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Fiscal Space and Policy Space for Financing the Global AIDS Response to 2031

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Abstract

Many factors will affect whether the fiftieth anniversary of the HIV and AIDS pandemic will be an occasion for congratulations or despair. Among the more important factors will be the fiscal space and policy space available to governments from now until 2031. Using projections of population, GDP per capita, public revenues, and likely health spending in low-, middle-, and high-income countries, we estimate likely future resource availability for HIV and AIDS programs. Spending for HIV will be constrained by other priorities for public spending, whether by governments in recipient countries or by donor readiness to provide official or philanthropic assistance. Spending on health is constrained by the level of per capita income or product.

The analysis identifies two regions, sub-Saharan Africa and South Asia, which are likely to continue to have too little money available for public purposes and specifically for HIV prevention, care, and treatment. Many countries in these regions, particularly those with generalized epidemics, will continue to require substantial donor assistance for HIV and AIDS over the next two decades. Middle-income countries in these and other regions show reasonable prospects of expanding their public sector and health budgets enough to sustain HIV programs with minimal donor aid.

Having enough money will not by itself be enough to assure that adequate programs and services are delivered in low- and middle-income countries. In far too many settings, especially in those countries with concentrated epidemics among most-at-risk populations that suffer from stigma and discrimination, there may be inadequate policy space to permit governments to finance the most cost-effective and harm-reducing interventions. Unless attitudes toward helping these most-at-risk populations change, there will be a significant role for multilateral financial organizations to play in the fight against AIDS even in middle-income countries.

The high-income countries will not grow as fast as many middle-income countries over the years from now to 2031. To assure an adequate amount of donor support for HIV and AIDS, those countries will have to reach for the elusive target of spending 0.7 percent of their GDP on aid, and they will have to increase the share of that aid allocated to HIV and AIDS programs. The prospect of at least some middle-income countries sustaining their own programs and providing aid to their less fortunate neighboring low-income countries may help build an adequate funding base that seems so far not to have been attained.

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Acronyms

EAP	East Asia and Pacific region
ECA	Europe and Central Asia
LAC	Latin America and the Caribbean
MNA	Middle East and North Africa
SAS	South Asia
SSA	Sub-Saharan Africa
HIC	High-income countries
OECD	Organization of Economic Cooperation and Development
GDP	Gross Domestic Product

Introduction

Many factors will affect whether the fiftieth anniversary of the HIV and AIDS pandemic will be an occasion for congratulations or despair. The most important indicators of success or failure will be the numbers infected annually, total numbers of persons living with HIV, treatment coverage, and mortality. Much of this conjuncture will depend on the breadth and quality of prevention and treatment programs over the next two decades, especially the effectiveness of prevention and its ability to slow down the numbers of persons becoming infected who will need treatment. Fiscal space will help to determine which countries will be able to finance their AIDS response in 2031 with internal resources, and will also influence the capacity of rich countries to help using donor assistance.

Among the more important factors will be the fiscal space and policy space available to governments from now until 2031. Fiscal Space is a term often linked to the IMF and its attention to borrowers' balance between revenues and expenditures. It allows us to anticipate the amount of money available for interventions that can bring the pandemic under control, if not to full elimination. Policy Space is a less common term, but one that suggests the importance of government decisions on how to deploy available funds. It also reminds us of constraints imposed by popular opinion on political decision makers and linked stakeholders. These constraints influence the choices available and thereby the outcomes reached by the decision makers.

Defining fiscal space for HIV and AIDS

This note reviews a remarkable set of information about fiscal space and how it may unfold over the next two-plus decades. The World Bank and IMF prepare and periodically update projections of GDP per capita and population for virtually all of their member countries.¹ These basic data can be combined with cross-section information on recent ratios of health spending and government revenue excluding grants to project likely public revenue availability and health spending. These ratios, once projected into the future, permit us to illustrate likely fiscal space available that would permit levels of spending out of each country's own future resources between the years 2009 to 2030 (virtually reaching the target date of 2031).

The data available as sketched out in the previous paragraph can also serve an important additional purpose. High-income countries are also members of the IMF and World Bank and projections are available from this same source to project GDP, population and GDP per capita, enabling us to project the fiscal space available to the principal donors from which to finance overseas development assistance. We can examine projections that assume maintenance of current (2005 or 2006, or even 2007) levels of donor assistance in aggregate, specifically for the health sector, and to some extent for HIV/AIDS programs as well. Another scenario can examine the optimistic projection of donors attaining the widely-discussed but rarely achieved goal of assigning 0.7 percent of GDP to international assistance.

¹ The Economist Intelligence Unit, a sister organization of *The Economist* weekly magazine, also prepares and makes available to clients similar projections. We have not as yet attempted to compare these two sources of projections.

The analyses can thus cover fiscal space allotted by low- and middle-income countries own growing capacity to pay for health and to finance those payments through their own national governments' tax revenues. It can also identify likely availability of donor assistance.

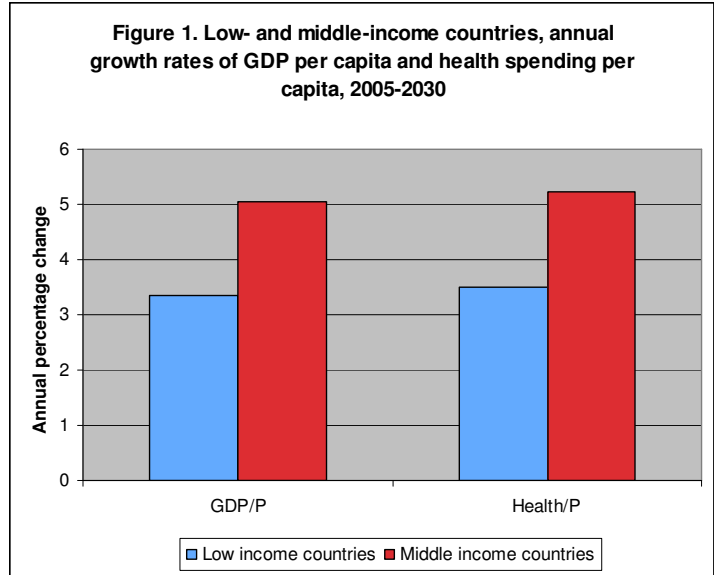
Policy space for HIV and AIDS

A more speculative topic: If fiscal space is expanding, will governments and individuals with money to spend agree to spend it on HIV and AIDS interventions? And if they do so, will they spend wisely, guided by sensible attention to choosing programs that yield a positive ratio of benefits to costs and are highly cost-effective in preventing new infections? These questions, addressed only briefly at the end of this note, are not answerable in any definitive way; we pose them principally to underline the challenges ahead as these two-plus decades unfold.

A key issue in policy space is that HIV and AIDS are all too often associated with persons and programs that some governments find difficult to address. Transmission of the disease is often associated with sex and drugs. These matters are difficult to confront for many governments. Notable successes in confronting political issues in Brazil, China, Mexico, Thailand, and Uganda, to name a few countries, must in future be replicated in many more countries if success in turning back the pandemic is to be achieved.

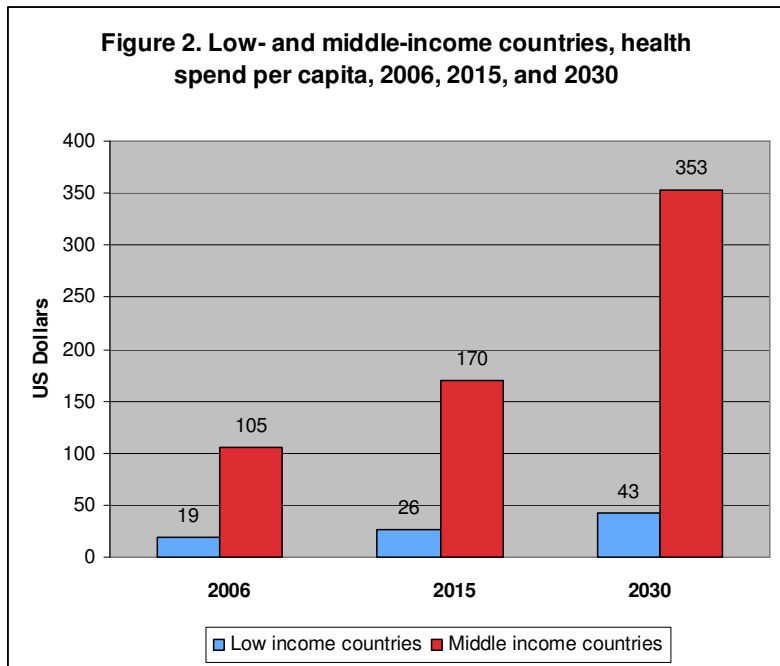
Growth Prospects, 2005-2030

Data made available by the World Bank Global Economic Prospects Group permit calculation of GDP per capita growth-rates for a quarter century to 2030 (see Figure 1). WHO data on health expenditures permits us to calculate 2006 health spending elasticities relative to incomes of 124 low- and middle-income countries. Applying these elasticities to projected per capita GDP growth yields the slightly growth-rates for health spending in these country groups. For example, GDP/P is projected to grow at a cumulative rate of 4.81 percent per annum over the quarter century, and per capita health spending will grow by 4.98 percent per annum. Note the substantial differences in the relatively slow growth of the low-income countries relative to the middle-income countries. Many low-income countries, especially those in sub-Saharan Africa, do not show positive prospects for financing their health needs or paying out of their own resources for HIV and AIDS services.



Low health spending in low-income countries

The likely limits on health spending and financing for AIDS programs from domestic resources in low-income countries can be further illustrated by the continuing low per capita outlays foreseen in future years (see Figure 2). For low-income countries, per capita health spending will little more than double over a quarter century. By 2030, spending will still be lower than the target of USD55 per capita, an amount in 2009 dollars equivalent to the target set nearly a decade ago by the WHO Commission on Macroeconomics and Health. The prospects for having enough domestic resources to support universal access to HIV and AIDS prevention, care, and treatment continue to appear bleak for these countries.



Middle-income countries are expected to fare much better, more than tripling per capita health spending between 2006 and 2030, thanks to more rapid growth of per capita GDP. Countries in both low- and middle-income groups differ in their capacity and readiness to finance health care. They differ more among themselves in the prevalence and incidence of HIV and AIDS. These differences are examined in more detail in a subsequent part of this paper that looks at financing prospects for the countries likely to need the most financing in absolute amount for each country.

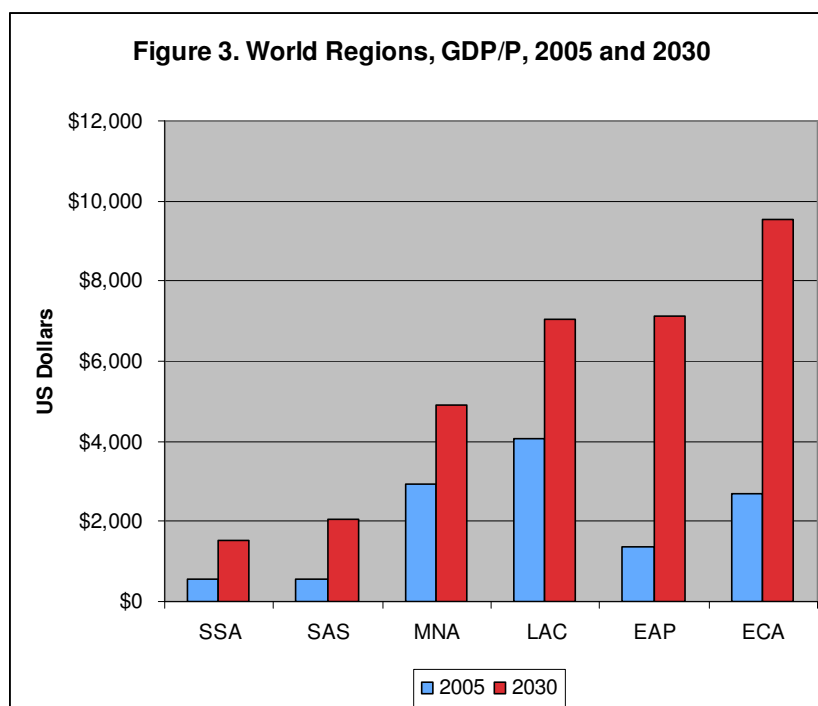
Two intermediate conclusions emerge from comparisons of these two country groups:

- 1) Low-income countries that also experience a high prevalence of HIV and AIDS are most unlikely to have adequate funds to support health needs over the next quarter century; and,
- 2) Middle-income countries, especially those with low or concentrated epidemics implying more moderate demands for financing HIV and AIDS programs may well find means to sustain programs out of their own resources.

A look in more detail at some key countries may further refine these conclusions below.

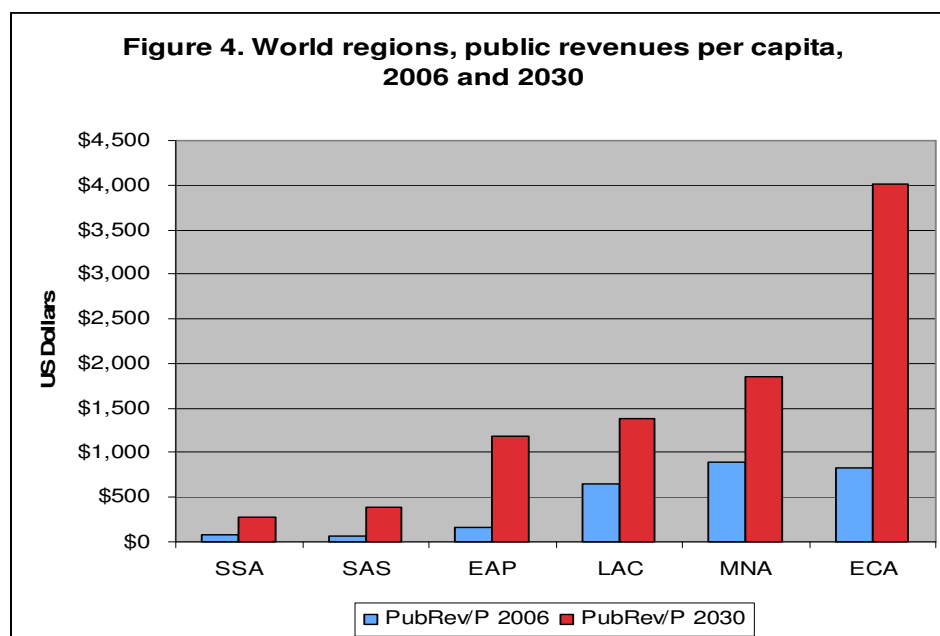
Projecting fiscal space – GDP/P and public revenues, world regions

Identifying low- and middle-income countries is one means to assess the future of fiscal space. Another is to consider prospects by world regions. Growth in GDP per capita is anticipated to be very different by region (see Figure 3). Sub-Saharan Africa and South Asia, now at the bottom among regions, will not have per capita GDP exceeding US\$2,000 even by 2030, according to projections. In contrast, prospects in East Asia and the Pacific as well as Eastern Europe and Central Asia are much brighter.



Available public revenues set the limits on what governments can spend for the wide variety of programs they must finance. The key factor affecting public revenues per capita is GDP per capita. Not surprisingly, the prospects by region for generating public revenues are essentially similar to the prospects for overall growth of the economies (see Figure 4). Low-income countries spend most of the population's income and production resources on food. Of the world regions analyzed here, both South Asia and Sub-Saharan Africa allocate far lower amounts per capita to public uses than do other world regions. These regions will still be providing less than USD500 per person to public programs in 2030. All other regions will be providing a thousand dollars or more to the public spending that can finance health care, including HIV and AIDS interventions.

Prospects for the global economy in late 2009 appear far less promising than they did only a year ago. Public revenues and funds available for the health sector in all regions may well fall short of these projects for 2030 unless an economic turnaround is soon and decisive.²



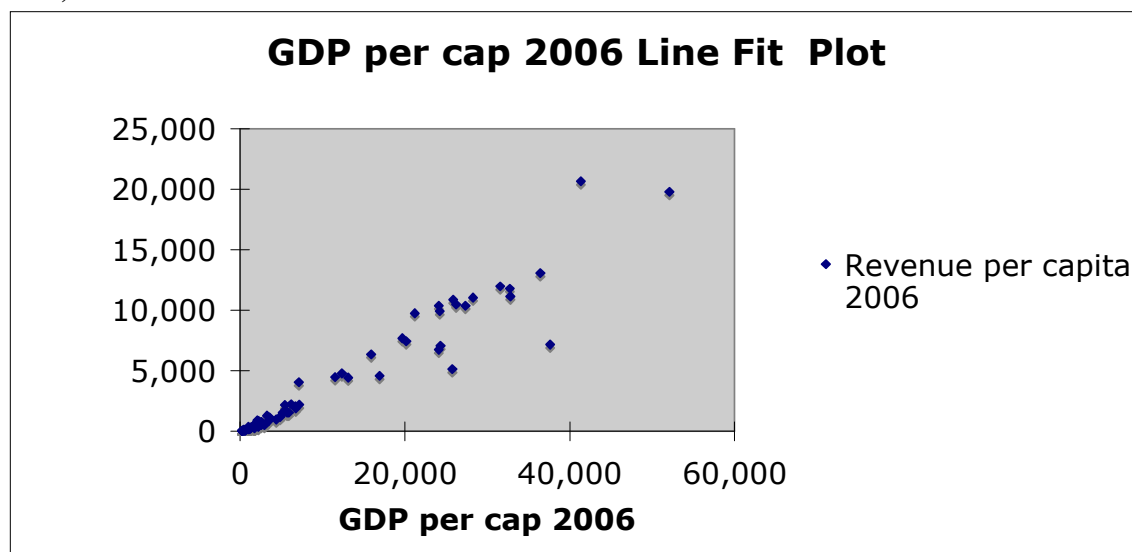
NOTES AND SOURCES: PER CAPITA GDP (GDP/P) 2005 AND 2030 FROM WORLD BANK GLOBAL ECONOMIC PROJECTIONS GROUP; PUBLIC REVENUES LESS GRANTS PER CAPITA, 2006, CALCULATED FROM WDI 2008; PUBLIC REVENUES PER CAPITA 2030 CALCULATED AS EQUIVALENT SHARE OF GDP/P WITH A SMALL ADJUSTMENT UPWARD FOR A POSITIVE ESTIMATED INCOME ELASTICITY OF DEMAND FOR PUBLIC REVENUES OF +1.3, DERIVED FROM CROSS-SECTION ESTIMATES, ALL LOW- AND MIDDLE-INCOME COUNTRIES, 2006.

PUBREV – PUBLIC REVENUE LESS GRANTS FROM OUTSIDE THE COUNTRY; P – POPULATION; GDP – GROSS DOMESTIC PRODUCT (OFTEN NOW SUBSTITUTED FOR BY GNI – GROSS NATIONAL INCOME IN REPORTS BY IMF AND WORLD BANK)

² In the elasticities calculated from 2005 and 2006 cross-section regressions of all countries, all low- and middle-income countries, and all high-income countries, there were variations that seem broadly plausible but may merit further review. The income elasticity of demand for health used here is +1.03; a higher elasticity has been observed in many country-specific cross sections. The elasticity of public revenues to per capita GDP used here, +1.25 for low- and middle-income countries, is higher than that for health suggesting that public revenues is a more superior good than health services, possible but not likely. We expect to continue work on these topics to resolve these technical issues. An earlier analysis not reported here found elasticity of health spending to per capita product as +1.09 in low- and middle-income countries and +1.19 in high income countries.

Public revenues per capita fit fairly well a regression line linking those revenues to GDP/P (see Figure 5). The adjusted r-squared value is about 0.93; much of the variance observed in Figure 5 appears to lie at the upper end of the range of GDP per capita. High-income countries differ among themselves in the extent to which they permit the public revenues to be a large (Luxembourg and Norway) or small (USA and Switzerland) share of income. For low- and middle-income countries there does not appear to be much divergence from a linear relationship between revenue per capita and income per capita.

FIGURE 5. CLOSE CORRELATION BETWEEN PER CAPITA PUBLIC REVENUES AND PER CAPITA GDP, 2006, ALL COUNTRIES.



These findings suggest that it is not easy for governments to deviate much from a predictable level of public spending governed by the level of per capita income and product.³ There are several important implications of this regularity in behavior:

Recall, though, that revenues as presented exclude grants. Grants from abroad, if properly targeted on those in greatest need, may be able to increase public resources, some of which could be allocated to public health purposes. Still, as the discussion below on health spending will demonstrate, it is difficult for donors and for governments in the low- and middle-income countries to step up health spending. Spending on HIV and AIDS programs may be similarly limited by the close linkages between average income levels, public revenues and spending on health care.

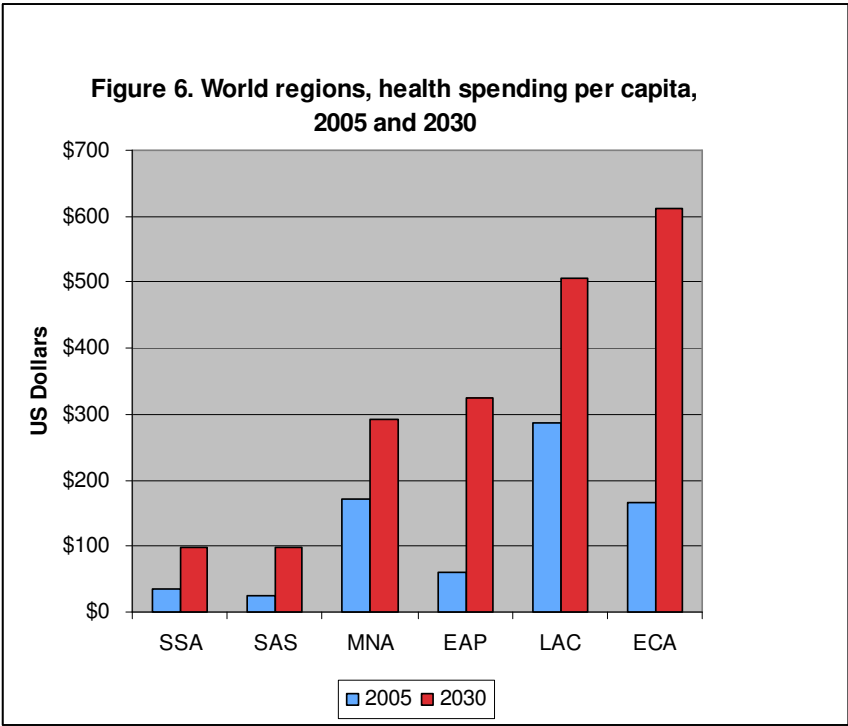
Projecting fiscal space – health spending

As incomes rise, the share of total spending allocated to health should rise as well. Health is what economists call a superior good. They contrast it with basic foodstuffs, an inferior good in that the spending on food declines as a share of total income as income rises. These different tendencies are easy to observe: The food share in much of India is 60 percent or more of total

³ Jacques van der Gaag and Vid Stimac, 2008, Towards a new paradigm for health sector development (unpublished manuscript), Results for Development, Wash DC, 34 p.

consumption for low-income families. High-income families in the OECD countries spend less than 10 percent of their incomes on food. Developed countries spend 10 percent or more of GDP on health care (USA is now 16 percent of GDP), whereas most poor countries spend little more than 5 percent of their GDP on health care.

The expected high income elasticity of health spending in response to per capita GDP does not in fact appear in our 2005 and 2006 cross-section data. The expectation that as incomes rise over the next two decades countries will allocate more resources to health will be disappointed if these elasticity estimates are correct. Based on the cross-sections developed for this analysis, we calculate that the income elasticity of demand for health care is +1.03 for low- and middle-income countries, providing minimal additional fiscal space for health spending (see Figure 6). For the two poorest regions, South Asia and Sub-Saharan Africa, health spending per capita will still be less than a hundred dollars per person per annum in 2030. Recall that such regional averages include a mixture of both low- and middle-income countries and that the advances for the poorest countries will be even less than these averages indicate. These tentative findings underline the imperative of upgrading and augmenting overall health system strengthening in these poorest countries as a necessary complement to the effort to finance universal access for HIV and AIDS programs.



NOTES AND SOURCES: POPULATION 2005 AND 2030 FROM WORLD BANK GLOBAL ECONOMIC PROSPECT GROUP; PER CAPITA HEALTH SPENDING, 2005, FROM WDI 2008; PER CAPITAL HEALTH SPENDING 2030 PROJECTED AS EQUIVALENT SHARE OF PER CAPITA GDP PLUS AN INCREMENT FOR INCOME ELASTICITY OF DEMAND FOR HEALTH CARE OF +1.03 FOR DEVELOPING COUNTRIES AND +1.4 FOR HIC AS DERIVED FROM CROSS-SECTION ESTIMATES, 2006.

The level of living overall has to rise if health spending is to rise; richer, healthier countries are better able to achieve these positive results because of their overall economic development achievements. Donor assistance aimed at raising the share of resources dedicated to health risk failure. External funds may not leverage additional resources but may instead crowd out or reduce private or public health spending from domestic resources. Governments' efforts to spend more on health in low- and middle-income countries may also result in crowding out private spending but still leave the poorest groups unable to get access to anything more than rudimentary health services. These observations underline the need for demand-side resource applications that assure that the poorest members of poor societies get access to health care and, as appropriate, the full range of prevention, care, and treatment for HIV and AIDS.

Fiscal space – donor assistance

After substantial increases in donor flows since the G8 Meetings in Gleneagles, Scotland, the high-income countries have scaled up their donor assistance. About USD15 billion funds health systems and about USD7 billion of that amount supports HIV and AIDS programs in low- and middle-income countries. A recent UNAIDS report summarizes the financing picture for 2008:

Globally, the largest sources of finance for HIV programmes (\$13.8bn. in 2008) are domestic expenditures in the affected countries (52%), direct bilateral cooperation (31%), multilateral institutions (12%) and the philanthropic sector (5%). The domestic funds include out-of-pocket spending by individuals and affected families, and in 2008 are estimated to be at \$1 billion. Each of these sources is vulnerable to the impact of the economic slowdown in a different way.⁴

What are the prospects for future donor flows? How will the current economic slowdown affect donor readiness to maintain past levels of support? Here we can provide a quantitative look at the range of possibilities near the end of the period under review here. Projections by the Global Economic Prospects Group point to a total GDP for high-income countries of just under USD42 trillion in 2030.⁵ If these countries continue to provide just 0.25 percent of their GDP for external assistance in 2030 as they have done in recent years, then total assistance will reach USD105 billion in 2030 v. USD70 billion in 2007). If however the rich countries ramp up their assistance to the target level of 0.7 percent of GDP, then total flows could reach USD294 billion. If the share for HIV and AIDS remains at about 6 percent of that larger total, it would exceed USD17 billion. Projections of need for HIV and AIDS donor assistance by 2031 are considerably greater than this already-optimistic assessment of what may continue to be an unachieved level of commitment.

As indicated in the quote from the UNAIDS 2009 report above, the balance between domestic and international sources of funding was about 50:50. If that balance prevails in 2030, total resources available would be about USD34 billion. That level depends on the optimistic scaling-up to 0.7 percent of GDP by donors. Universal access in 2015 will require an estimated USD37 billion. If expansion of need between 2010 and 2015 'predicts' the rate of expanding need, 2015

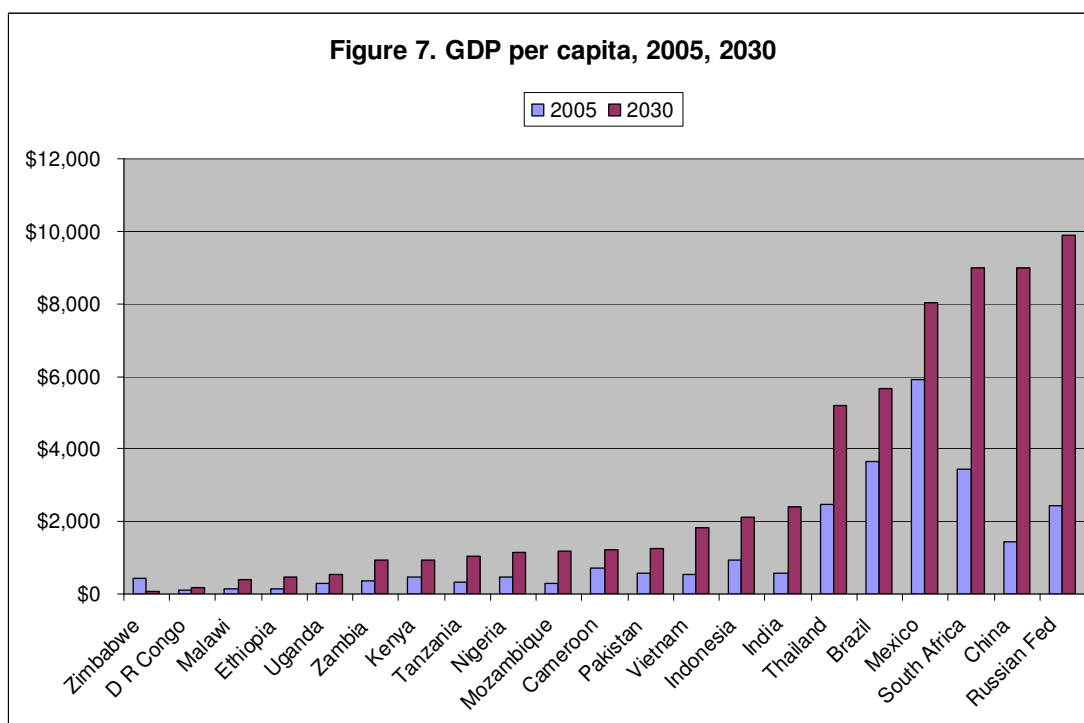
⁴ UNAIDS, 2009, Financial resources required to achieve universal access to HIV prevention, treatment, care and support, Geneva, p. 8. Data for this conclusion appear in Figure 2 in Annex 3 below.

⁵ That estimate emerges from multiplying those countries' estimated population of 998 million by a per capita GDP of USD42,078, to equal USD41,990 billion, or about USD42 trillion. The figures used for this report imply a HIC total GDP of USD28 trillion in 2005, an amount unadjusted for purchasing power parity and hence lower than some other published numbers that do use PPP adjustments.

to 2031, then requirements in 2031 will reach USD124 billion.⁶ This amount lies well above any previous estimate of future needs of which we are aware. It should be much less if infection rates decline as a result of prevention efforts recommended elsewhere in the aids2031 work program. This finding suggests that closing the funding gap will be a continuing challenge that must be met in part by readiness of many of the better-off recipients of donor assistance to develop self-sustaining financing plans.

Major countries requiring high levels of HIV/AIDS spending

An ongoing task of the UNAIDS secretariat is the calculation of resources needed to provide an adequate response. The Global Resource Needs Estimate (GRNE) summarizes global data based on country-specific estimates for about 140 countries. In GRNE estimates made in 2007, several of the largest national requirements appear in countries with large populations, e.g., India and China, which also have good growth prospects. These and other countries show signs that they could sustain program spending from their own resources over the next quarter century (see Figure 7).

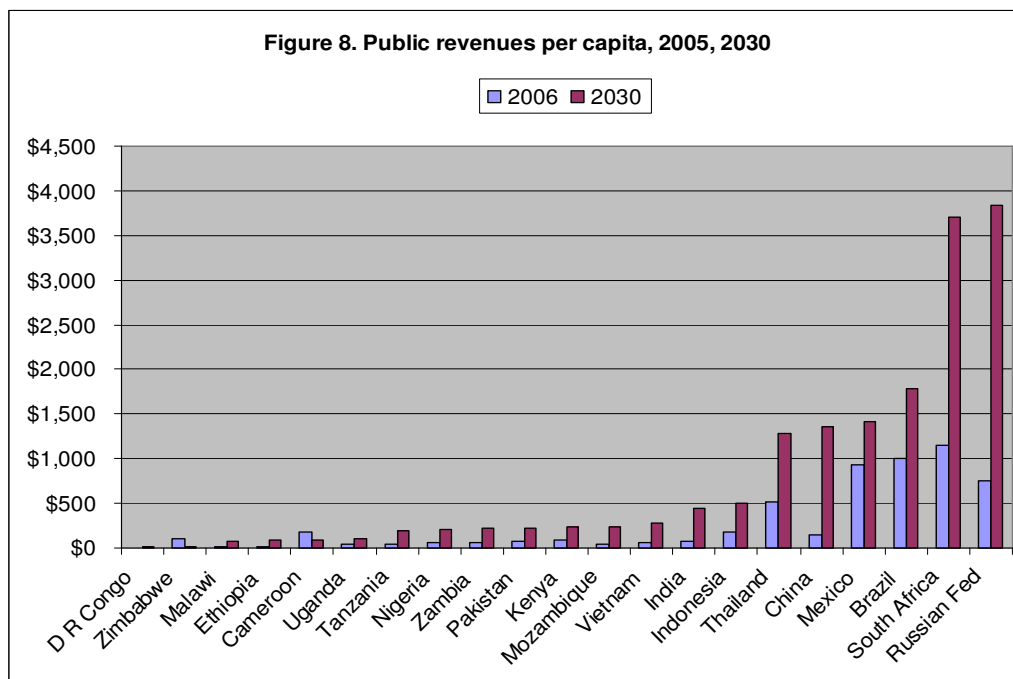


SOURCE: WORLD BANK GLOBAL ECONOMIC PROSPECTS. NOTE THAT ZIMBABWE IS EXPECTED TO EXPERIENCE A DECLINE IN PER CAPITA PRODUCT.

⁶ The growth-rate of need, 2010-2015 is 7.9 percent per annum. Applying that same rate going forward, 2015-3031, yields the large dollar amount illustrated in the text. Effective steps to reduce infections by means of prevention interventions will, hopefully, greatly reduce actual need by 2031.

The 21 countries that appear in Figure 7 were calculated to need about three-quarters of all HIV and AIDS spending, according to the 2007 GRNE estimates.⁷ To the extent that the faster-growing of these countries can finance much or most of their programs for HIV prevention, care, and treatment, their calls on donor assistance will be limited. By 2030 Indonesia, India, Thailand, Brazil, Mexico, South Africa, China and Russia will have GDP per capita exceeding US\$2,000, amounts that should be adequate to enable them to finance a wide range of goods and services beyond basic needs for food and shelter.⁸

Countries that will experience more rapid growth of per capita GDP are those more likely to raise public revenues that will be needed to finance public goods, health system strengthening and public health programs in general. Public revenues per capita will still be less than US\$500 per capita in many countries among those most affected by HIV and AIDS (see Figure 8). Countries to the left in Figure 8 show limited prospects of having adequate public revenues exclusive of grants: These include Democratic Republic of Congo, Zimbabwe, Malawi, Ethiopia, Cameroon, Uganda, Tanzania, Nigeria, Zambia, Pakistan Mozambique, and Vietnam. India and Indonesia will approach the US\$500 level, whereas Thailand, China, Mexico, Brazil, South Africa, and Russia will be well above that level, virtually assuring no sustained dependence on external support for HIV and AIDS programs.



SOURCE: PUBLIC REVENUES AS PERCENTAGE OF GDP AVAILABLE IN WORLD BANK WORLD DEVELOPMENT INDICATORS 2008 FOR CALENDAR YEAR 2006; THESE SAME PERCENTAGES THEN APPLIED TO GDP PER CAPITA IN 2030 AS ESTIMATED BY WORLD BANK GLOBAL ECONOMIC PROSPECT GROUP.

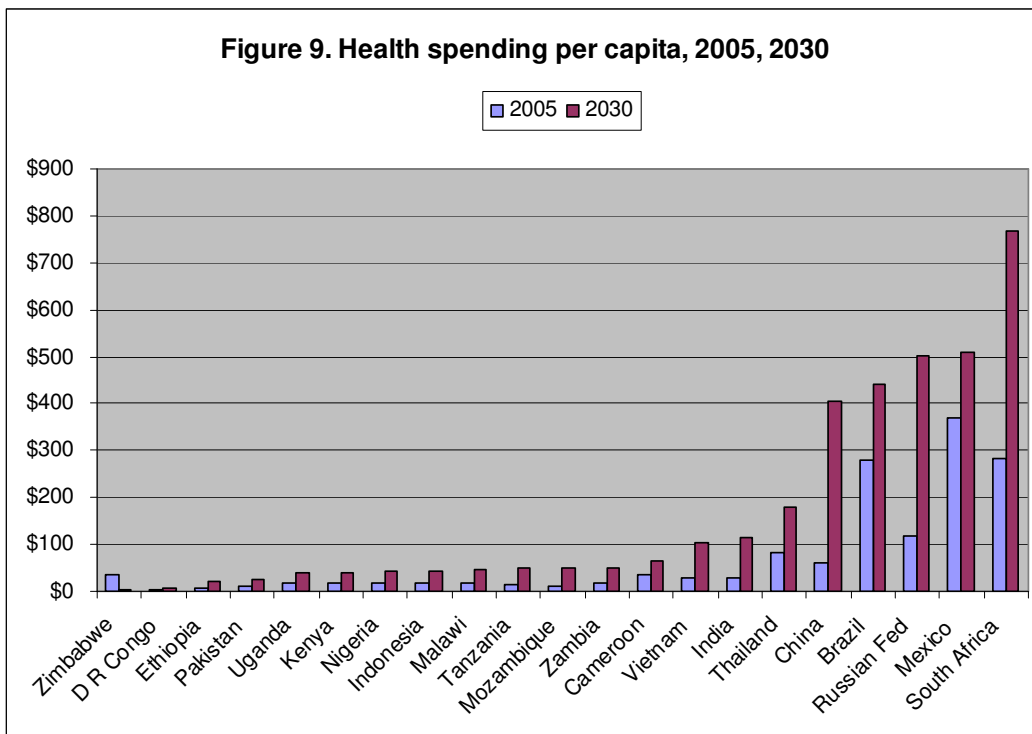
⁷ For details on country-specific global resource needs estimates, consult UNAIDS Resource Tracking Group. These data are periodically updated to take account of new information, new interventions, and progress in reducing the incidence and prevalence of HIV and AIDS.

⁸ Recall that these amounts are expressed in exchange-rate values, not purchasing power parity estimates. As an example of the difference, the 2030 estimate here for India, about US\$2,200 is far below the US\$15,000 expressed in PPP amounts that the Economist Intelligence Unit projects for that country.

Prospects for health spending

For the low-income regions of Sub-Saharan Africa and South Asia cited in Figure 2 above, prospects are that per capita health spending will double over a quarter century. Even by 2030, it will barely reach the minimum needs of US\$54 per capita of the revised WHO and Commission on Macroeconomics and Health estimate of health spending requirements. The prospects for many specific countries of these regions are equally bleak on capacity for health spending (see Figure 9). Countries on the left side of Figure 9 have a double burden. They are among those in greatest need for resources in the fight against AIDS, yet they also will have too little growth over the next quarter century to create space for essential health care spending. The 13 countries from Zimbabwe to Cameroon in Figure 9 are unlikely to have available, from own national resources, even US\$100 per capita for health by 2030. Vietnam, India, Thailand, China, Brazil, Russia, Mexico, and South Africa appear to be placed to have adequate resources for basic health services.

Among the countries in Figure 9, only six, China, South Africa, Russia, Mexico, Brazil, and Thailand, were spending fifty dollars or more on health care in 2005. To push up spending for health as well as for the specific interventions needed for HIV and AIDS, donors will need to focus on demand creation among the poorest groups in the poor countries on the left side of Figure 9. Demand-side assistance to poor households affected by HIV and AIDS, especially those among the most-at-risk populations, may prove to be the key to turning back the epidemic.



SOURCE: HEALTH SPENDING PER CAPITA, 2005, FROM WDI 2008; HEALTH SPENDING PER CAPITA, 2030, ESTIMATED AS EQUIVALENT SHARE OF HEALTH SPENDING PER CAPITA FOR 2005 PLUS INCOME ELASTICITY OF HEALTH SPENDING OF 1.03.

The challenge of resource mobilization is matched with a parallel challenge to seek and achieve political consensus. Even if governments are willing to pay for better health, and donors are prepared to keep substantial funds flowing across borders, the private-sector users of health care services may simply opt out of paying for any of the services they now finance out of pocket. Public money in the countries' governments plus willing donor assistance may 'crowd out' or substitute for private payments because aggregate demand is constrained by GDP per capita. To forestall this outcome, public-sector assistance for AIDS programs must reach down to and include poverty-affected households that would not otherwise be spending for services because of their extreme lack of resources. These constraints are well illustrated in recent work for USAID by the HS2020 project, which points to a likely spending gap for health services in the poorest countries of sub-Saharan Africa:

Burundi, DRC, Liberia, Ethiopia, Sierra Leone, Niger, Madagascar, The Gambia, Central African Republic, and Tanzania present some of the most difficult health financing challenges. Per capita income in all these countries is about \$375 or less, meaning that the average citizen gets by on \$1 per day or less. Even doubling the trajectory of private spending leaves 7 of the poorest countries unable to finance the basic package by 2020.⁹

Global Resource Needs Estimates

An ongoing task of the UNAIDS secretariat is the calculation of resources needed to provide an adequate response. The Global Resource Needs Estimate (GRNE) summarizes global data based on country-specific estimates for about 140 countries. The country data are also reviewed from time to time by national experts in what are referred to as validation exercises. These meetings provide the opportunity for technical specialists to review and enhance the quality of the estimates made periodically as new epidemiological and cost data become available. UNAIDS maintains these country-specific estimates in an unpublished form given that they have not been subjected to review and approval by government representatives from the countries themselves. One reason is that rankings on numbers of HIV positive persons, the often wide gaps between estimated need and actual expenditure, and the evolving data on prevalence and incidence of HIV have proven to be points of contention. For example, the question, 'Which country has the most HIV positive persons?' was hotly debated in past years and a cause of sensitivity between the UN and some governments.

Which countries will be able to sustain an adequate level of funding for the fight against AIDS? Must future international assistance focus increasingly on (1) high-priority, high-impact interventions and (2) the poorest countries with the greatest AIDS and health burden? Answering these questions can help assure cost-effective use of limited resources.

In GRNE estimates made in 2007, several of the largest national requirements appear in countries with large populations, e.g., India and China that also have good prospects of rapid future economic growth. These and other countries show signs that they could sustain program spending from their own resources over the next quarter century (see rankings in Figures 7, 8, and 9 above).

⁹ HS2020 project supported by USAID, implemented by Abt Associates, Dr. Laurel Hatt, principal author.

Countries that will experience more rapid growth of per capita GDP are those more likely to be able to finance AIDS programs. India, China, Russia, Mozambique, Ethiopia, and Vietnam are projected to grow per capita GDP by five percent or more through 2030. In contrast, Democratic Republic of Congo, Kenya, Zimbabwe, Uganda, and Cameroon are projected to grow by less than three percent per annum in the coming decades.¹⁰ These and other low-income countries with high demands for financing HIV/AIDS prevention, care and treatment (Nigeria, Tanzania, Mozambique, and Malawi) will most probably require ongoing donor financing in substantial amounts through the period up to 2031. Given their ranking at or near the top of those requiring the most total resources for HIV/AIDS programs, they are likely to be among those most in need of substantial transfers from high-income countries in future decades.

Among the countries appearing in Figures 7, 8, and 9 only six, China, South Africa, Russia, Mexico, Brazil, and Thailand, were spending fifty dollars or more on health care in 2005. Even by 2030, several will be spending less than that amount – Nigeria, Democratic Republic of Congo, Kenya, Ethiopia, Zimbabwe, Pakistan, Uganda, Malawi, and Indonesia. The close linkage between per capita GDP and per capita health spending suggests that it will be difficult for donor assistance to push up spending for health as well as for the specific interventions needed for HIV and AIDS to raise spending levels to provide an adequate response in all these countries. A potentially effective policy response is to target demand-side assistance on poor households affected by HIV and AIDS that would otherwise lack resources required to purchase necessary care and treatment.

These countries will likely need to spend three-quarters of the total to be spent in all 140 countries covered by GRNE. The challenge of resource mobilization is matched with a parallel challenge to seek and achieve political consensus. Even if governments are willing to pay for better health, and donors are prepared to keep substantial funds flowing across borders, the private-sector users of health care services may simply opt out of paying for any of the services they now finance out of pocket. Public money in the countries' governments plus willing donor assistance may 'crowd out' or substitute for private payments because aggregate demand is constrained by GDP per capita. To forestall this outcome, public-sector assistance for AIDS programs must reach down to and include poverty-affected households that would not otherwise be spending for services because of their extreme lack of resources.

Donor support may help keep government budget growth on a 5% trajectory, but this is by no means guaranteed given the current global economic downturn (see Annex 1).

These findings suggest two preliminary conclusions:

- 3) Some regions and some countries in those regions will gradually succeed in growing their economies enough to assure self-financing of health services and essential prevention, care and treatment for HIV and AIDS between now and 2031;¹¹ and,

¹⁰ Slow growth in Brazil and Mexico, perhaps representative of the LAC region as a whole, may matter less for this region because of higher income already achieved and progress in extending social security health care to most of their populations. Both these countries provide free-to-the-user ART and other health services for care and treatment of AIDS.

¹¹ Even for these countries, the policy space may still be inadequate to permit them to spend tax resources on most-at-risk populations that suffer from stigma and discrimination. Multilateral donors may have a special role to play in helping finance interventions, especially prevention, in those settings. That topic is addressed in a separate paper that will be discussed at the 12-13 Feb 09 workshop.

- 4) For many countries in sub-Saharan Africa there is little chance that their rates of per capita GDP growth and available resources from their own governments and donors will overcome the linkages between income levels and health spending that will permit an adequate response to the pandemic.

This balance of optimism for some, pessimism for many others requires a further, focused effort to break the linkage between income levels and health spending. By some means, e.g., providing conditional cash transfers that have worked in a number of settings to finance specific services like condom distribution or subsidized care and treatment via the demand side (rather than the supply side) of the market, governments and donors must get assistance to the poorest households. It is to that topic that the last part of this paper will turn.

Intervening to raise HIV and AIDS spending

Two of the countries appearing in figures above, Brazil and Mexico, have had considerable success in expanding support for HIV and AIDS programs through their public health services and national social security systems.¹² In effect, the public sector agreed to finance services for all persons. Similar progress in assuring inclusion of essential prevention, care and treatment has emerged in other LAC region countries as well.

For the poorest countries of sub-Saharan Africa the challenge will be to raise public sector and donor assistance for HIV/AIDS interventions without crowding out private spending. UNAIDS uses a rough estimate of USD1 billion for all out-of-pocket spending for HIV and AIDS in all low- and middle-income countries. The share for sub-Saharan Africa, like that region's share of all persons who have progressed to health impairment due to AIDS, might be half a billion dollars.

There are two potential sources of revenue that, if tapped in the right way, could provide net additional aid for HIV/AIDS prevention and treatment (or for health services overall): the corporate sector and the household sector. In many Sub-Saharan countries multi-national corporations and large domestic companies already provide employment based health insurance, the premium of which is partly paid by the corporation and partly by the employee. There is no particular reason for these arrangements to be limited to large formal sector companies. Indeed, in Namibia, when 25 smaller local companies were recently asked to join specially developed low cost health insurance coverage plans for low-income workers, all but one company signed up all their workers, with a 50:50 sharing arrangement for the payment of the premium.

There is also no reason to limit these types of employment based voluntary insurance arrangements to the formal sector. In Lagos, Nigeria, market women have been invited to join a low-cost health insurance scheme (covering the women and their families) on a voluntary basis. In general, these women are too poor to be able to pay for the total premium. This in turns opens up an opportunity for donors to provide additional resources (to subsidize the premium) without running the risk of crowding out the private resources that are already used in the health system. In this case, the Dutch government provided a large grant to the Health Insurance Fund, a Dutch NGO, to provide these subsidies. The Dutch NGO PharmAccess is implementing the program,

¹² On Brazil see Jose Serra, Feb 2008, *The political economy of the struggle against HIV-AIDS in Brazil*, IDB Technical Note on Health No. 1/2008, Inter-American Development Bank, Washington DC. Mr. Serra was Minister of Health in an important phase of including ART for all persons regardless of social security system status.

which includes upgrades for local health care facilities and quality control of the health care delivery in addition to the insurance. The Nigerian HMO Hygeia, which already has large numbers of formal sector workers insured, is the local partner to pioneer this new approach.

In Kwara State, Nigeria, the same approach sponsored by the same foundation and implemented by the same NGO and HMO has been used to insure poor farmers and their families and to improve the quality of the available local health infrastructure. Already 40,000 individuals are insured and the governor of Kwara State has asked to implement a similar project elsewhere in the state. He has also committed himself to funding this second project, once it has been implemented, entirely out of local resources, thus underscoring the potential sustainability of this approach. In the meantime, the World Bank and IFC have provided funding to PharmAccess to expand the efforts in Lagos to include coverage of a group of self-employed IT workers.

Many other projects are underway in Sub-Saharan Africa that are variations on this same theme. Sometimes they are government driven (e.g. in Uganda and Ghana), other times they are private sector initiatives that aim to augment government efforts. For instance, PharmAccess is currently developing three new projects in Tanzania, covering workers at a fish market, organic coffee growers, and participants in a micro-credit scheme. While these schemes are experimental, they hold much promise, also for other donors. PEPFAR is currently considering participating in the Tanzania projects and to cover the costs for HIV/AIDS, thus helping to strengthen the overall health care system, while keeping its focus squarely on HIV/AIDS.

There is a growing literature to estimate the potential scope for these and other voluntary insurance schemes. Given that out-of-pocket payments already make up a large share of overall resources in low-income countries (often more than 50%), the potential for harnessing these resources and using them more efficiently (and more equitably) through health insurance mechanisms is significant. So called “Willingness-to-Pay” for health insurance studies also point out the large potential. Typically, these studies find that households are willing to pay premiums that amount to 30% to 60% of a country’s overall expenditures on health (see Barnighousen et al, 2007, for rural China, Asenso-Okyere et al 1997, for Ghana, Asfaw et al. 2009, for Namibia). One such study, for Ethiopia, concludes that the extra resources that may become available actually exceed total current outlays (Asfaw et al, 2004).

In all cases, the premiums that poor households are able and willing to pay will still be insufficient to cover the total cost of a reasonable comprehensive package. But donors may find these new approaches to provide low cost health insurance to the poor, while simultaneously keeping private payments within the system, sufficiently attractive to subsidize the premiums.

A task for the future will be to assess and identify the strengths and weaknesses of these and additional experiments that aim to enhance effective spending for health care in general, and HIV and AIDS programs in particular.

What about policy space?

In most regions, and in many of the low- and middle-income countries that need large amounts of funding for HIV/AIDS interventions, there is an unwillingness to spend public money on the three most-at-risk populations (MARPs), namely, men who have sex with men, sex workers and their clients, and intravenous drug users. Some international public donors also shy from

devoting funds to these groups. The policy space for effective action may thus be even more constrained than the fiscal space.

A solution lies in using the multilateral organizations such as The Global Fund, UN agencies, the World Bank and the regional development banks as financial intermediaries that can rise above the limits to policy space imposed on governments by tradition and popular opinion among those who also impose stigma and discrimination on the most-at-risk populations. For example, the Global Fund could advise potential country coordinating mechanisms in recipient countries to include MARPs-focused programs in their proposals. The multilateral banks could assess the cost-effectiveness of alternative investment strategies and assure that their grants and loans support under-financed, high-impact programs for prevention among underserved groups. The Asian Development Bank, through its sponsorship of the Independent Commission on AIDS in Asia has already made good progress in assessing need among MARPs in its region. Its example could be followed in other regions as well, and all these institutions could multiply their targeted assistance for these groups.

A division of labor must in future consider the strengths and limits imposed by both fiscal space and policy space. If that occurs, there are reasonable prospects that funds for the fight against AIDS can be found and applied as necessary by 2031.

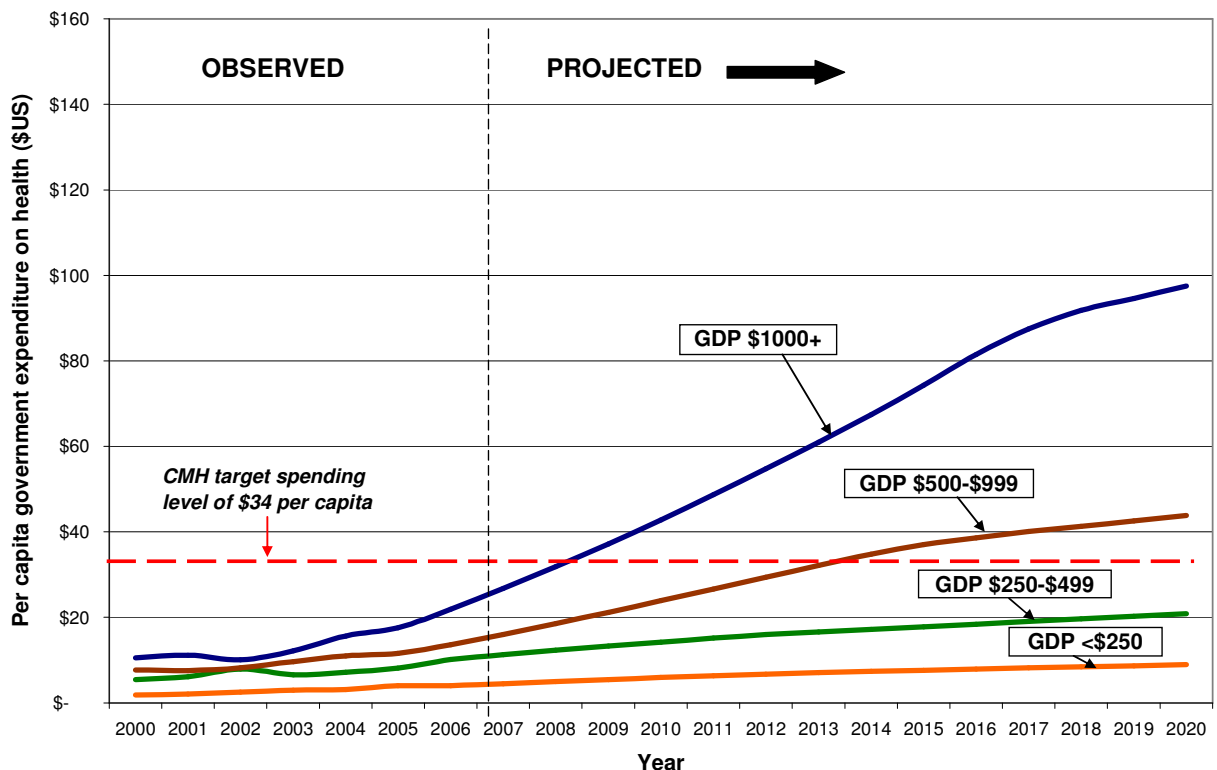
Some may suggest that external support be made proportional to, or conditioned on, the willingness of governments to overcome opposition to full-fledged assistance where it is most needed and most cost-effective. How will stakeholders resolve these broader issues of policy space? Prospective outcomes for the fight against AIDS hang in the balance.

Annex 1

PROSPECTIVE GOVERNMENT SPENDING FOR HEALTH IN AFRICA¹³

Most [African] governments in countries with current GDPs greater than \$1,000 per capita are already spending more than \$34 on health, and most governments in countries with GDPs between \$500 and \$999 would spend more than \$34 by 2020 (Figure 1 below). But governments in 22 countries – 20 of which with GDPs per capita less than \$500 – would still be spending less than \$34 per capita. Two governments (Democratic Republic of Congo and Ethiopia) would still be spending less than \$10 per capita.

FIGURE 1. PROJECTED AVERAGE PER CAPITA GOVERNMENT SPENDING ON HEALTH (USD), GROUPED BY GDP PER CAPITA IN 2006



Sources: WHOSIS, IMF World Economic Outlook database, and authors' calculations

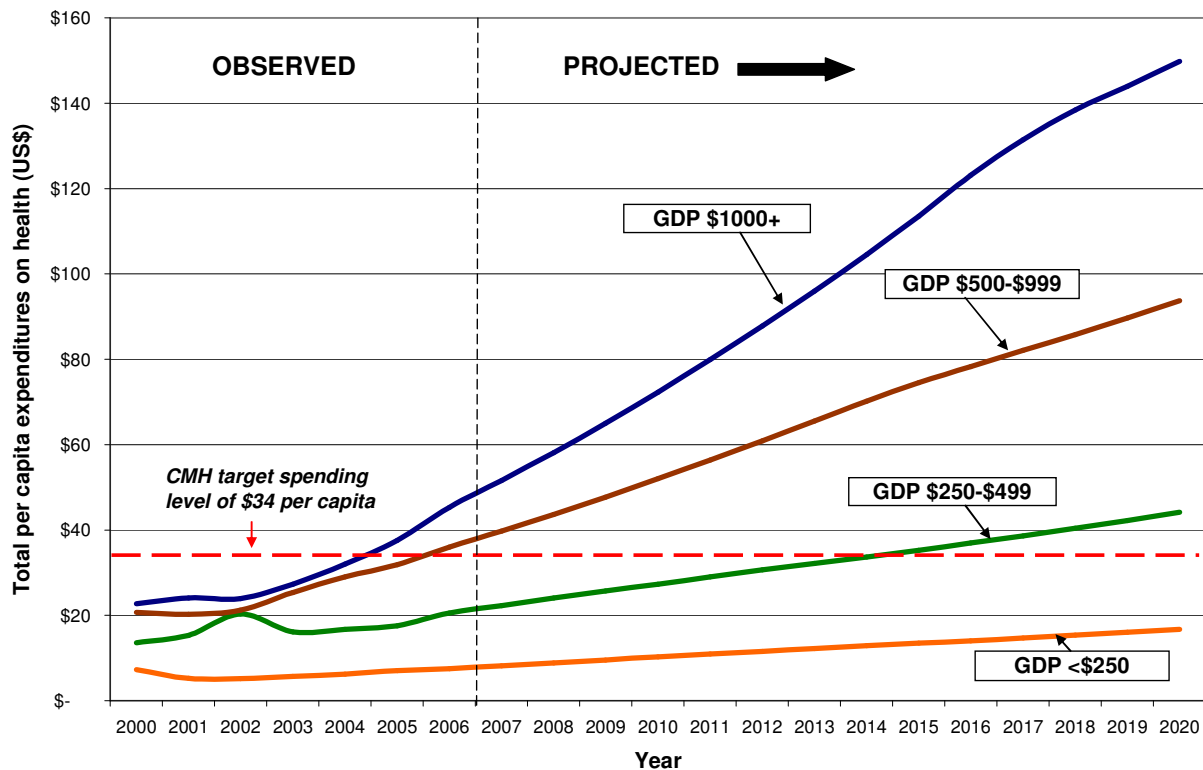
Adding in private spending helps to narrow these gaps (Figure 2 below). Assuming that private health expenditures continue to grow at 5.9% per year – their observed trajectory between 2000

¹³ This annex note is derived directly from an Abt Associates HR2020 draft report, "HOW CAN AFRICAN COUNTRIES FINANCE HEALTH CARE FOR THEIR PEOPLE?" prepared by Dr. Laurel Hatt and presented at a workshop in November 2008 co-sponsored by Results for Development. We are grateful to HR2020 and USAID for making it available for inclusion here.

and 2006 – and maintaining the previous assumptions about government spending, total health spending in 29 out of 39 countries would surpass the \$34 level by 2020.

But the 10 remaining countries (Burundi, DRC, Liberia, Ethiopia, Sierra Leone, Niger, Madagascar, The Gambia, Central African Republic, and Tanzania) present some of the most difficult health financing challenges. Per capita income in all these countries is about \$375 or less, meaning that the average citizen gets by on \$1 per day or less. Even doubling the trajectory of private spending (assuming 12% growth in private spending per year) leaves 7 of the poorest countries unable to finance the basic package by 2020.

FIGURE 2. PROJECTED AVERAGE PER CAPITA GOVERNMENT AND PRIVATE SPENDING ON HEALTH (USD), GROUPED BY GDP PER CAPITA IN 2006



Sources: WHOSIS, IMF World Economic Outlook database, and authors' calculations

Unfortunately, it may not be realistic to expect that African country governments will meet the Abuja target in the short term anyway. Only 18 out of 39 governments – most of them with per capita incomes less than \$500 – are closer to that target in 2006 than they were in 2001. Donor support may help keep government budget growth on a 5% trajectory, but this is by no means guaranteed given the current global economic downturn. And the economic crisis is likely to hit private spending for health even harder, making 6% annual growth seem very optimistic for the next several years.

Annex 2
UNAIDS 2009, SELECTED FIGURES

FIGURE 1. TOTAL ODA¹⁴ FROM DAC MEMBERS, 2002-2007, AIDS AND HEALTH EXTRACTED (CURRENT USD BILLION)

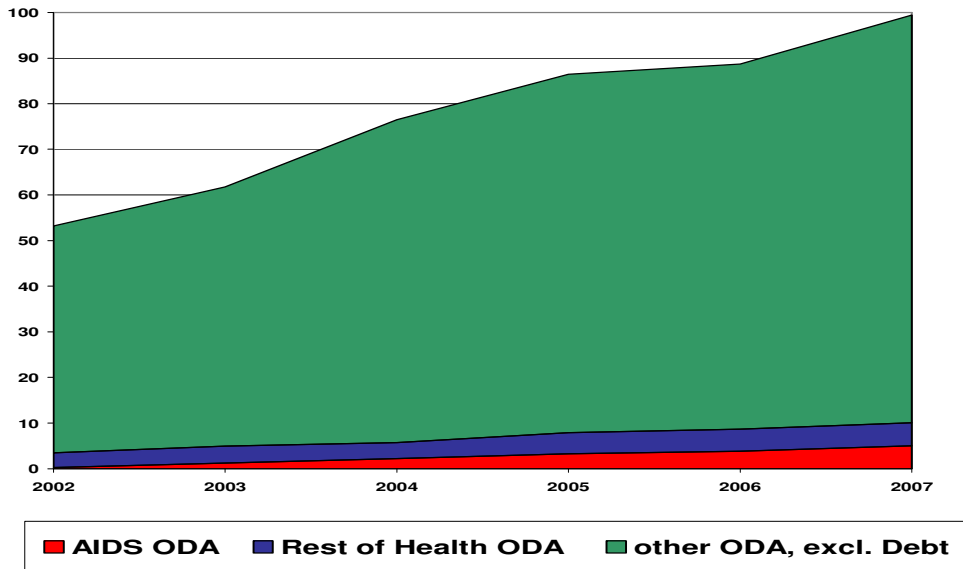
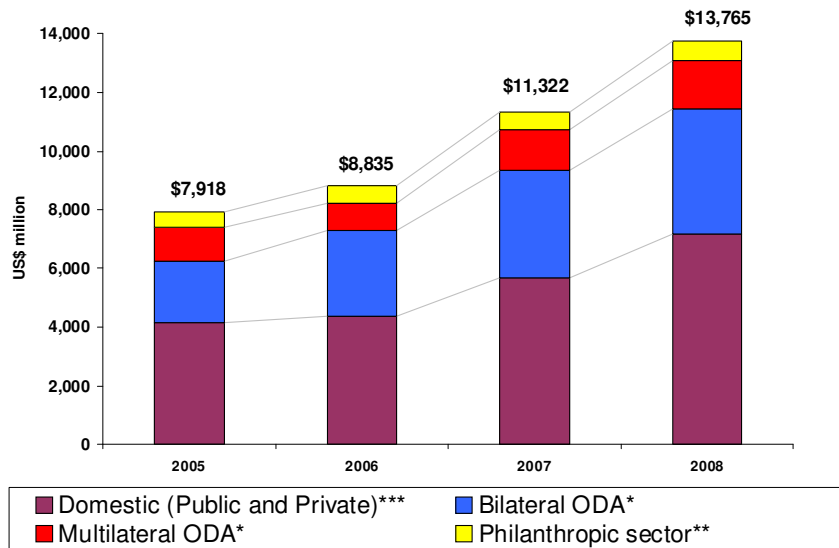


FIGURE 2. RESOURCE AVAILABILITY FOR HIV/AIDS, 2005-2008



¹⁴ Source: OECD/DAC CRS; data extracted on 2009/01/15 13:13 from OECD.Stat (Excluding debt relief).

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