking is defined as the practice of designating or dedicating specific revenues to the financing of specific public services.** As such, through earmarking, governments bypass the normal budget procedure of revenue pooling to directly tie a revenue source to an expenditure program. In foreign aid, earmarking can be understood as the practice of dedicating aid to spending on specific public services or activities in recipient countries with a view to influencing a government’s spending choices in favor of those programs and services deemed important by donors.
4. **In particular, two types of aid earmarking may be distinguished:** (i) *Earmarked-at-source* aid, which includes aid earmarked for specific themes or purposes by congressional authorities or by aid agencies early on in their allocation process; (ii) *Earmarked-at-use* aid, which in addition to earmarked-at-source may also include other types of aid designated for specific purposes at the point of commitment or use (including investment projects from both bilateral and multilateral sources, for example). This paper focuses on the estimation of earmarked-at-source aid, as it is both conservative and perhaps a better measure of the degree of budget inflexibility imposed on recipients through aid earmarking.

¹ See, for example, Acharya, A., A. De Lima and M. Moore (2006). “Proliferation and Fragmentation: Transactions Costs and the Value of Aid,” *Journal of Development Studies*, Vol. 42, No. 1 and World Bank, 2008, “Aid Architecture: An Overview of the Main Trends in Official Development Assistance,” Concessional Finance and Global Partnerships Vice Presidency, World Bank, Washington, D.C.

5. **The key conclusions of this paper are that:**

(i) Aid earmarking has been increasing globally since 2001

6. **Using the Organization of Economic Cooperation and Development (OECD)/Development Assistance Committee (DAC) Creditor Reporting System (CRS) data, which offers ODA by sector and type of aid, we estimate the extent of earmarked-at-source ODA globally and in IDA-eligible countries.** We define earmarked-at-source ODA as consisting of free-standing technical cooperation (FTC), emergency assistance, and global program funds. On the other hand, non-earmarked ODA includes general budget support, sector program support, and debt relief and actions relating to debt. We consider investment projects as neither earmarked-at-source nor non-earmarked since it is hard to know from the CRS data which ones are earmarked-at-source and which ones are not. Further country level information may be needed to make such a determination. The key findings are as follows:

- **Of total ODA, only slightly over half (55 percent) of ODA was country programmable aid (CPA) over the last decade.** CPA is defined by the DAC as total ODA minus humanitarian aid, debt relief, donor administrative costs, imputed student costs, research, costs of refugees in donor countries, food aid, and core grants to NGOs. The latter cannot be programmed by recipient countries. Some IDA countries (e.g., Congo, DRC, Liberia) received as little as 20-35 percent of their ODA as country programmable.
- **Earmarked-at-source ODA averaged about 38 percent of total ODA during 2001-2006, up from about 29 percent during 1995-2000.** Earmarking as a share of CPA—defined as the ratio of earmarked-at-source country programmable aid to the total country programmable aid—was even higher at 44 percent; significantly up from 30 percent during the period 1995-2000. Similarly, for IDA-eligible countries as a group, earmarking stood at about 25 percent of ODA and 39 percent of country programmable aid during 2001-06.
- **Non-earmarked ODA, too, increased from 14 percent of ODA in 1995-2000 to 25 percent in 2001-06,** mainly because of increases in debt relief and sector program support, which together increased from around 7 percent of ODA in 1995-2000 to about 19 percent in 2001-06. General budget support held steady at around 5 percent of ODA.
- **Unclassified ODA—which includes investment projects and other assistance not specified by type—declined by nearly 20 percent of ODA over the period.**

(ii) Much of this increase is due to stand-alone technical cooperation and global funds

7. **Much of the increase in earmarking reflects the growth in stand-alone technical cooperation.** Stand-alone technical cooperation grew from 13 percent to 16

percent of ODA during the decade. About 97 percent of the stand-alone technical cooperation is financed through bilateral ODA.

- **By sector, about two-thirds of the stand-alone technical cooperation during 2001-06 went to the social sectors** (education, health, population programs, and government and civil society) followed by multi-sectoral (12 percent), production sectors (9 percent), and economic infrastructure (7 percent). Within the social sectors, government and civil society (including conflict, peace and security), and population programs (STD control including HIV/AIDS) saw the largest growth from their levels during 1995-2001.
- **By purpose, a significant proportion of the stand-alone technical cooperation went to higher education, STD control including HIV/AIDS, narcotics control, multi-sector aid, and government administration.**

8. **Global program funds grew from almost nil during 1995-2000 to about 4 percent of ODA during 2001-06** (Annex 3). The main global funds committed a total of about US\$11.5 billion in IDA countries during the period 2001-06. Of these funds, GFATM was by far the largest, accounting for about 60 percent of total commitments, followed by the U.S. President's Emergency Program for AIDS Relief (PEPFAR), the US bilateral fund (20 percent), and GAVI (12 percent), the Global Environment Facility (GEF-5 percent), and FTI (3 percent).

- **By country, among the largest recipients of global program funds were Ethiopia, Tanzania, Zambia, Uganda, and Kenya.**
- **By sector, about 92 percent of the commitments were in health sector** while the GEF and FTI, which targeted the environment and education sectors respectively, remained small at 5 percent and 3 percent of total commitments.
- A recent study estimates that in 2006, the share of HIV/AIDS funding in total health expenditure accounted for about 33 percent in Mozambique, 42 percent in Uganda, 43 percent in Malawi, and 45 percent in Rwanda.² Sectoral and sub-sectoral funding rigidities and distortions introduced by these funds could be significant in such cases.

9. **Emergency assistance, another key component of earmarked-at-source ODA, held steady at around 9 percent of total ODA.** Emergency aid—which is broadly defined to include emergency reconstruction and food aid, administrative costs on bilateral aid, and support to non-governmental organizations (NGOs) and refugees in donor countries—held steady at around 9 percent of ODA, and modestly grew by about the same rate as the growth in ODA during the decade.

² See Castro, Rocio and Marcelo Selowsky, 2008, "Global Programs at the Country Level: Uganda Case Study", and World Bank (GPP), 2008, "Global Program Funds at the Country Level: What Have We Learned?" Synthesis Report, July.

(iii) But there is considerable variation across countries

10. **The extent of earmarking varies considerably—between 30 percent and 80 percent of country ODA—across IDA countries** (Annex 2). Coming at the top of most earmarked-at-source IDA-eligible countries are such countries as Liberia, Haiti, and Togo where nearly over 60-80 percent of the ODA is earmarked-at-source. While weak governance³ and/or capacity constraints may be among plausible factors explaining the high degree of earmarking, a further analysis will be needed to make definitive conclusions.

11. **The composition of earmarked-at-source aid, too, varies significantly across countries** (Annex 2). While some countries (such as Tanzania, Ghana, and Pakistan) seem to receive a significant share of their ODA in non-earmarked aid, others have a significant share of their ODA largely earmarked in stand-alone technical assistance (e.g., Timor-Leste, Papua New Guinea, Georgia, Moldova, and Kyrgyz Republic), emergency aid (e.g., Sudan, Liberia, Somalia, Eritrea), or global program funds (Gambia, Togo, Rwanda, Equatorial Guinea, Kenya).

(iv) Further impact study will be useful

12. **Despite the large degree and increasing trend of aid earmarking, there is very little analysis of how earmarked aid affects the recipient governments.** Further country level studies are no doubt necessary both to verify and confirm at the country level what the OECD/DAC data shows, and to understand this impact better. A key question then is which countries may be most suitable.

13. **Further country-level studies should focus, as much as possible, on those countries that are aid-dependent, where earmarking can potentially introduce a binding budget constraint on the recipient's spending choices.** In general, earmarking should have no effect on the composition of state budgets when the earmarked dollars represent a small fraction of total funding. Using earmarked-at-source ODA as a percent of government revenue as a filter, the following IDA-eligible countries may be good candidates for further impact study: Sierra Leone, DRC, Rwanda, Burundi, Niger, Ethiopia, Malawi, Uganda, Zambia, Gambia, Mauritania, Mozambique, Mali, Madagascar, and Tanzania (Africa); Afghanistan (South Asia); Cambodia, Lao PDR, and Mongolia (East Asia and the Pacific); Kyrgyz Rep. and Tajikistan (Europe and Central Asia); and Guyana and Nicaragua (Latin America and the Caribbean).

³ These countries typically have poor governance environments, with average governance ratings of 2.5 on CPIA governance cluster (compared to 3.4 for non-fragile states). They also rank low on governance using external governance indicators, such as the perception of corruption by Transparency International (see http://www.icgg.org/corruption.cpi_2007.html).

1. INTRODUCTION

1. **As noted in a recent paper⁴, the global aid architecture has become increasingly complex over the last four decades.** With the average number of donors per country rising from about 12 in the 1960s to about 33 during 2001-2005, the global development aid has been marked by proliferation of bilateral and multilateral aid agencies. This *source* proliferation has in turn been accompanied by significant *use* proliferation or fragmentation—the division of aid among a wide variety of small packet end-uses—which has contributed to increased transaction costs at the country level.⁵

2. **Furthermore, recent years have witnessed the increasing importance of global program funds (GPFs) and specific-purpose trust funds in development financing.** While global programs are not new—and the first major global program, the Consultative Group on International Agricultural Research (CGIAR), dates back to 1972—the recent creation of large “global funds” in the health, and education sectors has raised their visibility. The GEF and the Multilateral Fund to Implement the Montreal Protocol (MFIMP) were created in the early 1990s, followed by the GFATM, and the Global Alliance for Vaccines and Immunization GAVI in the late 1990s. In addition, “verticalization” or earmarking of ODA has also increased within bilateral assistance programs (e.g., the U.S. PEPFAR).

3. **With the rise in the importance of such global funds—and the attendant increase in earmarked ODA—there are concerns about the impact on country ownership, fiscal policy, and country level effectiveness of aid in general.** This paper focuses on the issue of foreign aid earmarking, and seeks to:

- clarify the definition of earmarked aid;
- measure how much of the ODA is earmarked-at-source globally and in IDA-eligible countries;
- discuss trends in earmarking, including whether earmarked-at-source ODA has indeed been increasing.

4. While there has been much analysis of earmarking in the context of public finance in general (see **Annex 1**), there has been comparatively little work done to define and quantify earmarking of foreign aid, and, hence this paper contributes filling an important knowledge gap. The paper also lays out the key considerations that should guide country selection for further study of the impact of earmarking on recipient countries, and applies these considerations to identify IDA countries most suitable for case studies.

⁴ World Bank, 2008, “Aid Architecture: An Overview of the Main Trends in Official Development Assistance,” Concessional Finance and Global Partnerships Vice Presidency, World Bank, Washington, DC.

⁵ See, for example, Acharya, A., A. De Lima and M. Moore (2006). “Proliferation and Fragmentation: Transactions Costs and the Value of Aid.” *Journal of Development Studies*, Vol. 42, No. 1 and Knack and Rahman, 2004; World Bank, 2008, *op cit.*, p.19

5. **The paper is organized as follows.** Section 2 discusses the concepts and definitions of earmarking as well as the arguments for and against earmarking. Section 3 estimates, based on data from the OECD CRS, the magnitude of earmarked-at-source ODA globally, and in IDA-eligible countries. It also identifies a set of IDA countries that may be most suitable to undertake further country-level impact assessment of earmarking. Section 4 offers summary and conclusions.

2. EARMARKING: DEFINITIONS, RATIONALE

2.1. CONCEPTS AND DEFINITIONS

6. In public finance, earmarking is defined as the practice of designating or dedicating specific revenues to the financing of specific public services.⁶ As such, through earmarking, governments bypass the normal procedure where tax revenue is pooled into a general fund before it is allocated across separate spending programs, thereby tying a revenue source directly to an expenditure program. Earmarked funds are alternatively referred to as “special funds,” “segregated accounts,” “segregated budgets,” or “dedicated revenues.”⁷

7. **In foreign aid, earmarking can be understood as the practice of dedicating aid to spending on specific public services or activities by the recipient country.** Through earmarking, donors attempt to “segregate” the various monies into different pots: aid money for HIV/AIDS is supposed to be kept separate from that for environment, and environment funds from that for girl’s education, for example. The ultimate purpose in doing so is to influence a government’s spending choices in favor of those programs and services deemed important by donors.

8. **Foreign aid earmarking takes place at various stages.** In reality, there is a sliding scale of the extent of earmarking with some forms of aid being most rigid (e.g., directly delivered technical assistance) while others (e.g., budget support) being most flexible. Nevertheless, two types of earmarking can be distinguished:

- *Earmarked-at-source* aid, which includes foreign aid earmarked by congressional authorities or by aid agencies early on in their allocation process for specific themes or purposes. Such appropriations often specify, and require, that aid money be devoted to the financing of specific themes, sectors, or services in recipient countries. Earmarking-at-source is perhaps the strongest form of aid earmarking. Three key examples of earmarked-at source aid may be distinguished: (i) free-standing technical cooperation, where the funding is largely donor-driven and tied; (ii) global program funds⁸ and other multilateral-bilateral

⁶ <http://en.wikipedia.org/wiki/Earmarking>: The term “earmark” dates back to the 16th century, originally referring to cuts or marks in the ears of cattle and sheep made as a mark of ownership.

⁷ James M. Buchanan, “The Economics of Earmarked Taxes,” *The Journal of Political Economy*, Vol. 71, No.5 (Oct., 1963), pp. 457-469)

⁸ These are defined as “international initiatives outside the UN system which deliver significant funding at country level in support of focused thematic objectives.”

trust funds channeled through multilateral organizations, including trust funds and global programs set up to fund specific issues or sectors (e.g., GFATM, GAVI, GEF, EFA-FTI); and (iii) emergency assistance, including food aid where the specific purposes of the funds are identified at source by donors, and sometimes even delivered in kind.

- *Earmarked-at-use* aid, which in addition to earmarked-at-source includes other types of aid designated for specific purposes at the point of commitment or use (including investment projects from both bilateral and multilateral sources, for example).

9. For the purposes of this paper, we focus on the estimation of earmarked-at-source aid, not only because it is a conservative measure but also because it may be a better indicator of the degree of budget inflexibility imposed on recipients through aid earmarking.

2.2. THE CASE FOR AND AGAINST EARMARKING

10. **There are several arguments for and against earmarking.** At the broadest level, the main case for earmarking is that it guarantees minimum levels of funding, protects high-priority programs from cuts (and abuse), and in some cases facilitates agreement about raising revenues.⁹

- Aid earmarks may remove funding decisions from the rough and tumble of the domestic budget decision-making process in recipient countries, in particular fluctuations in domestic revenue, and insulate or remove a spending program from competing with other budget priorities. This could in turn help ensure a stable funding and delivery of essential public services, and achieving tangible results more quickly than would otherwise be possible.
- Aid earmarking may also prevent overt diversion of money to more politically popular alternatives, or even corruption and wastage, inoculating the benefited program against the other priorities. Because of the restrictions put around earmarked funds, earmarking may also help allay governance and fiduciary concerns in recipient countries and protect aid money from inefficiency and corruption.
- Finally, aid earmarking may help finance specific activities visible to domestic constituencies in donor countries and thereby ensure public support for development aid. The argument is that if foreign aid goes directly into the government budget, and some evidence of corruption or wastage of money by the government is subsequently uncovered, this may sully the aid effort in the eyes of the public in donor countries and therefore reduce the public support for aid. Earmarking is seen as a way to not only guard against such incidents but also fund

⁹ See, for example, Buchanan, 1963; Goetz, 1968; Browning, 1975, among others.

activities that are visible to the public in donor countries. A combination of restricted aid budgets and a growing public skepticism about aid has pushed donors to demonstrate more accountability and effectiveness, and donors have responded by earmarking of aid to some sectors and essential services (e.g., HIV/AIDS prevention and treatment).

11. An example of earmarking that meets most of these cases is GFATM. By earmarking development aid through “vertical” disease-specific programs such as GFATM, the development community has shown its commitment to helping reduce the high death toll from HIV/AIDS, malaria and tuberculosis –diseases which impose a heavy burden on the poor¹⁰—by allowing for quick disbursements and stronger focus on results, both in terms of outputs and outcomes. In recent years, GFATM has boosted access to antiretroviral therapy for HIV/AIDS patients, raised vaccination rates and increased the use of directly observed therapy, or DOTS, for tuberculosis in many poor countries— all of which have helped make significant progress in preventing and fighting these diseases.

12. **The overarching argument against aid earmarking is that it explicitly takes power away from the recipient countries in terms of controlling their own development programs.** Indeed, the practice of directing aid through earmarking appears to be out of line with the new thinking on development cooperation, set out in the Paris Declaration Principles of 2005 on aid effectiveness, which recognizes that aid is more effective when partner countries exercise strong and effective leadership over their development policies, strategies, and programs. Earmarking, by imposing greater operational control over country programming, project selection and design, recruitment of staff, and the style and direction of implementation, may thus reduce or even eliminate recipient countries’ commitment to ongoing projects, thereby undermining country ownership and long term sustainability of development programs.

13. **From a narrow fiscal standpoint, the main argument against earmarking is that it introduces inflexibility into budgets and can lead to a misallocation of resources with too much being given to earmarked programs and too little to others.**¹¹ Three drawbacks are often highlighted:

- Earmarking can lead to *allocative inefficiency*. Because of lack of “separability” between financing sources (donors) and allocation decisions (recipients) earmarking generates rigidities that may lead to overspending in sectors that donors have earmarked money to at the expense of other sectors that the

¹⁰ The World Health Organization estimates that over 5.6 million people are killed by HIV/AIDS, tuberculosis and malaria every year, with virtually all of these deaths occurring in the developing world. See also Kaul I, Faust M, 2001, “Global public goods and health: taking the agenda forward,” *Bull World Health Organ* 2001, 79:869-874 for an assessment of the strengths and weaknesses of vertical programs in health.

¹¹ See Annex 1 for more.

government may deem essential for poverty reduction.¹² The latter may in turn undermine government ownership.

- Earmarked funds often tend to be provided off-budget, and as a result, earmarking may undermine aggregate fiscal discipline and strain the capacity of weak public financial management (PFM) in low income countries.¹³ But even when they are on budget, monitoring their use often requires additional effort.
- Earmarking may lead to increased transaction or administrative costs (or operational inefficiency)—such as additional staff time—as the funds often require special monitoring and reporting arrangements of their own.

14. **It is important to note that, in the end, one cannot state a priori that all earmarked aid is “bad” and that all unearmarked aid is “good.”** Whether aid earmarking benefits or hurts the recipient country is an empirical question, which needs to be examined at the country level. The pros and cons of earmarking notwithstanding, for aid earmarking to have some effect on the composition of government expenditure, the earmarked aid should not be fully fungible. If it is fully fungible – i.e. a government can offset donor spending by reducing its own expenditure on the same purpose—earmarking may not succeed in increasing the amount of money that goes into the specific purpose for which the money is earmarked. On the other hand, it is also important to note that the fungibility of aid directly undermines the three arguments for earmarking discussed above.

15. **Several empirical studies have found that aid is at least partially fungible,¹⁴ suggesting that earmarking may succeed in altering the composition of public expenditure in some recipient countries.** The question in that case would then be how to evaluate whether such a shift in composition of public expenditure is good or bad. While the implicit view, at least in the motivation of donors, seems to be that fungible aid is less effective than aid used exactly as specified, there is little firm empirical evidence supporting this view.¹⁵ Furthermore, in an environment where aid is increasingly being provided in support of nationally owned development strategies, donors may neither intend nor succeed in imposing their own preferences on the aid recipient country.

16. **In light of the arguments in favor of and against earmarking, it is important to examine whether earmarking has indeed been increasing over time.** In addition, further work is needed at the country level to better understand *how* different types of aid,

¹² Ibid.

¹³ See, for example, IMF, “Fiscal Policy Response to Scaled-Up Aid: Macro-Fiscal and Expenditure Policy Challenges” June 2007.

¹⁴ See Annex 1.

¹⁵ See Petersson (2007), and Mavrotas and Ouattara (2006) for early studies on this. Petersson (2007) examines whether earmarked non-fungible sectoral aid works better than fungible aid in terms of promoting economic growth and poverty reduction. Mavrotas and Ouattara (2006) examine the fiscal impact of different types of aid.

including earmarked and non-earmarked aid, may affect recipient governments' fiscal policy and management. The remainder of the paper will focus on these issues.

3. HOW MUCH OF THE OFFICIAL DEVELOPMENT ASSISTANCE IS EARMARKED?

3.1. DATA SOURCES AND ASSUMPTIONS

17. The Aid Activity Database of the OECD/DAC contains data on ODA that can be used to analyze where aid goes, what purposes it serves and what policies it supports¹⁶ (**Box 1**). We will use this dataset to shed light both on the magnitude as well as trends in earmarking of ODA over the last decade (1995-2006).

Box 1. Identifying Earmarked-at-source Aid from the OECD/DAC Creditor Reporting System (CRS)

The OECD CRS data offers a breakdown of ODA by sector and type of aid.

ODA by sector: Data are provided on 26 main sector categories, each of which is defined through a number of “purpose codes.” The two broad categories, however, are “sector allocable ODA” (which includes social infrastructure and services, economic infrastructure, production sectors, and multi-sector) and “non-sector allocable ODA” (which includes aid not targeted to a specific sector such as general budget support, actions relating to debt, emergency assistance, administrative costs of donors, aid to refugees in donor countries, and support to NGOs). For activities cutting across multiple sectors, either a multi-sector code or the code corresponding to the largest component of the activity is used.

ODA by type of aid: The database identifies the following types of aid: (i) Investment project, (ii) Sector programme; (iii) Technical cooperation, (iv) Investment project & sector program, (v) Investment project & technical cooperation, (vi) Sector program & technical cooperation, (vii) Investment project & sector programme & technical cooperation, and (viii) Other. We consider investment projects delivered in combination with other types of aid such as sector program or technical cooperation as part of “investment projects,” and sector program delivered in combination with technical cooperation as part of “sector program.” Using a sectoral filter, we further disaggregate the “Other” category into general budget support and all others.

These two classifications can be used jointly to identify earmarked-at-source and non-earmarked aid: (i) **Earmarked-at-source ODA** includes free-standing technical cooperation (FTC), emergency assistance, including food aid (EA), and global program funds (GPFs). (ii) **Non-earmarked ODA** includes general budget support (GBS), sector program support (SP), debt relief and actions relating to debt (DR). Investment projects (P), however, constitute a gray area – it is hard to know a priori which ones are earmarked-at-source and which ones are not from CRS data—so we consider them neither earmarked-at-source nor non-earmarked.

¹⁶ The data are collected from aid agencies and government departments (central, state and local) by a network of statistical correspondents, covering the 22 member countries of the OECD's Development Assistance Committee (DAC), the European Commission and other international organisations. Non-DAC donors report on a voluntary basis. The DAC Secretariat is responsible for data processing, quality control and dissemination. For more, see Creditor Reporting System (CRS) user guidelines for further information at www.oecd.org/dac/stats/crs.

18. **Using these definitions, about 80 percent of ODA can be classified into earmarked-at-source and un-earmarked on the basis of OECD/DAC data,** while the rest cannot. The “unclassified” ODA typically includes multi-sectoral, “unallocated,” and multi-purpose aid which cannot be classified into earmarked or non-earmarked. While these assumptions may seem strong in that they equate earmarked aid with aid modalities, they are limitations imposed by the type of available data. It should be possible, however, to combine the OECD/DAC data with country level data to undertake a more refined estimate and analysis of the impact of earmarked-at-source aid at the country level.

19. **Using the OECD CRS data (Box 1), we define “non-earmarked” aid as consisting of general budget support, debt relief and actions related to debt, and sector program support.**¹⁷ General budget support typically includes non-earmarked support to the government budget; support for the implementation of macroeconomic reforms (structural adjustment programs, poverty reduction strategies), and non-sector allocable general program assistance. Similarly, sector program includes sector program assistance, including budget support in the form of sector-wide approaches (SWAs), and sector program in combination with other types of assistance such as technical cooperation. Debt relief given on liabilities that are being serviced is equivalent to a flow of new resources for development and as such akin to budget support.¹⁸

20. **On the other hand, we define earmarked-at-source aid as consisting of free standing technical cooperation (FTC), emergency assistance, including food aid, and GPFs (Figure 1).** Technical cooperation consists of the transfer, adaptation or facilitation of ideas, knowledge, technologies or skills through the provision of personnel, education and training, consultancies and advisory services, research and equipment support. The OECD/DAC data contains two basic types of technical cooperation: (i) FTC, which is the provision of resources aimed at the transfer of technical and managerial skills or of technology for the purpose of building up general national capacity without reference to the implementation of any specific investment projects; and (ii) investment-or program-related technical cooperation, which denotes the provision of technical services required for the implementation of specific investment projects or sector programs. For the purposes of estimating earmarking, we exclude TC delivered in combination with other types of aid such as budget support, program aid, and investment projects, and focuses only on the free-standing technical cooperation.

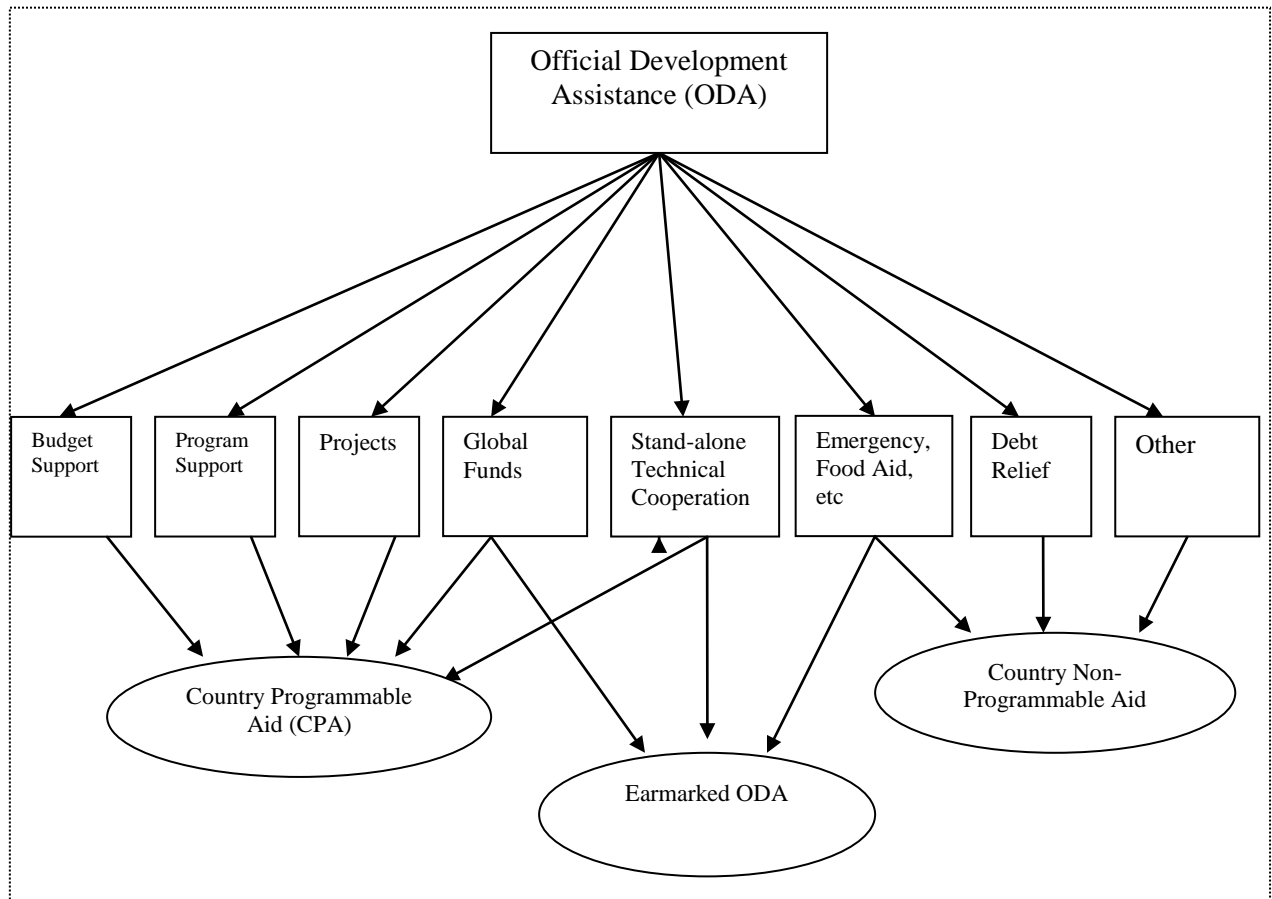
21. **There are two main reasons that most FTC could be considered earmarked at source.** First, while directed thematically at capacity building, FTC seems to be more donor-driven than other types of aid such as budget support, sector support and

¹⁷ The rationale for considering sector program support as non-earmarked is that the government will have the discretion to deploy the resources across multiple subsectors as it sees fit (as opposed to the inflexibility that earmarked funds impose). However, to the extent that a sector program support could shift overall spending to that sector, it may have the characteristic of earmarked aid.

¹⁸ However, including the nominal debt relief in non-earmarked aid may bias the results in as far as it is delivered as stock adjustment (as has been the norm since 2000). The impact on the budget of a reduction in the stock of debt will appear over time through reduced debt service obligations while the impact of budget support is immediate.

investment projects. Secondly, most of the free-standing technical cooperation is tied to the purchase of goods and services in the donor country, which reduces the scope for competing uses of TC resources (e.g., local versus expatriate personnel). Indeed, it is estimated that the costs of goods and services procured can be between 15-30 percent higher than on the open market by the absence of competitive bidding processes. Free-standing technical cooperation is exempt from untying, as mandated by the 2001 OECD/DAC agreements.¹⁹ Even if it were not tied, it would still be regarded as earmarked since as only the service provider can be chosen but the purpose for which the money is used is specified.

Figure 1: Definitions of Country Programmable and Earmarked-at-source ODA



Source: Author's illustration.

¹⁹ Since 2002, ODA to the least developed countries has been untied in the following areas: balance of payments and structural adjustment support; debt forgiveness; sector and multisector program assistance; investment project aid; import and commodity support; commercial services contracts, and ODA to NGOs for procurement related activities. However, technical cooperation and food aid are still exempt from untying. For more, see OECD/DAC "Untying Aid to the Least Developed Countries," 2001. <http://www.oecd.org/dataoecd/16/24/2002959.pdf>

22. As pointed out earlier, **global program funds** are large vertical funds targeting specific sectors such as health, education, and the environment. While the earmarked nature of these funds is not in doubt, they do not seem to be adequately captured in OECD CRS data.²⁰ We would need to complement the CRS data with data on global program funds (in particular for bilateral PEPFAR) in order to paint the full picture of the extent of earmarking through these funds.

23. Finally, **emergency assistance** is defined broadly as consisting of the following: emergency assistance and reconstruction, developmental food aid, commodity assistance, administrative costs of donors, and support to refugees in donor countries. Emergency assistance and reconstruction includes in-kind material and food assistance; relief coordination, protection and support services; and rehabilitation and disaster prevention and preparedness. These are considered earmarked-at-source not only because they are in-kind assistance, but also because the donors decide what kind of assistance to deliver, given country circumstances.²¹ Administrative costs of donors and support to refugees in donor countries are considered earmarked-at-source because donors choose to spend these funds on administration and refugee support, and as such are not available to the recipient countries to allocate as they see fit.

24. **Investment projects constitute a gray area in terms of whether they are considered earmarked-at-source or non-earmarked.** While it may be incorrect to automatically view all investment projects as earmarked-at-source or non-earmarked *ex ante*, there exists no mechanism to distinguish which investment projects are earmarked-at-source and which are not from the CRS data. For that reason, we classify investment projects as neither earmarked-at-source nor non-earmarked ODA. More information than is available in the CRS database, perhaps at the country level, may be needed to make such a determination.²²

25. **Finally, we will offer a measure of earmarking as a share of CPA.** CPA is defined by the DAC as total ODA minus humanitarian aid, debt relief, donor administrative costs, imputed student costs, research, costs of refugees in donor countries, food aid, and core grants to NGOs.²³ Over the last decade, non-programmable ODA has doubled from about 15 percent in 1995 to 30 percent in 2006. Much of this increase has been due to debt relief, which has more than doubled since the mid 1990s and today makes up about 15 percent of all ODA. Similarly, emergency assistance and reconstruction, administrative costs of donors, and support to NGOs and refugees in donor countries have increased significantly. Earmarked-at-source ODA as a proportion

²⁰ Only GFATM and the FTI are covered in the CRS data.

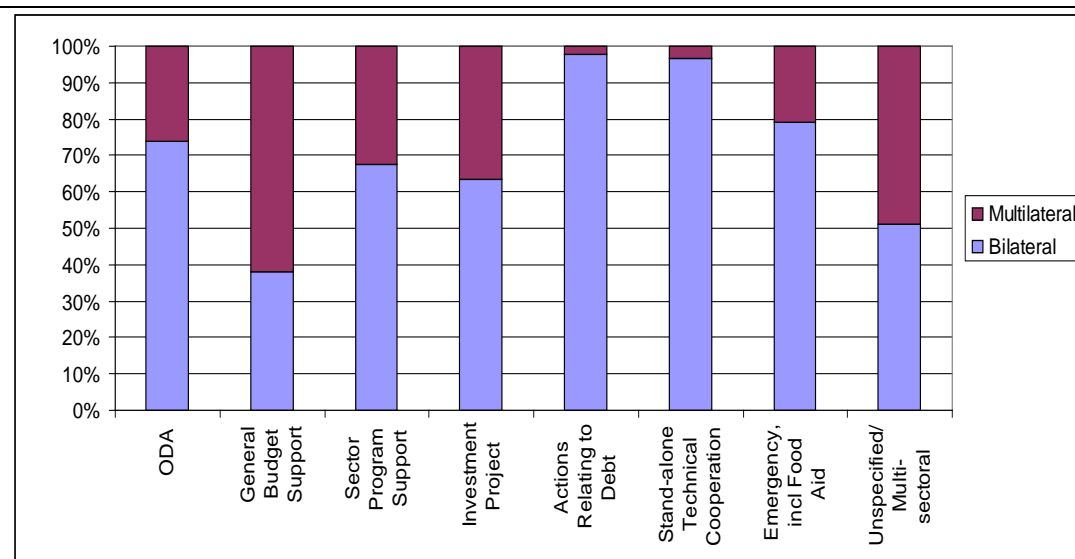
²¹ Some emergency assistance may also be delivered as non-earmarked budget support to the government, but this is not only a small share of such aid but also it is difficult to separate out those in the OECD/DAC data.

²² Further country-level studies could be used to shed more light on the degree of earmarking within investment projects.

²³ See, OECD/DAC (2007) "Towards Better Division of Labour: Concentration and Fragmentation of Aid," Paper presented at the Global Forum for Development.

of CPA²⁴ may yet provide a stronger indicator of the extent of inflexibility that may be introduced by earmarking.

Figure 2: Share of Bilateral and Multilateral ODA by Type of Aid



Note: The figures refer to ODA receipts. The sum of bilateral ODA and multilateral outflows may not always be equal to total ODA for a given year.

Source: OECD Creditor Reporting System (CRS)

Table 1: Share of Country Programmable ODA, 1995-2006

	1995-2000	2001-2006	% Change
Total ODA	59400.8	99431.0	67%
of which:			
Country Programmable	32416.2	55306.6	71%
of which:			
General Budget Support	3568.8	4905.6	37%
Sector Program Support	864.7	5864.3	578%
Investment Projects	18258.0	20224.4	11%
Technical Cooperation	9130.7	21329.4	134%
Global Program Funds	594.0	2983.0	402%
Not Country Programmable	11199.4	27446.1	145%
of which:			
Actions Relating to Debt	3736.6	13921.4	273%
Emergency Assistance, including Food Aid	7462.8	13524.7	81%
Unspecified Unspecified	15785.3	16678.3	6%
Country Programmable (% of ODA)	55%	56%	

Source: OECD Creditor Reporting System (CRS).

²⁴ This is defined as the ratio of earmarked-at-source country programmable aid to total country programmable aid.

3.2. THE GLOBAL VIEW²⁵

26. **Figure 2 offers a breakdown of bilateral and multilateral ODA by type of aid.** During 2001-06, bilateral ODA (in commitments) accounted for about 74 percent of ODA, and multilateral ODA for about 26 percent. Relative to this share, multilateral ODA is deployed more towards general budget support, sector program support, investment projects, and multisectoral programs. On the other hand, bilateral ODA goes more disproportionately to financing of debt relief, stand-alone technical cooperation, and emergency relief and food aid.

Table 2: Global Earmarked-at-source and Non-earmarked ODA (Average commitments per year, millions of US\$)

	1995-2000	2001-2006	% Change
Total ODA ^{1/}	59400.8	99431.0	67%
Of which:			
Earmarked-at-source ODA	17187.5	37837.0	120%
of which:			
Free Standing Technical Cooperation ^{2/}	9130.7	21329.4	134%
Emergency Assistance ^{3/}	7462.8	13524.7	81%
Global Program Funds	594.0	2983.0	402%
Non-earmarked ODA	8170.1	24691.3	202%
of which:			
General Budget Support	3568.8	4905.6	37%
Sector Program Support ^{4/}	864.7	5864.3	578%
Actions Relating to Debt	3736.6	13921.4	273%
Unclassified	34043.3	36902.7	8%
Investment Projects ^{5/}	18258.0	20224.4	11%
Other Unspecified ODA	15785.3	16678.3	6%
Earmarked-at-source (% of ODA)	29%	38%	
Non-earmarked (% of ODA)	14%	25%	
Unclassified (% of ODA)	57%	37%	
Earmarked-at-source (% of country programmable) ^{6/}	30%	44%	
<p>Note: 1/ Data presented are averages for two sub-periods, 1995-2000 and 2001-2006, to smooth out short term fluctuations.</p> <p>2/ Some of the increase in technical cooperation figures may reflect increased reporting (e.g., by France, Japan, and Germany started reporting in 2003) instead of increased earmarking.</p> <p>3/ Emergency Assistance is broadly defined to include: emergency assistance and reconstruction + developmental food aid + commodity assistance + administrative costs of donors + support to refugees in donor countries. The latter two are separately presented in the CRS but consolidated into emergency aid here for presentational brevity.</p> <p>4/ Includes sector program support coupled with technical cooperation as well.</p> <p>5/ Includes investment projects delivered in combination with technical cooperation and program support as well.</p> <p>6/ This defined as the ratio of earmarked-at-source country programmable aid (FTC+GPFs) to total country programmable aid.</p>			
Source: OECD Creditor Reporting System (CRS).			

²⁵ The global view covers 157 ODA recipient countries, as reported in the OECD/DAC database.

27. **Globally, only slightly over half (55 percent) of ODA is country programmable aid (Table 1).** While official development assistance (in commitments) increased from an average of about \$59 billion per year during 1995-2000 to about \$99 billion per year during 2001-06, the percent share of CPA remained steady at about 55 percent of ODA. Some IDA countries receive much less than half –indeed as little as 20-35 percent –of their ODA in country programmable aid (e.g., Congo, DRC, Liberia) (see Annex 2).

28. **About 38 percent of ODA was earmarked during 2001-2006, up from about 29 percent during 1995-2000 (Table 2).** Earmarking as a share of CPA was even higher at 44 percent, significantly up from 30 percent during 1995-2000. Non-earmarked ODA, too, increased from 14 percent of ODA in 1995-2000 to 25 percent in 2001-06, mainly because of debt relief and sector program support, which together increased from around 7 percent of ODA in 1995-2000 to about 19 percent in 2001-06. General budget support held steady at around 5 percent of ODA. Unclassified ODA—which includes investment projects and other assistance not specified by type—declined by nearly 20 percent of ODA over the period.

Table 3: FTC by Sector (Commitment, millions of US\$)

	Amount		% Share in Total		Growth (%) Change)
	1995- 2000	2001- 2006	1995- 2000	2001- 2006	
Total Technical Cooperation	9130.7	21329.4			134%
Of which:					
Social Infrastructure & Services	5250.3	14185.9	58%	67%	170%
Education	1857.7	3591.2	20%	17%	93%
Health	657.8	1606.5	7%	8%	144%
Population Programmes	540.7	2144.2	6%	10%	297%
Water Supply & Sanitation	287.4	364.3	3%	2%	27%
Government & Civil Society	1037.3	4247.7	11%	20%	309%
Other Social Infrastructure & Services	869.3	2231.9	10%	10%	157%
Economic Infrastructure	829.2	1388.5	9%	7%	67%
Transport & Storage	161.7	245.8	2%	1%	52%
Communications	40.2	131.0	0%	1%	226%
Energy	177.5	301.3	2%	1%	70%
Banking & Financial Services	107.5	189.4	1%	1%	76%
Business & Other Services	342.2	521.0	4%	2%	52%
Production Sectors	1086.3	1897.5	12%	9%	75%
Agriculture, Forestry, Fishing	845.8	1171.7	9%	5%	39%
Industry, Mining, Construction	165.3	353.1	2%	2%	114%
Trade Policy and Regulations	57.8	356.0	1%	2%	516%
Tourism	17.5	16.6	0%	0%	-5%
Multisector	1330.2	2470.1	15%	12%	86%
Environment Protection	383.1	656.3	4%	3%	71%
Other Multisector	947.1	1813.8	10%	9%	92%
Others	635.2	1390.3	7%	7%	119%

Source: OECD Creditor Reporting System (CRS).

29. **Most of this increase in earmarking reflects the growth in stand-alone technical cooperation** (which grew by 120 percent), often associated with expatriate consultants as well as tied (Table 2).

- About 97 percent of the stand-alone technical cooperation was financed through bilateral ODA (Figure 2).
- By sector, about two-thirds of the stand-alone technical cooperation during 2001-06 went to the social sectors (education, health, population programs, and government and civil society) followed by multisectoral (12 percent), production sectors (9 percent), and economic infrastructure (7 percent) (Table 3). Within the social sectors, government and civil society, and population programmes (STD control including HIV/AIDS) saw the largest growth from their levels during 1995-2000. Government and civil society includes general public administration-related support plus support for conflict, peace and security, both of which grew significantly during 2001-06.
- By purpose, the bulk of free standing technical cooperation went to higher education, STD control including HIV/AIDS, narcotics control, multisector aid, and government administration.

Table 4: Global Program Funds (Commitments in millions of US\$)

	2001	2002	2003	2004	2005	2006
GFATM ^{1/}	0	131.7	1321.1	830.7	1019.5	1691.5
GAVI ^{2/}	70.2	25.4	387.5	58.4	40.9	535.7
GEF ^{3/}	449.5	402.3	547.1	659.7	599.4	563.2
MFIMP ^{4/}	150	150	158	158	158	156
EFA-FTI ^{5/}	0	0	0	37.8	50.2	25.4
US PEPFAR ^{6/}	0	0	0	595.3	1088.7	1298.8
Total	669.7	709.4	2413.7	2514.5	2839.6	4270.6
% of ODA	1%	1%	2%	3%	2%	4%
% of CPA	2%	2%	5%	4%	4%	8%
Memo items:						
ODA	73074.8	82828.1	99980.3	100182.5	121755.3	118765.2
CPA	35669.5	41989.0	53253.1	56162.1	64971.8	61896.2

Source:

1/ CRS data in 2005 constant prices; data reported neither under aid by type nor under aid by sector.

2/ http://www.gavialliance.org/media_centre/publications/progress_reports.php

3/ <http://gefonline.org/home.cfm>

4/ http://www.multilateralfund.org/the_funding_process/1080058887066.htm

5/ CRS data; reported as part of investment and sector program support

6/ Data refers to cumulative "obligated amount" over 2004-0 See

<http://www.cgdev.org/section/initiatives/active/hivmonitor/pepfardata>

30. **Emergency assistance, another key component of earmarked-at-source ODA, held steady at around 9 percent of total ODA.** Emergency aid—which includes emergency reconstruction and food aid, administrative costs on bilateral aid, and support to NGOs and refugees in donor countries—held steady at around 9 percent of ODA, and modestly grew by about the same rate as the growth in ODA during the decade.

31. **Earmarking through global program funds increased to about 3 percent of ODA during 2003-06, up from about 1 percent during 1995-2000** (Table 4). Global program funds accounted for some \$2.2 billion a year, or about 3 percent of ODA (or 4 percent of CPA) over the period 2003-2006. This is indeed a very marked increase from the situation before 2003, when these funds accounted for very small proportions of total ODA or CPA.²⁶

3.3. WHICH IDA COUNTRIES ARE MOST EARMARKED?

32. **Total ODA commitment to IDA-eligible countries grew from an average of US\$41.7 billion in 1995-2000 to US\$64.5 billion in 2001-06** (Table 5). Country programmable aid stood at slightly over half of the total ODA to these countries.

33. **About 25 percent of ODA to IDA-eligible countries was earmarked-at-source during 2001-2006, up from about 17 percent during 1995-2000.** As a share of CPA, earmarking was even higher at 39 percent during 2001-06, significantly up from 27 percent in 1995-2000. Much of this increase again was due to the growth in free standing technical cooperation and global program funds. Emergency assistance held steady at around 9 percent of total ODA (Table 5).

34. **The extent of earmarking varies considerably—between 30 percent and 80 percent—across IDA countries.** Annex 2 provides the extent and composition of earmarked-at-source ODA for each individual IDA-eligible country. Figure 3 provides the top 15 IDA-eligible countries that are most highly earmarked-at-source. Coming at the top of this ranking are countries such as Liberia, Haiti, and Togo where between 60-80 percent of the ODA is earmarked-at-source. The high degree of earmarking in these countries may not be surprising in light of the fact that donors seem to seek to allay concerns about weak governance through earmarking.²⁷

²⁶ There is a strong prospect that the proportion will rise further with the likely setting up of additional global initiatives in areas such as food security and climate change.

²⁷ These countries typically have poor governance environments, with average governance ratings of 2.5 on CPIA governance cluster (compared to 3.4 for non-fragile states). They also rank low on governance using external governance indicators, such as the perception of corruption by Transparency International (see http://www.icgg.org/corruption.cpi_2007.html).

Table 5: IDA Countries: Earmarked-at-source and Non-earmarked ODA (Commit, millions of US\$)

	1995-2000	2001-2006	% Change
Total ODA to IDA Countries ^{1/}	41680.0	64540.1	55%
Of which:			
Earmarked-at-source ODA	7228.1	16355.8	126%
of which: Free Standing Technical Cooperation	4107.8	8582.9	109%
Emergency Assistance	2911.9	5191.3	78%
Global Program Funds	208.4	2581.6	1139%
Non-earmarked	14718.0	26901.9	83%
of which: General Budget Support	2366.9	3946.5	67%
Sector Program Support	395.6	2838.4	618%
Investment Projects	9124.7	10864.7	19%
Actions Relating to Debt	2830.8	9252.3	227%
Unspecified Unspecified	19733.9	21282.4	8%
Country Programmable (% of ODA)	39%	45%	
Earmarked-at-source (% of ODA)	17%	25%	
Non-earmarked (% of ODA)	35%	42%	
Unclassified (% of ODA)	47%	33%	
Earmarked-at-source (% of country programmable) ^{4/}	27%	39%	

Note:

1/Data presented are average per year for two sub-periods, 1995-2000 and 2001-2006, to smooth out short term fluctuations.

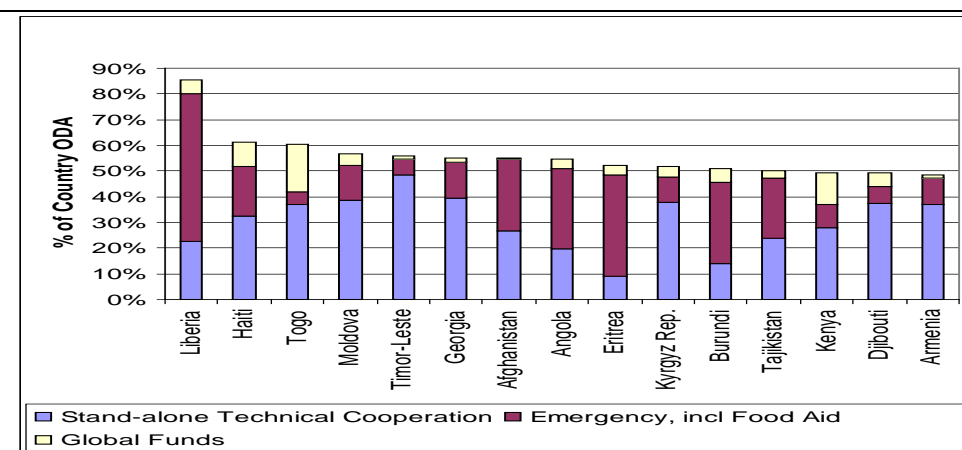
2/ Includes sector program support coupled with technical cooperation as well

3/ Emergency Assistance is broadly defined to include: emergency assistance and reconstruction + developmental food aid + commodity assistance + administrative costs of donors + support to refugees in donor countries.

4/ This defined as the ratio of earmarked-at-source country programmable aid (FTC+GPFs) to total country programmable aid.

Source: OECD Creditor Reporting System (CRS)

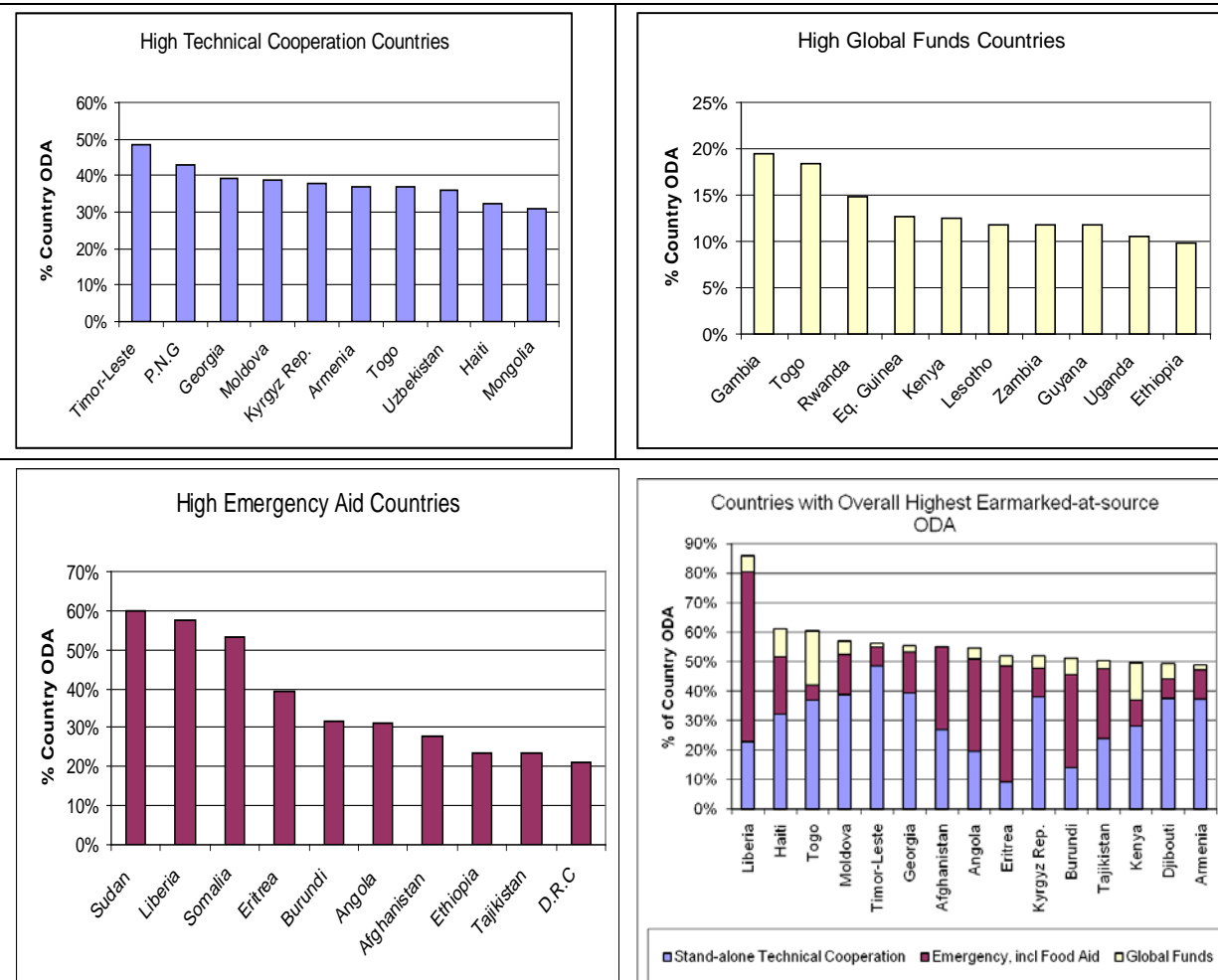
Figure 3: Highly Earmarked IDA Countries, 2001-06 (Average)



Source: OECD Creditor Reporting System (CRS).

35. **The composition of earmarked-at-source aid, too, varies significantly across countries (Figure 4).** While some countries seem to receive a significant share of their ODA in non-earmarked aid (Annex 2), others have a significant share of their ODA largely earmarked in stand-alone technical assistance (e.g., Timor-Leste, Papua New Guinea, Georgia, Moldova, and Kyrgyz Republic), emergency aid (e.g., Sudan, Liberia, Somalia, Eritrea), or global program funds (Gambia, Togo, Rwanda, Equatorial Guinea, Kenya, Lesotho, Zambia, Guyana, Uganda, Ethiopia) (Figure 4).

Figure 4: Typology of Highly Earmarked-at-source IDA Countries



Source: OECD Creditor Reporting System (CRS).

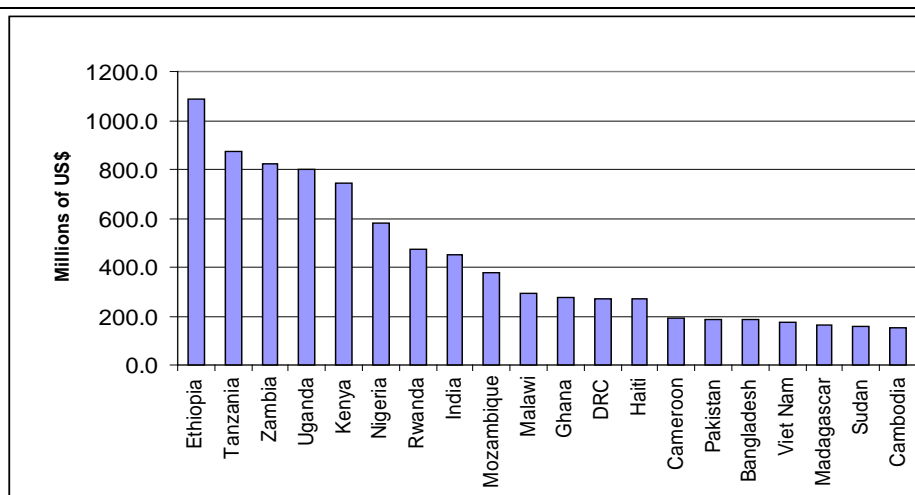
36. **Global program funds invested a cumulative amount of about US\$11.5 billion in IDA countries during the period 2001-07, or about 4 percent of total ODA in these countries.** Annex 3 provides cumulative commitments of global program funds in IDA-eligible countries during the period 2001-07²⁸, including funding from the US President's Emergency Plan for AIDS Relief (PEPFAR) in the 15 focus-countries.²⁹

²⁸ Two key challenges in integrating global program funds into the broader analysis of earmarking are: (i) data on *annual* country-level commitments is not always easily available. For the purposes of this

37. **Of the global funds, GFATM was by far the largest**, accounting for about 60 percent of total commitments, followed by PEPFAR (20 percent), and GAVI (12 percent), GEF (95 percent) and FTI (3 percent).

- **By country, among the largest recipients of global program funds in absolute terms were sub-Saharan African countries** such as Ethiopia, Tanzania, Zambia, Uganda, and Kenya (Figure 5).
- **By sector, about 92 percent of the commitments of global program funds**

Figure 5: The 20 Largest Recipients of Global Program Funds, 2001-07 (Cumulative commitments, millions of US\$)



Source: Annex 2.

were in the health sector while the GEF and FTI, which targeted the environment and education sectors respectively, remained small at 5 percent and 3 percent of total commitments. Annex 3 provides a further disaggregation of financing from each of these funds by sub sectors and thematic areas—such as HIV/AIDS, malaria, TB, immunization, and health systems for health sector; and

exercise, we express cumulative global funds commitments over 2001-07 as a percentage of cumulative ODA during the same period to get the share of global funds in ODA for each IDA country. (ii) to add these funds to the other types of earmarked ODA (free standing technical cooperation and emergency assistance) we make the assumption that the global funds constitute part of the “unspecified ODA.” This may be reasonable in view of the fact that the GFATM, for example, is reported in the OECD/DAC database as neither a sector investment project, nor a program support or technical cooperation.

²⁹ The 15 focus countries receiving PEPFAR funds are Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam, and Zambia. Focus countries account for about half of PEPFAR's total budget, with the rest divided between GFATM, other bilateral programs, and other activities (including research). The figures refer to only IDA-eligible countries (i.e. excluding Botswana, Namibia, and South Africa).

climate change, biodiversity, and multi-focal interventions for the environment sector.

38. **Even when the share of global funds may seem low as a share of ODA, these funds can become sufficiently large to dominate their respective sector's public investment programs** in several low income countries. In the health sector, for example, the size of HIV/AIDS financing from the global funds has recently amounted to more than 30 percent of the total public health budget in many African countries.³⁰ A recent study estimates that in 2006, the share of HIV/AIDS funding in total health expenditure accounted for about 33 percent in Mozambique, 42 percent in Uganda, 43 percent in Malawi, and 45 percent in Rwanda.³¹

39. **Going forward, a more in-depth analysis, including a sectoral and sub-sectoral analysis of free standing technical cooperation and global funds, may yield useful insights** into the extent to which earmarking distorts country priorities and/ or imposes additional transactions costs. But a key question is which IDA countries may be most suitable for such a study.

3.4. WHICH IDA COUNTRIES MAY BE SUITABLE FOR FURTHER IMPACT STUDY?

40. Since aid earmarking should have no effect on the composition of country budgets when the earmarked dollars represent a small fraction of total funding, the case studies should focus on countries that are aid-dependent, where earmarking can potentially introduce a binding budget constraint on the recipient's spending choices. Four indicators that may be useful in identifying such countries are: (i) earmarked-at-source ODA as a percent of government revenue, (ii) earmarked-at-source ODA as a percent of government expenditure, (iii) earmarked-at-source ODA as a percent of country programmable aid (CPA), and (iv) ODA as a percent of Gross National Income (GNI).

41. **Table 6 presents IDA countries where these indicators are all uniformly high** (double-digit as a percent share). The indicators are shown in the last four columns of the table. The countries are rank ordered by earmarked-at-source ODA as a percent of revenue indicator (third column from last) since the higher this ratio, the more likely that aid earmarking becomes a binding constraint to the government's expenditure decisions.

42. **This set of potential countries can be further narrowed down using several additional criteria** such as regional representation, data availability, and work program of country teams. Irrespective of data quality, carrying out further country impact would require CFP to partner with operational country teams throughout the Bank—and ideally with those who are currently in the planning phase of a public expenditure review so that integration would be easier. Annex 4 outlines possible approaches to assessing the country level impact of earmarking.

³⁰ See WHO/World Bank, *High-Level Forum on the Health Millennium Development Goals: Selected Papers 2003-05*, 2006.

³¹ See Castro, Rocio and Marcelo Selowsky, 2008, "Global Programs at the Country Level: Uganda Case Study", and World Bank (GPP), 2008, "Global Program Funds at the Country Level: What Have We Learned?" Synthesis Report, July.

Table 6: Possible IDA Countries for further Case Studies

Country	Average Annual ODA (\$ millions)	Earmarked-at-source as % of Country ODA				Earmarked-at-source as % of			ODA as a share of GNI
		SA-TC	EA	GPFs	Total	CPA	Rev	Exp	
Africa									
Sierra Leone	382.2	21%	20%	3%	44%	41%	140%	38%	34%
DRC	2485.0	12%	21%	2%	35%	42%	70%	24%	35%
Rwanda	531.1	22%	6%	15%	43%	52%	35%	32%	23%
Burundi	350.8	14%	31%	6%	51%	43%	30%	24%	41%
Niger	510.5	10%	8%	4%	23%	25%	28%	28%	15%
Ethiopia	1864.8	13%	24%	10%	46%	42%	25%	20%	17%
Malawi	594.3	22%	11%	8%	41%	47%	25%	24%	27%
Uganda	1262.7	18%	10%	11%	38%	41%	22%	19%	15%
Zambia	1162.5	16%	4%	12%	32%	48%	19%	18%	15%
Gambia	62.0	14%	7%	20%	40%	55%	18%	20%	15%
Mauritania	302.8	15%	7%	2%	24%	33%	18%	20%	16%
Mozambique	1590.3	14%	5%	4%	23%	30%	17%	14%	29%
Mali	688.5	19%	2%	3%	24%	30%	13%	11%	14%
Madagascar	840.4	12%	7%	3%	22%	31%	13%	10%	15%
Tanzania	2013.9	10%	4%	7%	21%	25%	13%	11%	14%
South Asia									
Afghanistan	2479.7	27%	28%	0%	55%	51%	108%	30%	32%
EAP									
Cambodia	557.7	29%	5%	5%	38%	56%	30%	28%	10%
Laos PDR	300.9	22%	2%	4%	29%	44%	30%	22%	13%
Mongolia	220.9	31%	8%	2%	41%	58%	13%	14%	16%
ECA									
Kyrgyz Rep.	213.9	38%	10%	4%	52%	63%	20%	19%	12%
Tajikistan	248.7	24%	24%	3%	50%	52%	17%	18%	12%
LAC									
Guyana	123.3	21%	4%	12%	37%	61%	12%	10%	16%
Nicaragua	1024.7	11%	4%	1%	16%	30%	11%	10%	19%
Source: OECD/DAC Creditor Reporting System; Annex 1									
Acronyms: Free-standing technical cooperation (FTC), Emergency Assistance (EA), Global program funds (GPFs), Country Programmable Aid (CPA), Revenue (Rev), Expenditure (Exp), Gross National Income (GNI)									

4. SUMMARY AND CONCLUSIONS

43. **Aid earmarking is a practice of dedicating aid to spending on specific public services or activities in the recipient country.** Through earmarking, donors attempt to “segregate” the various monies into different pots in order to ultimately influence the

recipient governments' spending choices. Two types of aid earmarking can be distinguished: (i) *Earmarked-at-source* aid, which includes aid earmarked for specific themes or purposes by congressional authorities or by aid agencies early on in their allocation process; (ii) *Earmarked-at-use* aid, which in addition to earmarked-at-source may also include other types of aid designated for specific purposes at the point of commitment or use (including investment projects from both bilateral and multilateral sources, for example). This paper has focused on the estimation of earmarked-at-source aid.

44. **Of total ODA, earmarked-at-source ODA averaged about 38 percent of total ODA during 2001-2006, up from about 29 percent during 1995-2000.** As a share of CPA, earmarking was even higher at 44 percent, significantly up from 30 percent during the period 1995-2000. Most of this increase in earmarking reflects the growth in free standing technical cooperation, and, to a lesser extent, the rising importance of special purpose trust funds and global programs. Non-earmarked ODA, too, increased from 14 percent of ODA in 1995-2000 to 25 percent in 2001-06, mainly because of debt relief and sector program support, which together increased from around 7 percent of ODA in 1995-2000 to about 19 percent in 2001-06. General budget support held steady at around 5 percent of ODA. Unclassified ODA—which includes investment projects and other assistance not specified by type—declined by nearly 20 percent of ODA over the period.

45. **For IDA-eligible countries as a group, earmarked-at-source aid stood at about 25 percent of ODA during 2001-06, up from about 17 percent of ODA during 1995-2000.** As a share of CPA, about 40 percent of ODA remained earmarked-at-source in IDA countries during 2001-06. Much of the increased earmarking is explained by an increase in free standing technical cooperation (which has increased from 13 percent to 16 percent of ODA), and increased funding through global program funds (which increased from almost zero to about 4 percent of ODA). Emergency assistance, a key component of earmarked-at-source ODA, held steady at around 9 percent of total ODA.

46. **Global program funds invested a total of about US\$11.5 billion in IDA countries, or about 4 percent of total ODA in these countries, during the period 2001-07.** About 92 percent of the commitments were in the health sector while the GEF and FTI, which targeted the environment and education sectors respectively, remained small at 5 percent and 3 percent of total commitments. By country, among the largest recipients of global program funds were sub-Saharan African countries: Ethiopia, Tanzania, Zambia, Uganda, and Kenya were the largest five in terms of cumulative commitments.

47. **At the country level, the extent of earmarking varies considerably—between 40 percent and 80 percent of country ODA—across IDA countries.** Coming at the top of this ranking are countries such as Liberia, Haiti, and Togo where nearly over 60-80 percent of the ODA is earmarked-at-source. While weak governance³² and/or capacity

³² These countries typically have poor governance environments, with average governance ratings of 2.5 on CPIA governance cluster (compared to 3.4 for non-fragile states). They also rank low on

constraints may be among plausible factors driving the high degree of earmarking, a further analysis will be needed to make definitive conclusions.

48. **The composition of earmarked-at-source aid, too, varies significantly across countries.** While some countries (such as Tanzania, Ghana, and Pakistan) seem to receive a significant share of their ODA in non-earmarked aid, others have a significant share of their ODA largely earmarked in stand-alone technical assistance (e.g., Timor-Leste, Papua New Guinea, Georgia, Moldova, and Kyrgyz Republic), emergency aid (e.g., Sudan, Liberia, Somalia, Eritrea), or global program funds (Gambia, Togo, Rwanda, Equatorial Guinea, Kenya). To the extent that the type of (bilateral) aid to a country may be influenced by a variety of factors, such as historical ties, a further study exploring why some countries are historically “high technical cooperation” countries while others are “high global funds” or “high emergency aid countries” will be useful although the latter two seem to be driven by the prevalence of HIV/AIDs and crisis/conflict, respectively.

49. **Despite the large degree—and increasing trend—of aid earmarking, there is very little analysis of how earmarked-at-source aid affects the recipient governments.** Further country level studies are no doubt necessary to understand this impact better. However, since aid earmarking should have no effect on the composition of state budgets when the earmarked dollars represent a small fraction of total funding financed through general revenues, a further country level inquiry should focus, as much as possible, on those countries that are aid-dependent, and where earmarking can potentially introduce a binding budget constraint on the recipient’s spending choices. Using earmarked-at-source ODA as a percent of government revenue as the main indicator, some of the potential candidate countries include Sierra Leone, DRC, Rwanda, Burundi, Niger, Ethiopia, Malawi, Uganda, Zambia, Gambia, Mauritania, Mozambique, Mali, Madagascar, and Tanzania (Africa); Afghanistan (South Asia); Cambodia, Lao PDR, and Mongolia (East Asia and the Pacific); Kyrgyz Rep. and Tajikistan (Europe and Central Asia); and Guyana and Nicaragua (Latin America and the Caribbean).

REFERENCES

- Amis, Philip, Lara Green and Michael Hubbard, 2005, "Measuring Aid Costs: What has been learnt and what still needs to be learnt", *Public Administration and Development* 25, 373-378.
- Beynon, Jonathan. 2002. "Policy Implications for Aid Allocations of Recent Research on Aid Effectiveness and Selectivity," in B. Mak Arvin (ed.), *New Perspectives on Foreign Aid and Economic Development*, Praeger, Westport, Connecticut (2002).
- Browning, E. (1975). "Collective Choice and General Fund Financing." *Journal of Political Economy*, 83(2): 377-390.
- Buchanan, J. (1963). "The Economics of Earmarked Taxes." *Journal of Political Economy*, 71(5): 475-469.
- Cashel-Cordo, P. and Craig, S. (1997). "Donor Preferences and Recipient Fiscal Behavior: A Simultaneous Analysis of Foreign Aid." *Economic Inquiry*, 35(3): 653-671.
- Cashel-Cordo, P. and Craig, S. (1990). "The Public Sector Impact of International Resource Transfers." *Journal of Development Economics*, 32(1): 17-42.
- Castro, Rocio and Marcelo Selowsky (2008) "Global Programs at the Country Level: Uganda Case Study", World Bank, Washington D.C. April.
- Collins, Bruce M. and Fabozzi, Frank J. (1991) "A Methodology for Measuring Transaction Costs", *Financial Analysts Journal*, 47 (2) 27-36
- Deran, E. (1965). "Earmarking and Expenditures: A Survey and a New Test." *National Tax Journal*, 18: 354-361.
- Devarajan, Shantayanan, Andrew Sunil Rajkumar and Vinaya Swaroop, 2007, "What Does Aid to Africa Finance?" in *Theory and Practice of Foreign Aid*, Volume 1, Chapter 17.
- Feyzioglu, T., Swaroop, V., and Zhu, M. (1998). "A Panel Data Analysis of the Fungibility of Foreign Aid." *The World Bank Economic Review*, 12(1): 29-58.
- Franco-Rodriguez, S. (2000). "Recent Developments in Fiscal Response with an Application to Costa Rica." *Journal of International Development*, 12(3): 429-441.
- Gang, I. and Khan, H. (1991). "Foreign Aid, Taxes, and Public Investment." *Journal of Development Economics*, 34(1-2): 355-369.
- Goetz, C. (1968). "Earmarked Taxes and the Majority Rule Budget Process." *American Economic Review*, 58: 128-136.

Heller, P. (1975). "A Model of Public Fiscal Behavior in Developing Countries: Aid, Investment, and Taxation." *The American Economic Review*, 65(3): 429-445.

Heller, Peter (2006), "The Prospects of creating 'fiscal space' for the health sector,"

IDA15, 2007, "Aid Architecture: An Overview of the Main Trends in Official Development Assistance", Financial Resource Mobilization Department, World Bank, Washington, DC, February.

IMF, 2007, "Fiscal Policy Response to Scaled-Up Aid: Macro-Fiscal and Expenditure Policy Challenges" June.

Khilji, N. and Zampelli, E. (1991). "The Fungibility of U.S. Assistance to Developing Countries and the Impact on Recipient Expenditures: A Case Study of Pakistan." *World Development*, 19(8): 1095-1105.

Khilji, N. and Zampelli, E. (1994). "The Fungibility of U.S. Military and Non-military Assistance and the Impacts on Expenditures of Major Aid Recipients." *Journal of Development Economics*, 43(2): 345-362.

Knack, Stephen and Rahman, Aminur, "Donor Fragmentation and Bureaucratic Quality in Aid Recipients"(January 2004). *World Bank Policy Research Working Paper* No. 3186.

Mavrotas, George. 2002. "Foreign Aid and Fiscal Response: Does Aid Disaggregation Matter?" *Weltwirtschaftliches Archiv (Review of World Economics)* 138:534–59.

Mavrotas, George and Bazoumana Ouattara. 2003. "The Composition of Aid and the Fiscal Sector in an Aid-Recipient Economy: a Model," *Discussion Paper No. 03/07*, School of Economic Studies, University of Manchester.

Mavrotas, George and Bazoumana Ouattara. 2006. "Aid Disaggregation and the Public Sector in Aid-recipient Economies: Some Evidence from Cote D'Ivoire", *Review of Development Economics*, 10(3), 434-451.

McCleary, W. (1991). "The Earmarking of Government Revenue: A Review of Some WorldBank Experience." *The World Bank Research Observer*, 6(1): 81-104.

McGillivray Mark, Morrissey Oliver. 2000. Aid fungibility in assessing aid: red herring or true concern? *Journal of International Development* 12: 413–428.

McGillivray M, Morrissey O. 2001a. A Review of Evidence on the Fiscal Effects of Aid. *CREDIT Research Paper* No 01/13.

- McGillivray M, Morrissey O. August 2001b. Aid illusion and public sector fiscal behaviour. *Journal of Development Studies* 37(6): 118–136.
- McGillivray, Mark. 2002. “Aid, Economic Reform and Public Sector Fiscal Behavior in Developing Countries,” *Credit Research Papers No. 02/11*, University of Nottingham, Centre for Research in Economic Development and International Trade.
- McGillivray M, Feeny S, Hermes N, Lensink R. 2006. Controversies over the impact of development aid: it works; it doesn't; it can, but that depends. *Journal of International Development* 18(7): 1031–1050.
- McGuire, M. (1987). “Foreign Assistance, Investment and Defense: A Methodological Study with an Application to Israel, 1960-1979.” *Economic Development and Cultural Change*, 35(4): 847-873.
- McGuire, M. (1982). “U.S. Foreign Assistance, Israeli Resource Allocation and the Arms Race in the Middle East: An Analysis of Three Interdependent Resource Allocation Processes.” In *The Economics of Military Expenditures: Military Expenditures, Economic Growth and Fluctuations*, Proceedings of a conference held by the International Economic Association in Paris, France:197-238.
- McMahon, W., and Sprenkle, C. (1972). “Earmarking and the Theory of Public Expenditure.” *National Tax Journal*, 25(2): 229-230.
- Operations Evaluation Department (OED), World Bank (2004), Addressing the Challenges of Globalization: An Independent Evaluation of World Bank Involvement in Global Programs—Phase 2 Report. Washington, DC: World Bank.
- Pack, H. and Pack, J. (1993). “Foreign Aid and the Question of Fungibility.” *Review of Economics and Statistics*, 75(2): 258-265.
- Pack, H. and Pack, J. (1990). “Is Foreign Aid Fungible? The Case of Indonesia.” *Economic Journal*, 100(399): 188-194.
- Petersson, J. 2007. “Foreign Sectoral Aid Fungibility, Growth and Poverty Reduction”, *Journal of International Development*, 19: 1074-1098.
- Shelanski, Howard A. and Kelin, Peter G. (1995) “Empirical Research in Transaction Cost Economics: A Review and Assessment”, *Journal of Law, Economics and Organisation*, 11 (2) 335-361.
- Swaroop, V., Jha, S., and Rajkumar, A. (2000). “Fiscal Effects of Foreign Aid in a Federal System of Governance: The Case of India.” *Journal of Public Economics*, 77(3): 307-330.

Uma Lele, Nafis Sadik, Adele Simmons, The Changing Aid Architecture: Can Global Initiatives Eradicate Poverty?
http://siteresources.worldbank.org/EXTGLOREGPARPRO/Resources/uma_lele_article.pdf

Wang, Ning. 2003. "Measuring Transaction Costs: An Incomplete Survey", *Ronald Coase Institute Working Paper Series*, Working Paper No.2.

World Bank.1998. *Assessing Aid: What Works, What Doesn't and Why*, Oxford and New York: Oxford University Press.

ANNEXES

ANNEX 1: THE PROS AND CONS OF EARMARKING: LITERATURE REVIEW

The pros and cons of earmarking have been extensively discussed in the literature. Opponents maintain that earmarking introduces inflexibility into budgets and can lead to a misallocation of resources with too much being given to earmarked programs [McMahon and Sprenkle, 1970; Deran, 1965; McCleary, 1991].

Proponents contend that earmarking protects high-priority programs from shifting majorities, inefficiency, and corruption; it guarantees minimum levels of funding; and it can facilitate agreement about raising revenues [Buchanan, 1963; Goetz, 1968; Browning, 1975].

Two key reasons that donors often earmark aid money are the desire to finance specific activities visible to domestic constituencies, and to allay concerns about governance issues in recipient countries. According to widely used political economy models, however, earmarking should have no effect on the composition of state budgets when the earmarked dollars represent a small fraction of the total funding of an expenditure primarily financed through general revenues. In other words, earmarking should be irrelevant when it introduces no meaningful government budget constraint. If earmarked aid can be undone—i.e. a government can offset donor spending on a particular purpose by reducing its own expenditure on the same purpose—aid is said to be fully fungible.

A. Earmarking and Fungibility of Aid

Several studies have examined whether earmarked aid is fungible. Much quantitative work has been triggered on the one hand by heightened concern over the effectiveness of foreign aid (Boone (1995), World Bank (1998), Easterly *et al.* (2004), Asra *et al.* (2005), Easterly (2005), Devarajan *et al.* (2007)), and on the other hand, by the availability of data (Cashel-Cordo and Craig (1990), Gang and Khan (1991), Pack and Pack (1990, 1993, 1996), Khilji and Zampelli (1994), Feyzioglu *et al.* (1998), Swaroop *et al.* (2000), Njeru (2003), and Cratty and Van de Walle (2005)).

These studies have found that foreign aid is largely fungible. Pack and Pack (1990, 1993, 1996) find that aid is totally fungible in the Dominican Republic, non-fungible in Indonesia and partially fungible in Sri Lanka. Swaroop *et al.* (2000) show that aid to India is fungible at the national level, but non-fungible at the state level. Using a panel data set, Feyzioglu *et al.* (1998) find that foreign aid is fungible in agriculture, education and health, partially fungible in power and non-fungible in transport and communication. Njeru (2003) found that increases in foreign aid to Kenya resulted in less than one-for-one increases in overall public spending. Cratty and Van de Walle (2005) found evidence of partial fungibility in World Bank financing for a rural road rehabilitation project in Vietnam. None of these authors, except Devarajan *et al.* (2007), offer a reasonable explanation as to the reasons why aid may or may not be fungible.

Assessing Aid (World Bank, 1998), a major flagship study of the World Bank which attracted a lot of external attention, also thoroughly examined the issue of aid fungibility [in Chapter 3 and a related appendix]. The study attempted to answer the following three questions: (i) does aid increase government spending? (ii) does aid increase development spending? (iii) does project aid finance particular sectors? The conclusions are that (i) while aid generally causes government spending to increase, it is not generally true that each additional dollar of aid results in a one dollar increase in this spending; (ii) while aid causes increases in investment (a proxy for development expenditure), only 29 cents of each additional dollar of aid typically goes to this sort of expenditure, with most of the balance being allocated to consumption; (iii) extensive empirical evidence [Cashel-Cordo and Craig (1990), Pack and Pack (1990, 1993, 1996), Feyzioglu *et al.* (1998)] shows that aid is largely fungible.

Most recently, Devarajan *et al* (2007) explored the extent of aid fungibility in sub-Saharan Africa; and the reasons that aid might be fungible or not. Using a panel dataset on 18 sub-Saharan African countries from 1971 to 1995, they find that there is little evidence that aid leads to greater tax relief in Africa; that every dollar of aid leads to an increase in government spending of 90 cents; that aid in Africa leads to an increase in current and capital spending in equal amounts. In terms of fungibility of sectoral aid, they conclude that aid to energy and transport and communication sectors lead to some (less than one-to-one) increase in public spending in those sectors, while aid to the education sector has an almost one-to-one effect on education sector spending in Africa. As to the reasons why aid may or may not be fungible, they note that it depends on the costs of compliance/ monitoring faced by the recipient government. When compliance costs are low for the recipient (such as when there is a large number of donors in a country that recipients could get away with as little compliance as possible), there is likely to be greater fungibility of aid.

But why is fungibility important? If aid is fully fungible, aid earmarking may not succeed in increasing the amount of money that goes into the specific activity for which the money is earmarked. If it is partially fungible, aid earmarking to particular sectors can increase (although less than one to one) the amount of spending in that sector. In either case, the implication is that instead of focusing on earmarking, donors should be concerned with the quality of the overall public expenditure program of the recipient country.

B. Beyond Fungibility to Measuring Impact

When earmarked aid is fully fungible, earmarking becomes a non-issue. However, if it is only partially fungible, as most empirical studies seem to suggest, or non-fungible at all it will have some impact on the composition of public expenditure of the recipient country. The question then is how we evaluate whether such a shift in composition of public expenditure is good or bad.

The implicit view seems to be that fungible aid is less effective than aid used as specified, although there is no firm empirical evidence supporting this view. Petersson (2007), in a

pioneer study, attempts to shed light on this issue by examining whether earmarked non-fungible sectoral aid works better than fungible aid in terms of promoting economic growth and poverty reduction. Using a sample of 57 aid recipient countries, he finds that, for a sufficiently high quality of policies, there is no evidence that non-fungible aid impacts growth better than fungible aid. But when policies are sufficiently bad, non-fungible aid has greater (marginal) impact on growth. Similarly, in terms of ‘pro-poor’ government expenditures and poverty reduction, he finds that while non-fungible aid appears to be welfare improving relative to fungible aid, these results are not robust to small changes in the empirical model. Overall, he concludes that the concept of fungibility may be too narrow and should possibly not be the most central concern when aid is debated or given.

In a similar vein, recent literature has emphasized that, rather than fungibility, the focus should in fact be on the broader context of how aid impacts the public sector behavior of recipient countries. Emerging largely as a critique of *Assessing Aid*, this literature has argued (e.g., [McGillivray and Oliver, 2000](#)) that the impact on the fiscal response of recipient countries should be the primary concern. Among such studies are [Beynon \(2002\)](#), [McGillivray and Oliver \(2002, 2001a, 200b\)](#), [McGillivray \(2002\)](#), [McGillivray et al \(2006\)](#), [Mavrotas \(2002\)](#), [Mavrotas and Ouattara \(2003, 2006\)](#), and [McGillivray and Morrissey \(2000\)](#).

[Mavrotas and Ouattara \(2006\)](#) is particularly worth highlighting as it examines the impact of different types of aid—namely project aid, program aid, technical assistance, and food aid—on the fiscal sector of the aid recipient economy by using time-series data for Cote d’Ivoire over the period 1975-99. They find that when a single value (or aggregated) aid is used for Côte d’Ivoire, foreign aid is fully consumed. However, using disaggregated aid, they show that the government responds differently according to the type of aid. In particular, they find that technical assistance and food aid are mainly directed towards financing consumption whilst project aid and program aid are used for investment purposes. They conclude that understanding *how* aid works, and in particular *how different types of aid work* is of paramount significance in terms of designing better aid policies that would promote aid effectiveness.

In summary, while much of the literature on aid earmarking to date has focused on whether and to what extent earmarked aid is fungible, recent studies have begun to go beyond measuring fungibility to analyzing whether earmarked aid is better or worse than non-earmarked aid in terms of facilitating growth and poverty reduction. More country analysis may be needed, however, to understand the impact of aid earmarking on recipient countries more fully.

ANNEX 2: EARMARKED-AT-SOURCE AND NON-EARMARKED ODA IN IDA-ELIGIBLE COUNTRIES, 2001-06 (AVERAGE)

Country	Average Annual ODA (\$ millions)	ODA/ GNI	Share of Country Program mable ODA	Earmarked-at-source as % of Country ODA				Non-earmarked as % of Country ODA				Unspecified as % of Country ODA			Earmarked-at-source and country programmable as % of		
				Stand-alone TC	Emergency, incl Food Aid	Global Funds	Total	General Budget Support	Sector Program	Debt Relief	Total	Investment Projects	Other	Total	CPA	Rev	Exp
Afghanistan	2479.7	32%	53%	27%	28%	0%	55%	2%	11%	0%	13%	13%	19%	32%	51%	108%	30%
Angola	555.9	3%	44%	20%	31%	4%	54%	0%	4%	11%	15%	17%	13%	31%	52%	3%	3%
Armenia	319.0	7%	79%	37%	10%	1%	49%	11%	9%	0%	21%	20%	11%	31%	48%	13%	14%
Azerbaijan	256.2	3%	68%	26%	12%	2%	40%	6%	1%	0%	6%	35%	20%	54%	41%	4%	3%
Bangladesh	2012.6	2%	58%	16%	7%	2%	24%	7%	11%	9%	26%	23%	27%	50%	31%	4%	3%
Benin	488.8	9%	65%	17%	2%	3%	22%	13%	17%	7%	37%	15%	26%	41%	31%	10%	8%
Bhutan	79.6	12%	73%	20%	2%	4%	26%	4%	11%	0%	15%	35%	25%	60%	33%	14%	11%
Bolivia	953.4	9%	47%	27%	6%	0%	33%	4%	8%	21%	33%	8%	26%	34%	57%	8%	6%
Bosnia-Herzegovina	576.8	7%	56%	25%	11%	1%	36%	1%	5%	1%	7%	25%	32%	57%	45%	4%	4%
Burkina Faso	728.3	13%	67%	13%	4%	3%	20%	21%	10%	4%	36%	19%	25%	45%	24%	10%	8%
Burundi	350.8	41%	45%	14%	31%	6%	51%	12%	1%	6%	19%	13%	17%	30%	43%	30%	24%
Cambodia	557.7	10%	61%	29%	5%	5%	38%	2%	4%	0%	6%	21%	35%	56%	56%	30%	28%
Cameroon	1019.9	6%	31%	14%	2%	3%	19%	3%	0%	56%	59%	11%	11%	21%	57%	5%	6%
Cape Verde	170.1	15%	67%	24%	9%	0%	34%	13%	8%	2%	23%	20%	23%	43%	37%	13%	12%
Central African Rep.	126.1	7%	75%	27%	4%	9%	40%	11%	1%	10%	22%	28%	11%	39%	47%	17%	15%
Chad	311.2	9%	54%	12%	20%	2%	34%	13%	0%	5%	18%	27%	21%	48%	26%	5%	5%
Comoros	35.0	9%	68%	36%	3%	2%	41%	3%	0%	8%	11%	27%	21%	48%	55%	55%	NA
Congo, Dem. Republic	2485.0	35%	33%	12%	21%	2%	35%	8%	1%	34%	43%	11%	12%	22%	42%	70%	24%
Congo, Rep.	413.7	9%	35%	19%	17%	1%	37%	3%	0%	32%	35%	12%	16%	28%	57%	4%	6%
Cote d'Ivoire	621.0	3%	37%	19%	18%	3%	40%	8%	0%	37%	45%	7%	8%	15%	59%	4%	3%
Djibouti	82.1	11%	71%	37%	7%	5%	49%	6%	3%	0%	9%	19%	23%	41%	61%	30%	22%
Equatorial Guinea	29.8	1%	51%	27%	2%	13%	42%	0%	2%	20%	22%	9%	27%	36%	78%	1%	2%
Eritrea	264.3	38%	36%	9%	40%	4%	52%	4%	1%	0%	6%	18%	25%	42%	35%	26%	13%
Ethiopia	1864.8	17%	54%	13%	24%	10%	46%	9%	3%	4%	16%	19%	18%	38%	42%	25%	20%
Gambia	62.0	15%	60%	14%	7%	20%	40%	1%	0%	3%	4%	25%	31%	56%	55%	18%	20%

ANNEX 2: EARMARKED-AT-SOURCE AND NON-EARMARKED ODA IN IDA-ELIGIBLE COUNTRIES, 2001-06 (AVERAGE)

Country	Average Annual ODA (\$ millions)	ODA/ GNI	Share of Country Program mable ODA	Earmarked-at-source as % of Country ODA				Non-earmarked as % of Country ODA				Unspecified as % of Country ODA			Earmarked-at-source and country programmable as % of		
				Stand-alone TC	Emergency, incl Food Aid	Global Funds	Total	General Budget Support	Sector Program	Debt Relief	Total	Investment Projects	Other	Total	CPA	Rev	Exp
Georgia	365.7	7%	74%	39%	14%	2%	55%	6%	8%	0%	14%	18%	12%	30%	56%	8%	9%
Ghana	1408.9	12%	61%	10%	2%	3%	16%	16%	8%	18%	42%	23%	19%	42%	22%	6%	4%
Guinea	290.5	7%	52%	22%	13%	4%	38%	4%	0%	13%	16%	22%	23%	45%	50%	23%	11%
Guinea-Bissau	90.1	35%	50%	18%	9%	4%	31%	3%	2%	18%	23%	23%	23%	46%	44%	NA	NA
Guyana	123.3	16%	54%	21%	4%	12%	37%	7%	1%	7%	15%	13%	35%	48%	61%	12%	10%
Haiti	467.2	8%	59%	32%	19%	10%	61%	4%	1%	1%	6%	12%	21%	33%	71%	20%	17%
Honduras	679.9	8%	42%	14%	6%	2%	22%	4%	6%	21%	31%	15%	31%	46%	39%	7%	6%
India	3559.8	0%	77%	18%	8%	2%	28%	3%	2%	0%	5%	53%	14%	67%	26%	0%	0%
Kenya	984.5	4%	73%	28%	9%	13%	50%	2%	6%	4%	12%	25%	14%	38%	55%	8%	7%
Kiribati	20.4	9%	75%	47%	0%	2%	50%	0%	1%	0%	1%	24%	25%	50%	67%	5%	5%
Kyrgyz Rep.	213.9	12%	67%	38%	10%	4%	52%	3%	1%	4%	8%	20%	20%	40%	63%	20%	19%
Laos PDR	300.9	13%	60%	22%	2%	4%	29%	5%	3%	1%	8%	26%	37%	63%	44%	30%	22%
Lesotho	99.0	6%	57%	17%	4%	12%	33%	4%	5%	0%	10%	19%	39%	57%	51%	3%	4%
Liberia	190.7	36%	33%	23%	58%	5%	86%	0%	1%	4%	5%	4%	5%	10%	84%	NA	NA
Madagascar	840.4	15%	47%	12%	7%	3%	22%	9%	5%	19%	33%	18%	27%	45%	31%	13%	10%
Malawi	594.3	27%	64%	22%	11%	8%	41%	6%	5%	6%	17%	23%	19%	42%	47%	25%	24%
Maldives	36.8	5%	46%	11%	25%	3%	39%	0%	1%	0%	1%	32%	29%	61%	30%	1%	1%
Mali	688.5	14%	72%	19%	2%	3%	24%	19%	13%	7%	39%	19%	19%	37%	30%	13%	11%
Mauritania	302.8	16%	51%	15%	7%	2%	24%	2%	2%	15%	19%	30%	26%	57%	33%	18%	20%
Moldova	181.2	6%	74%	39%	14%	5%	57%	7%	1%	0%	8%	23%	13%	35%	59%	6%	6%
Mongolia	220.9	16%	57%	31%	8%	2%	41%	1%	2%	0%	3%	21%	35%	56%	58%	13%	14%
Mozambique	1590.3	29%	60%	14%	5%	4%	23%	12%	12%	14%	38%	17%	21%	38%	30%	17%	14%
Myanmar	121.1	NA	42%	23%	23%	5%	51%	0%	3%	11%	14%	11%	24%	35%	66%	NA	NA
Nepal	568.8	6%	58%	26%	5%	2%	33%	3%	6%	4%	13%	20%	33%	54%	49%	15%	9%
Nicaragua	1024.7	19%	38%	11%	4%	1%	16%	5%	13%	27%	45%	9%	30%	40%	30%	11%	10%
Niger	510.5	15%	58%	10%	8%	4%	23%	20%	3%	15%	38%	21%	18%	39%	25%	28%	28%
Nigeria	3126.8	4%	52%	22%	1%	3%	26%	0%	2%	29%	32%	25%	17%	42%	47%	7%	7%
Pakistan	3184.9	2%	53%	11%	10%	1%	21%	26%	3%	20%	49%	13%	17%	30%	22%	2%	1%
Papua New Guinea	330.8	7%	68%	43%	2%	2%	47%	0%	1%	0%	1%	22%	30%	52%	67%	8%	9%
Rwanda	531.1	23%	71%	22%	6%	15%	43%	15%	2%	4%	21%	17%	19%	36%	52%	35%	32%

ANNEX 2: EARMARKED-AT-SOURCE AND NON-EARMARKED ODA IN IDA-ELIGIBLE COUNTRIES, 2001-06 (AVERAGE)

Country	Average Annual ODA (\$ millions)	ODA/ GNI	Share of Country Program mable ODA	Earmarked-at-source as % of Country ODA				Non-earmarked as % of Country ODA				Unspecified as % of Country ODA			Earmarked-at-source and country programmable as % of		
				Stand-alone TC	Emergency, incl Food Aid	Global Funds	Total	General Budget Support	Sector Program	Debt Relief	Total	Investment Projects	Other	Total	CPA	Rev	Exp
Samoa	47.2	13%	62%	40%	3%		43%	0%	3%	0%	3%	19%	35%	54%	65%	12%	26%
Sao Tome & Principe	34.4	18%	55%	39%	5%	5%	48%	1%	1%	14%	16%	9%	26%	36%	79%	15%	20%
Senegal	795.1	9%	54%	26%	2%	3%	30%	3%	5%	18%	25%	17%	27%	44%	53%	13%	11%
Sierra Leone	382.2	34%	58%	21%	20%	3%	44%	13%	3%	8%	25%	17%	14%	31%	41%	140%	38%
Solomon Islands	116.2	39%	70%	56%	9%	0%	65%	0%	4%	2%	6%	9%	20%	29%	80%	157%	104 %
Somalia	229.9	NA	33%	13%	53%	5%	71%	0%	1%	1%	2%	14%	13%	27%	54%	NA	NA
Sri Lanka	1048.6	3%	53%	9%	14%	1%	24%	2%	2%	2%	6%	39%	31%	70%	19%	2%	1%
St. Lucia	27.3	2%	63%	7%	5%	1%	13%	1%	0%	0%	1%	53%	32%	86%	13%	1%	1%
St.Vincent & Grenadines	16.6	2%	49%	7%	4%	1%	12%	1%	0%	2%	3%	41%	45%	86%	15%	1%	1%
Sudan	1147.6	4%	26%	20%	60%	2%	82%	0%	1%	0%	2%	3%	14%	17%	84%	5%	4%
Tajikistan	248.7	12%	52%	24%	24%	3%	50%	8%	2%	0%	10%	15%	25%	39%	52%	17%	18%
Tanzania	2013.9	14%	69%	10%	4%	7%	21%	19%	12%	13%	43%	21%	15%	35%	25%	13%	11%
Timor-Leste	234.2	41%	76%	49%	6%	1%	56%	5%	8%	0%	13%	14%	18%	31%	65%	13%	30%
Togo	70.4	3%	77%	37%	5%	18%	60%	4%	2%	14%	20%	15%	4%	20%	72%	10%	11%
Tonga	26.5	14%	81%	47%	9%	1%	56%	0%	10%	0%	10%	23%	11%	33%	59%	18%	13%
Uganda	1262.7	15%	70%	18%	10%	11%	38%	17%	7%	3%	26%	17%	18%	35%	41%	22%	19%
Uzbekistan	233.2	2%	83%	36%	7%	3%	47%	0%	1%	0%	1%	43%	9%	52%	47%	2%	2%
Vanuatu	53.9	13%	80%	52%	3%	1%	55%	3%	10%	0%	13%	15%	17%	32%	65%	38%	41%
Viet Nam	2632.9	4%	66%	10%	1%	1%	12%	7%	3%	0%	10%	45%	32%	77%	17%	2%	2%
Yemen	397.3	3%	48%	18%	10%	3%	32%	1%	0%	14%	15%	26%	28%	54%	44%	2%	2%
Zambia	1162.5	15%	57%	16%	4%	12%	32%	6%	10%	28%	44%	14%	11%	24%	48%	19%	18%
Zimbabwe	229.1	4%	65%	47%	23%	7%	77%	0%	1%	0%	1%	10%	12%	22%	83%	NA	NA

Source: OECD/DAC Creditor Reporting System. Data extracted on 2008/06/24 16:21 from OECD.Stat

Country Programmable Aid (CPA)= Free standing technical cooperation + Global program funds + General budget support + Sector program support + Investment Projects

Earmarked-at-source country programmable aid = Free standing technical cooperation + Global program funds

Emergency aid, incl food aid (EA) = developmental food aid + commodity assistance + emergency assistance and reconstruction + administrative costs of donors + support to refugees in donor countries.

ANNEX 3: EARMARKING THROUGH GLOBAL PROGRAM FUNDS IN IDA-ELIGIBLE COUNTRIES, 2001-07 (COMMITMENTS IN MILLIONS OF US\$)																		
	GFATM ^{a/}					GAVI ^{b/}					PEPFAR ^{c/}	GEF ^{d/}					FTI ^{e/}	All Sources
	HIV/AIDS	TB	Malaria	HSS	Total	Injection Safety	Immunization Services	New & underused vaccines support	Health System Strengthening	Grand Total	HIV/AIDS	Biodiversity	Climate Change	Multi-focal	Other	Total GEF Grant		
Afghanistan	1.01	3.45	14.57	3.13	22.15	8.80	1.68	10.40	6.70	27.58	0.00	0.98	0.20	0.00	0.00	1.18	0.00	50.90
Angola	86.12	10.87	0.00	0.00	96.99	15.03	1.48	4.58	0.00	21.10	0.00	0.34	0.00	0.00	0.00	0.34	0.00	118.43
Armenia	8.09	3.63	0.00	0.00	11.71	0.57	0.06	0.08	0.00	0.70	0.00	5.35	6.51	0.20	2.57	14.63	0.00	27.05
Azerbaijan	10.34	4.35	0.00	0.00	14.69	1.08	0.15	0.75	0.00	1.98	0.00	5.70	0.00	0.20	0.49	6.39	0.00	23.06
Bangladesh	33.71	71.01	18.59	0.00	123.30	20.83	8.12	21.90	0.00	50.84	0.00	0.00	8.74	0.22	0.50	9.46	0.00	183.61
Benin	40.77	8.64	15.55	0.00	64.96	16.71	0.42	0.09	0.00	17.22	0.00	4.85	0.30	0.23	0.49	5.87	0.00	88.04
Bhutan	1.50	1.74	3.78	0.00	7.02	0.57	0.03	0.00	0.00	0.60	0.00	0.96	0.84	0.22	7.96	9.98	0.00	17.60
Bolivia	14.95	5.30	5.11	0.00	25.36	0.00	0.87	0.07	0.00	0.95	0.00	0.90	0.00	0.20	0.48	1.58	0.00	27.88
Bosnia and Herzegovina	4.83	2.72	0.00	0.00	7.55	0.77	0.05	0.00	0.00	0.82	0.00	0.29	0.00	0.20	8.50	8.99	0.00	17.35
Burkina Faso	46.91	16.98	25.00	0.00	88.89	17.61	0.95	5.76	0.00	24.32	0.00	18.88	2.06	5.07	0.47	26.48	0.00	139.69
Burundi	41.01	7.40	39.09	0.00	87.50	17.17	0.42	2.04	2.70	22.33	0.00	0.21	0.30	0.23	5.75	6.48	0.00	116.32
Cambodia	83.32	9.44	32.69	1.84	127.29	7.24	0.69	1.34	1.85	11.11	0.00	7.84	6.38	0.23	0.49	14.94	0.00	153.34
Cameroon	76.06	5.80	46.75	0.00	128.62	12.15	1.03	5.97	1.86	21.01	0.00	10.83	0.00	0.20	6.85	17.88	22.50	190.01
Cape Verde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.95	0.30	0.23	0.30	4.78	0.00	4.78
Central African Republic	40.03	4.57	16.66	0.00	61.26	0.58	0.14	1.61	0.00	2.33	0.00	0.27	0.20	0.23	0.48	1.18	0.00	64.77
Chad	17.78	3.04	0.00	0.00	20.82	0.95	0.41	2.64	0.00	4.00	0.00	1.86	0.30	6.48	0.49	9.13	0.00	33.95
Comoros	1.14	0.00	2.49	0.00	3.62	0.36	0.03	0.06	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.08
Congo (Democratic Republic of the)	113.65	30.76	53.94	0.00	198.34	23.61	3.26	21.93	21.53	70.33	0.00	0.11	0.30	0.23	0.00	0.63	0.00	269.30
Congo (Republic of the)	12.04	0.00	0.00	0.00	12.04	1.36	0.26	1.12	0.00	2.74	0.00	0.19	0.10	0.20	0.50	0.99	0.00	15.77
Cote d'Ivoire	0.00	0.00	0.00	0.00	0.00	12.56	3.22	0.00	0.00	15.78	79.37	0.10	0.10	0.20	0.28	0.68	0.00	95.82

ANNEX 3: EARMARKING THROUGH GLOBAL PROGRAM FUNDS IN IDA-ELIGIBLE COUNTRIES, 2001-07 (COMMITMENTS IN MILLIONS OF US\$)

	GFATM ^{a/}					GAVI ^{b/}					PEPFAR ^{c/}	GEF ^{d/}					FTI ^{e/}	All Sources
	HIV/AIDS	TB	Malaria	HSS	Total	Injection Safety	Immunization Services	New & underused vaccines support	Health System Strengthening	Grand Total	HIV/AIDS	Biodiversity	Climate Change	Multi-focal	Other	Total GEF Grant		
Djibouti	14.72	1.14	2.61	0.00	18.47	0.26	0.03	0.11	0.00	0.41	0.00	0.00	0.20	0.23	0.38	0.80	6.00	25.69
Equatorial Guinea	9.82	0.00	12.91	0.00	22.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.73
Eritrea	30.49	5.47	13.85	0.00	49.82	2.60	0.14	0.44	0.00	3.18	0.00	0.17	2.47	0.22	0.00	2.86	0.00	55.86
Ethiopia	541.29	38.77	132.99	0.00	713.05	72.95	3.29	15.82	68.84	160.90	208.84	0.00	5.51	0.15	0.50	6.16	0.00	1,088.95
Gambia	14.57	14.57	23.01	0.00	52.14	4.44	0.13	0.46	0.00	5.03	0.00	1.18	0.30	0.15	0.45	2.07	13.40	72.65
Georgia	18.26	14.85	2.39	0.00	35.50	0.75	0.07	0.14	0.07	1.02	0.00	0.99	4.71	0.20	0.40	6.29	0.00	42.82
Ghana	111.27	37.16	47.74	0.00	196.17	43.93	0.86	3.68	0.00	48.46	0.00	0.00	7.45	1.05	1.44	9.94	19.00	273.56
Guinea	14.24	4.06	24.23	0.00	42.53	1.78	0.65	2.92	0.00	5.35	0.00	9.55	0.30	0.23	7.43	17.50	0.00	65.38
Guinea-Bissau	3.36	2.65	7.05	0.00	13.06	0.20	0.11	0.41	0.00	0.72	0.00	5.41	0.20	0.00	0.45	6.06	0.00	19.84
Guyana	20.15	1.17	3.92	0.00	25.24	1.04	0.00	0.02	0.00	1.06	48.43	0.00	0.00	0.20	0.00	0.20	12.00	86.93
Haiti	109.73	14.03	14.43	0.00	138.20	0.00	0.40	1.26	0.00	1.65	127.23	0.00	0.29	0.21	0.38	0.88	0.00	267.96
Honduras	52.44	6.60	7.93	0.00	66.97	0.00	0.46	0.05	0.00	0.50	0.00	3.01	3.80	4.72	0.45	11.97	0.00	79.44
India	232.41	72.65	63.54	0.00	368.60	33.13	25.93	0.00	0.00	59.06	0.00	10.01	13.68	0.20	0.00	23.89	0.00	451.55
Kenya	109.66	20.88	109.45	0.00	239.99	82.18	1.25	4.22	3.74	91.38	312.19	1.76	2.08	9.50	11.73	25.06	72.60	741.22
Kirbati	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	2.10	0.23	0.40	2.92	0.00	2.92
Kosovo (Serbia)	2.47	3.92	0.00	0.00	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.39
Kyrgyzstan	28.92	7.02	3.43	0.00	39.36	1.61	0.18	0.07	0.42	2.28	0.00	0.00	0.43	0.20	1.50	2.12	9.00	52.76
Lao PDR	14.57	11.52	35.68	0.00	61.77	3.68	0.26	1.43	0.00	5.37	0.00	1.00	5.63	0.23	0.50	7.35	0.00	74.49
Lesotho	49.95	8.80	0.00	0.00	58.75	0.39	0.11	0.20	0.00	0.69	0.00	0.00	3.11	0.23	0.49	3.82	7.20	70.47
Liberia	19.66	10.94	24.84	0.00	55.44	0.74	0.17	2.05	1.02	3.99	0.00	1.26	0.20	0.22	0.37	2.04	0.00	61.47
Madagascar	21.02	8.32	72.97	0.00	102.31	15.63	0.52	3.24	0.00	19.40	0.00	14.69	0.20	0.00	0.50	15.39	27.00	164.10
Malawi	201.40	0.00	18.82	22.64	242.86	48.79	0.55	0.99	0.00	50.34	0.00	0.00	0.30	0.22	0.50	1.02	0.00	294.22

ANNEX 3: EARMARKING THROUGH GLOBAL PROGRAM FUNDS IN IDA-ELIGIBLE COUNTRIES, 2001-07 (COMMITMENTS IN MILLIONS OF US\$)

	GFATM ^{a/}					GAVI ^{b/}					PEPFAR ^{c/}	GEF ^{d/}					FTI ^{e/}	All Sources
	HIV/AIDS	TB	Malaria	HSS	Total	Injection Safety	Immunization Services	New & underused vaccines support	Health System Strengthening	Grand Total	HIV/AIDS	Biodiversity	Climate Change	Multi-focal	Other	Total GEF Grant		
Maldives	2.66	0.00	0.00	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	2.73	0.95	0.23	0.00	3.91	0.00	6.56
Mali	52.34	11.16	11.81	0.00	75.31	13.84	0.71	5.38	0.00	19.93	0.00	12.19	5.91	0.23	0.09	18.41	0.00	113.65
Mauritania	6.57	7.17	7.21	0.00	20.96	0.61	0.21	0.99	0.00	1.82	0.00	0.15	3.10	0.23	6.77	10.25	9.00	42.02
Moldova	18.13	5.68	0.00	0.00	23.81	0.50	0.09	0.00	0.00	0.59	0.00	1.84	1.10	0.20	18.12	21.26	4.40	50.06
Mongolia	12.15	9.32	0.00	0.00	21.47	1.25	0.11	0.02	0.00	1.38	0.00	0.00	0.00	0.00	0.00	0.00	8.20	31.04
Mozambique	121.12	14.20	53.74	0.00	189.07	19.03	0.89	0.92	0.00	20.85	155.51	10.35	3.38	0.21	0.48	14.42	0.00	379.84
Myanmar	6.10	2.74	2.49	0.00	11.33	14.10	3.10	4.60	0.00	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.13
Nepal	10.37	10.13	16.55	0.00	37.04	13.96	1.29	3.31	0.00	18.56	0.00	7.14	0.10	0.20	0.47	7.91	0.00	63.51
Nicaragua	10.13	2.81	5.59	0.00	18.53	0.00	0.46	0.00	0.00	0.46	0.00	1.19	8.57	0.95	3.80	14.50	14.00	47.49
Niger	25.07	13.70	59.22	0.00	97.99	0.00	1.03	9.04	0.00	10.07	0.00	0.21	0.30	4.58	4.71	9.79	13.00	130.85
Nigeria	74.40	25.57	95.54	0.00	195.51	13.54	0.00	47.32	0.00	60.86	301.62	8.35	1.00	0.20	10.81	20.36	0.00	578.35
Pakistan	8.31	36.51	17.97	0.00	62.80	67.27	9.08	35.60	0.00	111.94	0.00	5.12	3.58	0.20	2.84	11.74	0.00	186.48
Papua New Guinea	17.55	5.01	20.11	0.00	42.67	1.62	0.00	0.43	0.00	2.05	0.00	3.55	0.99	0.23	0.00	4.77	0.00	49.48
Rwanda	166.83	13.24	66.74	33.95	280.76	23.63	0.37	2.86	2.17	29.04	127.43	5.77	0.53	4.65	0.37	11.32	26.00	474.55
Sao Tome and Principe	0.51	0.00	7.60	0.00	8.11	0.17	0.02	0.06	0.00	0.25	0.00	0.00	0.55	0.23	0.37	1.15	0.00	9.51
Senegal	23.53	4.38	61.29	0.00	89.20	13.36	0.78	2.61	0.00	16.75	0.00	5.34	5.30	4.35	0.50	15.48	0.00	121.43
Sierra Leone	27.45	10.04	18.90	0.00	56.38	3.47	0.34	1.96	0.00	5.77	0.00	0.28	0.20	0.22	0.40	1.09	0.00	63.24
Solomon Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.23	0.00	0.43	0.00	0.43
Somalia	24.92	13.83	25.98	0.00	64.73	0.00	0.31	1.22	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.26
Sri Lanka	1.01	9.65	10.95	0.00	21.61	2.68	0.84	0.00	0.00	3.52	0.00	10.53	8.10	0.20	0.50	19.33	0.00	44.46
St. Lucia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.10	0.19	0.40	0.97	0.00	0.97
St. Vincent and	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.10	0.23	0.00	0.53	0.00	0.53

ANNEX 3: EARMARKING THROUGH GLOBAL PROGRAM FUNDS IN IDA-ELIGIBLE COUNTRIES, 2001-07 (COMMITMENTS IN MILLIONS OF US\$)

	GFATM ^{a/}					GAVI ^{b/}					PEPFAR ^{c/}	GEF ^{d/}					FTI ^{e/}	All Sources
	HIV/AIDS	TB	Malaria	HSS	Total	Injection Safety	Immunization Services	New & underused vaccines support	Health System Strengthening	Grand Total	HIV/AIDS	Biodiversity	Climate Change	Multi-focal	Other	Total GEF Grant		
Grenadines																		
Sudan	58.92	29.90	58.31	0.00	147.13	3.54	1.99	6.56	0.00	12.09	0.00	0.10	0.20	0.23	0.50	1.03	0.00	160.25
Swaziland	98.38	2.51	1.82	0.00	102.71	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.18	0.00	0.39	0.00	103.10
Tajikistan	15.39	8.80	5.38	0.00	29.57	1.56	0.35	1.04	0.00	2.95	0.00	2.19	0.10	0.29	0.49	3.07	9.20	44.79
Tanzania	377.37	17.46	184.47	0.00	579.29	27.02	1.49	7.99	0.00	36.51	226.36	25.90	3.87	0.23	0.50	30.49	0.00	872.65
Timor-Leste	3.68	0.97	2.88	0.00	7.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.23	8.20	15.95
Togo	44.75	5.54	23.32	0.00	73.61	0.65	0.38	2.15	0.00	3.18	0.00	0.00	0.30	0.23	0.50	1.03	0.00	77.81
Tonga	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.10	0.23	0.39	1.03	0.00	1.03
Uganda	189.18	12.80	141.07	0.00	343.04	76.28	1.39	9.23	0.00	86.90	362.52	4.32	0.30	0.13	0.49	5.24	0.00	797.69
Uzbekistan	21.08	13.27	2.42	0.00	36.77	4.58	0.85	0.00	0.00	5.43	0.00	1.96	0.00	0.20	0.00	2.16	0.00	44.35
Vanuatu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.20	0.23	0.39	1.72	0.00	1.72
Viet Nam	22.22	11.61	22.79	0.00	56.62	13.00	3.23	0.51	3.65	20.39	54.40	15.77	25.03	0.20	0.50	41.49	0.00	172.90
Yemen	14.46	6.15	11.88	0.00	32.49	23.84	1.20	3.44	0.38	28.86	0.00	0.10	1.20	0.23	0.47	1.99	20.00	83.34
Zambia	326.64	49.95	82.00	0.00	458.59	28.91	0.77	3.86	2.34	35.89	313.88	10.72	3.47	0.97	0.06	15.23	0.00	823.58
Zimbabwe	50.03	9.23	28.68	0.00	87.94	0.10	1.08	1.27	0.00	2.45	0.00	1.09	0.10	0.16	0.50	1.84	0.00	92.24
Grand Total	4,084.92	837.51	1,942.70	61.56	6,926.69	840.56	90.72	270.23	117.28	1,318.78	2,317.76	251.59	158.48	54.51	119.86	584.4	300.70	11,448.37

Sources and Notes:

a/ Data refers to cumulative committed funds since the establishment of GFATM in 2002. See <http://www.theglobalfund.org/programs/search.aspx?search=3&lang=en>

b/ Data refers to cumulative approved support up to end-2007. See GAVI Alliance Progress Report 2007 (<http://www.gavialliance.org/resources/2007GAVIreport.pdf>)

c/ Data refers to cumulative "obligated amount" over 2004-06. See Nandini Oommen, Michael Bernstein and Steve Rosenzweig, 2008, " New PEPFAR Data: The Numbers Behind the Stories" , and http://www.cgdev.org/section/initiatives/active/hivmonitor/pepfar_data

d/ Data refers to cumulative approved projects over 2001-06. See <http://gefonline.org/home.cfm>

e/ Data refers to cumulative grant agreements signed up to end-2007. See FTI Secretariat http://www.education-fast-track.org/library/AR2007_Eng6.pdf

ANNEX 4: POSSIBLE APPROACHES TO ASSESSING COUNTRY LEVEL IMPACT OF EARMARKING

A survey of the literature (see **Annex 1**) suggests that one can consider two approaches:

Approach 1: A comprehensive approach to evaluating the impact of earmarked aid would consider its effect on the fiscal policy of recipient governments, including the implications for revenue, expenditure, and public sector borrowing decisions. Two examples of such studies are Mavrotas and Quattara (2006) and Petersson (2007), which use formal modeling methods to assess the impact of earmarked aid. The former examines the impact of different types of aid—namely project aid, program aid, technical assistance, and food aid—on the fiscal policy of the aid recipient economy by using time-series data for Cote d’Ivoire over the period 1975-99. The latter, using a sample of 57 aid recipient countries, examines whether earmarked non-fungible sectoral aid works better than fungible aid in terms of promoting economic growth and poverty reduction. A similar assessment can be undertaken for aid-dependent countries, provided there is good data.

Approach 2: If Approach 1, which tends to be data intensive, is not feasible, the impact of earmarking may be studied in its less rigorous and qualitative form in terms of its effect on: (i) *aggregate fiscal discipline*, including the types and composition of earmarked aid in the country, the extent to which earmarked funds are provided on- or off-budget, and to what extent they weaken government fiscal discipline; (ii) *allocative efficiency* issues including the extent to which donor priorities are aligned with the government’s priorities (as articulated in a PRSP or a similar strategic document), whether there may be “overspending” in sectors that are earmarked and under-spending in others, and the rate at which earmarked resources are actually translated into results; and (iii) *transaction or administrative costs* associated with earmarked funds, including staff time and other indirect effects (e.g., undermining government ownership).

In Approach 2, earmarked aid can be thought of as having adverse impact at three stages. *First*, to the extent that earmarked funds tend to be provided off-budget, they may undermine aggregate fiscal discipline and strain the capacity of weak PFM systems in LICs.³³ *Second*, aid earmarking may entail *allocative inefficiency*. Overspending in sectors that donors have earmarked money is possible at the expense of other sectors that the government may deem essential for poverty reduction.³⁴ The priorities, as spelled out in a country’s PRSP or its development strategy, may then be used as a benchmark against which qualitative evaluation may be done. *Third*, earmarking may lead to transaction or administrative costs—costs arising from the preparation, negotiation, implementation, monitoring of earmarked aid—which in turn contribute to *operational inefficiency*.³⁵ While a measurement of aid transaction costs is not easy,³⁶ it may still be

³³ See, for example, IMF, “Fiscal Policy Response to Scaled-Up Aid: Macro-Fiscal and Expenditure Policy Challenges” June 2007.

³⁴ Ibid.

³⁵ Transaction costs take three forms: (i) Administrative costs, in particular staff time; (ii) Indirect costs, including the impact of the delivery mechanism on the achievement of development goals (e.g., , undermining government ownership); and (iii) Opportunity costs, i.e. benefits forgone from alternative

possible to assemble country evidence on the perceived burden of managing earmarked aid (e.g., donor procedures for reporting, auditing, monitoring, etc.) that would yield useful qualitative insights.

applications of the resources consumed in the transaction (e.g., trade off between senior officials' time between aid management and policy development).

³⁶ Wang (2003) offers a comprehensive survey of literature to date in measuring transactions costs. UNDP and DFID (2000), found that government officials were unable 'to break down or cost their time according to the distinct activities identified'; and there were too many uncertainties in distinguishing which costs were additional to normal costs of running government, which costs were essential and which unnecessary, and which costs were direct (e.g., , administrative staff time) and which were indirect (e.g., , undermining government ownership and policy consistency).

