

#### **CHAPTER 4:**

# IMPACT OF DEVELOPMENT ASSISTANCE FOR HEALTH ON COUNTRY SPENDING

As external health aid has grown in importance in recent years, global health experts have discussed the role that development assistance for health (DAH) plays in defining the agenda for health spending by developing countries. These discussions have relied on mostly anecdotal evidence and limited data.<sup>57</sup> In this chapter, we will discuss our findings regarding the effect that DAH has on country spending for health in low- and lower-middle-income countries.

Chapter 3 showed that there were notable differences at the country level between the databases of the International Monetary Fund (IMF) and the World Health Organization (WHO), yet the overall pattern remained similar. Large parts of Latin America, the Middle East, and Asia showed increasing government commitment to health as measured by government health expenditure as source (GHE-S) as a percentage of general government expenditure (GGE). Much of sub-Saharan Africa, however, showed decreasing commitment. These trends can be seen in the maps in Figures 31 and 32.

The maps reveal how regional averages can mask wide variation in the performance of different countries. Malawi, for example, shows an increasing commitment to health, as measured by GHE-S against GGE, but it is part of a region with a decreasing commitment to health. In West Africa, there are significant differences in funding trends among countries. In the Middle East, Pakistan is notable as one of the few countries showing a consistent decline in GHE-S as a percentage of GGE while being surrounded by countries that have increased their commitment to health.

To illustrate these variations in spending patterns, it is worth comparing the maps in Figures 31 and 32 with the map of DAH by country in Figure 33.

For the most part, the countries that have seen the most substantial increases in DAH are also the countries that have seen declines in country spending on health programs.

### Statistical analysis of DAH and country spending

To test whether this connection between DAH and country spending on health is significant, we applied several statistical models to the data. We were able to identify three factors that had an impact on country spending: DAH given directly to governments, DAH given to non-governmental organizations (NGOs) operating within those countries, and GGE. We found that, on average, for every \$1 of DAH given directly to governments, those governments decreased their own health spending by a range of 43 cents to \$1.14.

In analyzing both WHO and IMF datasets, the results were substantially the same. According to WHO data, for every \$1 of DAH given to governments in developing countries, the governments reduced spending from their own sources by 46 cents. The results from the IMF database were nearly identical, showing a reduction in spending of 43 cents. This finding was confirmed by subgroup analyses for three groups of countries: low-income countries, low- and lower-middle-income countries, and sub-Saharan African countries.

This finding suggests that global health funders would need to increase their giving to accomplish their goals. For example, the High Level Taskforce on Innovative International Financing for Health Systems asked for \$30 billion to save the lives of 10 million mothers and children in developing countries. <sup>63</sup> Based on our research, they actually would need to spend at least \$53 billion – and perhaps considerably more – to achieve their goal if they channel funds directly to governments.

FIGURE 31:
Percentage change in GHE-S as a share of GGE for countries in Global Burden of Disease developing regions (based on IMF data), 1999-2002 compared with 2003-2006

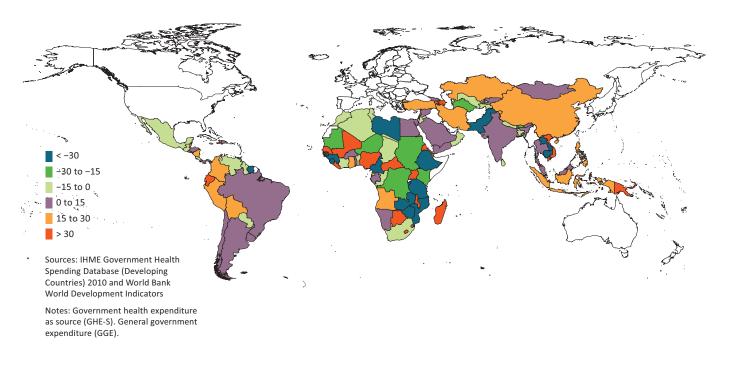


FIGURE 32:
Percentage change in GHE-S as a share of GGE for countries in Global Burden of Disease developing regions (based on WHO data), 1999-2002 compared with 2003-2006

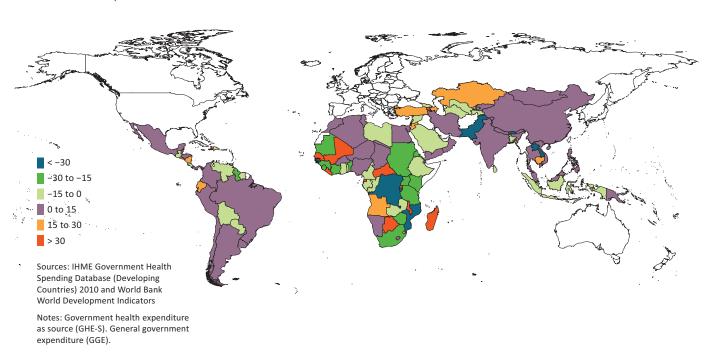
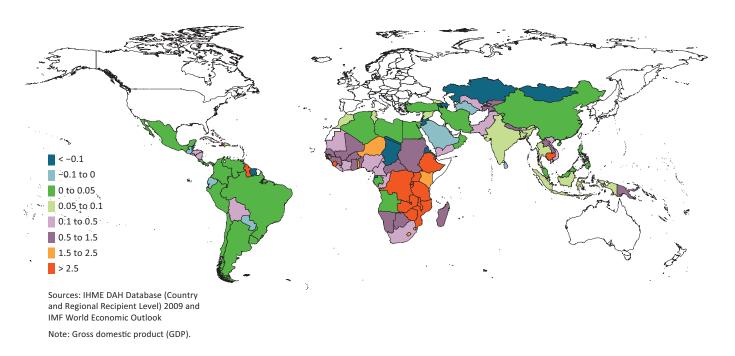


FIGURE 33: Percentage change in DAH as a share of GDP in Global Burden of Disease developing regions, 1999-2002 compared with 2003-2006



Whether the movement of funding to areas other than health has an overall negative or positive effect on social welfare can only be answered by more information about the programs on which the budgets of ministries of health are spent. The funds could be going toward increasing educational attainment, which has been shown to have an enormous impact on health outcomes.<sup>64</sup> The funds also could be going to infrastructure development, poverty alleviation, or other underfinanced government programs that may improve health. However, governments could be taking their own money out of the health budget to finance sectors with uncertain health impacts, such as the military or industrial development. The current state of reporting by many recipient governments does not help answer the question.

The finding that some governments in low-resource settings spend their own resources elsewhere was not as surprising as our finding in regard to NGOs. We found that for every \$1 of DAH given to NGO channels, on average, country governments appeared to increase their spending on health by about 60 cents. The question of how governments would react to spending channeled through NGOs has not been widely studied. Some global health observers have speculated that NGOs increase the competition for human resources and, therefore, may force governments to increase salaries for their own staffs.65,66 NGOs also may bring increased attention to health problems within a country and, in doing so, increase funding through both public and private channels. Before policymakers react to this finding by channeling more DAH through NGOs, careful research is needed to determine the exact drivers of this trend and the risks and benefits of channeling DAH through NGOs.

## Connection between HIV/AIDS and country spending on health programs

To help understand why DAH is not having a more dramatic impact on HIV/AIDS, we examined the relationship between the HIV/AIDS disease burden and country spending.

The push to control the HIV/AIDS epidemic is a key component of increases in DAH worldwide. Yet despite promising therapies that are reaching more HIV-positive patients than in previous years, the HIV/AIDS epidemic remains dauntingly large in much of the developing world.

We found that the largest reductions in the fraction of GHE-S were noted for parts of sub-Saharan Africa with the largest HIV/AIDS epidemics and the largest contributions of DAH to government.

The results of the analysis of the WHO and IMF databases were remarkably consistent even if the data varied substantially by country and year. We expected HIV seroprevalence to have an impact on the amount that governments spend of their own funds on health.<sup>58</sup> Instead, we found no significant association in these analyses with the amount spent.

We also reasoned that governments might need time to respond appropriately to the rise of the epidemic. Redirecting spending cannot always be accomplished quickly. We built into our model the assumption that it would take three years for governments to respond to an increased prevalence of HIV. Even with this assumption, we still found no association.

## Implications of the effect of DAH on developing country spending on health

The debate over the effect of DAH on country spending for health tends to center around how governments actually allocate resources for health compared to how donors, civil society organizations, and others perceive that governments should spend that funding, whether it comes from DAH or from domestic resources. These were the main themes at the symposium in London in April 2010 where researchers from the Institute for Health Metrics and Evaluation (IHME), representatives from donor and recipient countries, and finance experts discussed the relationship between DAH and country spending.<sup>12</sup>

On one side, some researchers, finance ministers, and others working in the field of development say governments should make their own allocation decisions based on the conditions unique to their populations and economic state. 67 Devi Sridhar at All Souls College at the University of Oxford recently wrote that DAHfunded projects in developing countries "are largely driven by donor agendas rather than the country's own needs and priorities. However ambitious or wellintentioned the initiative might be, it becomes difficult in this environment for governments to develop and implement sound national plans for their country."68 The IMF has taken the view that countries could use DAH to increase their reserves because aid flows can be unreliable from year to year.<sup>69</sup> In this view, DAH should be considered budget support that enables countries to set their own priorities, whether that means better schools, new roads, or health programs. Some have drawn the analogy of a national government sending funding to states or provinces for road building. In this scenario, local governments are not necessarily expected to spend their own money on the same roads but are free to spend their money on schools, public safety, and other priorities.

On the other side of the debate, some who have spent time working in health programs for bilateral agencies, country governments, or NGOs tend to believe that, regardless of a country's other priorities, funding given for health programs should supplement existing country spending on health, not replace it. Karen Grepin at New York University's Wagner Graduate School of Public Service wrote in response to IHME's country spending paper: "Donor aid might be squeezing out spending on systems in a great way. To the Ministry of Finance, a dollar is a dollar, but to a patient in Africa, a free bed net might be a poor substitute for a doctor to deliver a baby."70 To those on this side of the debate, there is a moral urgency to address health needs in certain countries, particularly related to the HIV/AIDS epidemic, that imposes an obligation on governments to devote as much funding as possible to health concerns. To take up the same analogy, the national government in this case would tell the states or provinces that they had to provide matching funds for any new federally funded road construction.

What's clear is that more research needs to be conducted into the most effective ratio for DAH as it relates to country spending. Equally important would be efforts to improve the quality of data on country spending. The main limitation for IHME's country spending paper was that the data are far from complete. Multiple imputation can compensate for some amount of missing data, but there are real concerns that systematic errors could be skewing the country spending picture. The project-level databases from WHO and IMF leave large gaps in the funding picture. We also had difficulties ascertaining the exact amount of DAH channeled directly to governments and the exact amount of DAH channeled through NGOs.

During the prepublication process for the April 2010 *Lancet* publication, reviewers asked that we take another look at how much DAH is actually going to governments versus NGOs. In response, we performed a series of sensitivity analyses that relied on a much stricter assumption of the amount of DAH going to government. Using this narrower definition of DAH, our results indicated that a larger amount of country spending for health was redirected to other sectors compared to our initial results based on a broader definition of DAH. That finding underscored for us that our initial results were sound. For more information about the sensitivity analysis, please visit our online Methods Annex at:

http://www.healthmetricsandevaluation.org/publications/financing\_global\_health\_2010\_methods\_IHME.pdf

We also sent our researchers to Zambia and Malawi to conduct interviews with donors, ministries of health, and ministries of finance. In both cases, in-country interviews confirmed the results we saw in the data.

We believe that, if anything, we are overestimating the amount of country spending on health programs, and we have called for a more rigorous approach to collecting and reporting both DAH sent to governments and country spending on health programs. Taking into account the full scope of spending on health programs, nearly 90% of recipient countries in our analysis have been increasing their spending on health. That funding is a mixture of their own resources and DAH. For health advocates, this is undoubtedly good news. At the same time, key health interventions are scaling up, including antiretroviral medicines to combat HIV/AIDS, insecticide-treated bed nets to prevent malaria, childhood immunizations for a range of diseases, and skilled birth attendance programs to prevent maternal and newborn deaths. 71-74 There is accumulating evidence that these interventions are having a powerful impact. In this context, it is all the more important to understand what drives spending on health programs in developing countries. As the dominant source of money for health, it will continue to be the engine for accelerating progress.