Financing health in low-income countries

Poverty magnifies the need for health care while shrinking the capacity to finance it. Low-income countries face 56 percent of the global disease burden but account for only 2 percent of global health spending (World Bank 2005; Mathers, Lopez, and Murray, forthcoming). With spending levels of some $30 per capita on average, over half of it out of pocket, low-income countries face severe challenges in providing their citizens with a basic package of essential services and a modicum of financial protection against the impoverishing effects of catastrophic illness. Most low-income countries, particularly those in Africa, are far off track for reaching the Millennium Development Goals for health. To improve the equity and efficiency of their health financing systems and to achieve the Millennium Development Goals, low-income countries will need to improve the efficiency and equity of their institutions, particularly public sector management; significantly increase their current government health spending levels through enhanced domestic resource mobilization, improvements in the efficiency of public spending, and large increases in grant-based and sustainable external assistance; improve financial protection to the extent feasible through appropriate risk pooling mechanisms adapted to country-specific circumstances; and improve the technical and allocative efficiency of government health-purchasing decisions. Low-income countries face difficult choices and trade-offs, and there are no one-size-fits-all solutions or magic bullets.

Every country wants a health care system that offers good health outcomes, affordable services, satisfied consumers and providers, and medical and financial equity. These objectives are hard to attain in low-income countries, where budget constraints are binding at low levels of overall expenditure, in particular in the public sector. As progress toward the Millennium Development Goals for health has faltered in the poorest countries, strong international pressure has been building to scale up efforts. Because health expenditures are largely out of pocket in low-income countries and there is limited capacity to increase domestic public expenditures, donors are expected to finance most of the scale-up. But even if donors make long-term commitments, health expenditures will eventually have to be absorbed within...
each country’s domestic resource envelope. Moreover, donor assistance for health is most likely to focus on Sub-Saharan Africa, because of its large health needs and challenging economic circumstances, and on a few other low-income countries outside this region, leaving the remaining countries to find their own solutions.

This chapter reviews the enabling conditions for an expansion in health expenditures from efficiency, equity, and sustainability perspectives in the context of low-income countries (countries with a GNI of less than $766; World Bank 2005b). It examines mechanisms for increasing resources for health and the major restrictions on each method in low-income countries. Public and private financing arrangements for pooling health care revenues are also reviewed. Seven main lessons have emerged:

• Because economic growth is a precondition for reaching the Millennium Development Goals, low-income countries must not jeopardize overall growth and equity goals as they weigh decisions about additional taxation and resource allocation that could generate additional revenues for health. Although low-income countries should give priority to increasing their ability to tax in an effective and equitable manner, tax revenues cannot be expected to provide, in the short run, the large additional revenues needed for most countries to reach the Millennium Development Goals.

• Payroll-financed social insurance has many of the same limitations as general taxation in low-income countries, and it will be difficult for many countries to meet the enabling conditions that increase the probability of successful implementation of social health insurance schemes and guarantee their sustainability.

• In many highly indebted poor countries, debt relief is important for both growth and solvency. Debt relief does not, however, generate new resources for these countries, so they cannot count on debt relief alone to increase government expenditures in social sectors.

• To effectively increase recurrent health expenditures, donor funding should be in the form of predictable on-budget financing offered over extended periods (20 years or more in some countries). Without long-term commitments of assistance, low-income countries may not be able to handle the recurrent cost-related fiscal contingencies generated by such increases.

• Donors and governments alike must carefully consider the opportunity costs of their resource allocation decisions: what other uses might spur growth or generate increases in outputs and outcomes in other sectors, which could in turn improve health outcomes? The best way to approach overall expenditure allocation issues is through explicit country strategies, as described in poverty reduction strategy papers and medium-term expenditure frameworks. Countries must also carefully consider the distributional impact of their limited resources.

• Low-income countries are likely to have a larger and more equitable impact on health outcomes if they select a very basic universal package of mainly public goods, including some treatment services proven effective in moving toward
the Millennium Development Goals. Other interventions should be considered in a targeted manner.

- The capacity of low-income countries to efficiently absorb additional resources may be a problem. To build capacity, donors need to work within governments’ own programs and administrative mechanisms, rather than through independent initiatives. Low-income countries, in turn, need to improve public expenditure planning, management, and monitoring, particularly by upgrading financial management and procurement systems, improving accountability for results, and strengthening judicial systems. Decentralization, targeting, and contracting may all help improve the equity and efficiency of public expenditure management.

**Health spending by region**

As discussed in chapter 1, low-income countries in all regions spend much less on health care than higher-income countries and depend much more on private expenditures, mostly directly out of pocket. Severe institutional, fiscal, economic, and political constraints limit the use of all organized means of financing (which include tax revenue, social health insurance, community-based health insurance, and voluntary health insurance). The basic pattern of low health spending, heavy reliance on out-of-pocket financing, and limited domestic resource mobilization ability holds for low-income countries in all regions.

**Asia**

In low-income countries in South Asia, it is difficult to estimate total health expenditures, because households’ out-of-pocket expenditures on health care, the largest source of financing, are not well quantified. According to World Health Organization (WHO) estimates, in 2002 total health expenditure (the sum of public and private health expenditure) was slightly above 6 percent of GDP in Afghanistan and India, about 5 percent in Nepal, 3.5 percent in Bhutan and Sri Lanka, and just above 3 percent in Bangladesh and Pakistan (figure 7.1).

On average across these countries, public sources of revenue for health accounted for less than 25 percent of total health expenditure, while most of the remaining 75 percent from private sources is in the form of out-of-pocket payments (chapter 1). There are three exceptions to this common pattern: Sri Lanka, Bhutan, and Bangladesh. In Sri Lanka public sources of financing for health services are significant, accounting for half of all spending. In Bangladesh, the share of total health expenditures from public sources is about 35 percent, because donor financing is more significant than in other low-income South Asian countries (about 13.5 percent).

By looking at the trends, one can also see that in low-income countries in South Asia, the proportion of total health expenditures paid out of pocket has been stable or increasing, while the share from government revenue sources has
been declining. For example, in India, the privately funded share of the total resources for health increased from 73.5 percent to 78.9 percent during 1998–2002 (Government of India Ministry of Statistics 1998, 2001). Almost all of it is directly paid by patients at the point of delivery. By contrast, over the same period, government expenditure on health and family welfare in India decreased from 9.2 percent to 7.3 percent of total government expenditure, and in 2002/3 it was equal to only $3.50 per capita. The share of government spending on health has also been decreasing in Nepal and Sri Lanka and has been stagnant in Pakistan. Governments in South Asia seem to be unable to respond to the expectations about increased levels of service, better quality standards, and greater diversification of care that is accompanying the steady increase in population, income, and education levels.1

The situation in low-income East Asian countries is very similar to that in South Asia; population-weighted average private expenditures represent 67 percent of total health expenditure, and these expenditures are mostly out of pocket (92 percent, on average). In low-income countries, such as Vietnam, where the private health spending share of GDP is 5 percent, and even more so in Cambodia—where the share is 6 percent—private health spending is almost entirely made up of out-of-pocket expenditures. WHO data also show a trend of increasing private expenditures in Vietnam, essentially stagnant levels in Lao People’s Democratic Republic, and slight decreases in Cambodia during 1998–2002. Mongolia is a special case; private sources of revenue represent less than 30 percent of total health expenditure (and are tending to decrease even further). So is Papua Guinea, where

FIGURE 7.1 Public and private health expenditures in South Asia, 1998–2001

private revenue sources are estimated to account for less than 15 percent of total health expenditure.

**Africa**

In Sub-Saharan Africa, government expenditures on health are also extremely low. However, because donor funding is an important source of revenue for health in these countries, on average, the sum of these two public sources of revenue is still substantial (chapter 1). Nonetheless, private spending exceeds public spending on health (see chapter 1 and figure 7.2). Furthermore, household out-of-pocket spending accounts for 80 percent of private spending and almost 50 percent of total health spending.

Nevertheless, with low per capita income, challenging growth prospects, limited domestic revenue mobilization potential, severe shortages of health manpower, and the highest disease burden in the world, Africa faces difficult health financing decisions. Africa accounts for 25 percent of the global disease burden and 60 percent of the people living with HIV/AIDS. But it accounts for less than 1 percent of global health spending and contains only 2 percent of the global health workforce (United Nations Population Division 1998; WHO 2004; WHO and UNAIDS 2004;

**FIGURE 7.2 Private and public health expenditures in Sub-Saharan Africa, 2002**

Source: Bitran forthcoming.

![Graph showing private and public health expenditures in Sub-Saharan Africa, 2002](source: Bitran forthcoming.)
Joint Learning Initiative 2004). In this region, increasing the level of health expenditures and improving their efficiency is literally a life and death situation.

**Other regions**

Most low-income countries in Europe and Central Asia, Latin America and the Caribbean, and the Middle East and North Africa have public-private health expenditure patterns similar to those in Asian and African low-income countries. Health expenditures derived from private sources in Haiti and Tajikistan are above 60 percent, are mostly in the form of out-of-pocket spending, and show no recent declines. But the relative importance of private health expenditures is somewhat lower, at about 50 percent, in Latin American countries that have recently been classified as lower middle income (Bolivia, Honduras, and Nicaragua).

In the Kyrgyz Republic and Uzbekistan, two other low-income countries in the Europe and Central Asia region, the proportion of total health expenditures derived from private sources is lower, at about 50 percent, than in some countries in the region that are classified as lower middle income (such as Armenia, Azerbaijan, and Georgia), where the proportion is about 70 percent. These differences may reflect the different degrees of reductions in public health expenditures after the collapse of the Soviet Union. For example, Armenia and Georgia faced some of the largest declines in public health expenditures in the 1990s (Bonilla-Chacin, Murrugarra, and Temourov 2005).

**The cost of the Millennium Development Goals**

To integrate the Millennium Development Goals for health into national poverty reduction strategies, countries need to be able to estimate the costs. More attention must be paid to relative cost estimates than to absolute ones, to the short-term time horizon than to the long-term one, to domestic sources of funding than to foreign aid, and to national ownership than to donor-driven priorities (Vandemoortele and Roy 2004). This local and immediate orientation requires aligning health plans that have been developed with the Millennium Development Goals in mind with each country’s medium-term expenditure framework and poverty reduction strategy. Moreover, it requires being cognizant of budget constraints and multisectoral priorities.

**Estimating methods**

The best methodology for estimating the costs of reaching the Millennium Development Goals remains a subject of debate. Some proposed methods are summarized in annex 7.1.

Table 7.1 provides a set of preliminary country-level estimates for removing bottlenecks to accelerate progress toward the health Millennium Development Goals (MBB method), what it will cost to achieve the health Millennium Development Goals (UN Millennium Project estimates), additional expenditure estimates
to reach the Millennium Development Goals in selected countries based on measured elasticities (elasticity estimates), and additional health expenditures per capita under an optimized allocation framework (MAMS). (See annex 7.1 for detailed information about these costing strategies.) The estimates illustrate orders of magnitude and should not be compared directly to each other or across countries; each methodology has a different estimating objective, and the numbers for each country are not comparable across methodologies.

The MP model estimates an average unit cost per capita and includes all Millennium Development Goals for health, including antiretroviral treatment and essential universal coverage of hospital care for childbirth. MBB estimates the costs of removing bottlenecks at different levels of care delivery: for Madagascar and Mali, the needed expansion of services is largely at the household and outreach levels of
care, where the marginal impact on maternal and child mortality per dollar spent is expected to be large. When additional coverage of hospital care for mothers and treatment for HIV/AIDS is added to MBB costs per capita, per capita costs can reach $25–$35. Finally, the elasticity analysis measures expenditure per capita, under certain assumptions of growth in GDP, decline in illiteracy, and improved access to sanitation and roads. In the elasticity model, the expenditures per capita are especially high for countries for which under-five mortality increased between 1990 and 2000.2

Closing the health financing gap

Whatever estimation method is used, the conclusion of all the Millennium Development Goal cost estimate studies is the same: the financing gap between the costs of achieving the Millennium Development Goals and the potential for low-income countries to mobilize domestic resources is large. That gap can be closed only by external financing. Hence, all Millennium Development Goal cost estimate studies conclude that public expenditures on health must be increased and this additional spending must be financed largely by donor support, especially in the least-developed countries (CMH 2001; UN Millennium Project 2005).

To give a sense of this gap, actual and projected government health expenditures as a percentage of GDP are plotted for 10 low-income countries in Sub-Saharan Africa (figure 7.3). Projected expenditures per capita are derived for each country from the model presented in chapter 5 of this report under assumptions that GDP per capita would grow at 1 percent a year and that all other independent variables in that model (education, roads, water, sanitation, and donor funding) would grow at 5 percent a year.

For these countries, the ratio of government health expenditures to GDP would have to grow from an average of about 2.3 percent of GDP in 2000 (World Bank 2005a) to an average of 30 percent by 2015 to reach the goal for child mortality. For several of the countries, the level of public expenditures to GDP at the end of 2015 would have to be much larger than 20 percent, well above the ratio of total tax revenues to GDP (Kenya, Lesotho, Tanzania, and Zambia). All the other countries, except for Nigeria, are projected to need public spending on health well over 8 percent of GDP. This is obviously not realistic and suggests that the increases in spending would have to come mostly from donor grants and that these grants would have to be sustained for long periods. An independent study suggests that in the cases of Ethiopia and Tanzania, a doubling of aid as a percentage of GDP would require grant financing for 20 years before these grants can be substituted with additional tax revenue under reasonable assumptions of increased domestic revenues (Foster 2003).3

One way low-income countries might improve their health planning is to develop poverty reduction strategy papers under different scenarios of health sector assistance. For example, there is a strong push by certain advocates for governments to produce health plans and even broader poverty reduction strategies on a
“needs basis,” without consideration of budget constraints, under the assumption that any gap will be financed by donors after reasonable national efforts at resource mobilization (UN Millennium Project 2005). Others stress that to be a useful guide to action, the poverty reduction strategy paper needs to be linked to the national budget process, establishing clear priorities to guide public expenditure plans and budgets based on a realistic assessment of available resources.

Clearly, multiple scenarios of the poverty reduction strategy paper are useful for planning. By developing multiple scenarios based on alternative revenue and external assistance scenarios, as in the case of country assistance strategies, some countries have shown how the poverty reduction strategy paper can be used as a guide to the allocation of the resources they expect to have and as a bid for additional support—a “high-case” scenario is used to attract additional finance by showing what could be achieved with it, whereas realistic medium- or low-case scenarios set out how expenditure plans should be prioritized in the event that fewer resources are available. The World Bank and IMF have supported those countries wishing to adopt this approach. A strong case can be made for encouraging all countries to do so.

In any case, given the volatility and unpredictability of donor aid (chapter 4), the need for countries to eventually sustain their own increases in expenditure, and the need for realistic planning and prioritization, it is imperative to analyze
the alternative financing mechanisms available to low-income countries and the major factors constraining their expansion.

**Public sources of revenue for health**

In principle, governments have various ways to increase health expenditure at a sustainable level—that is, to increase the fiscal space that can be available to health. Additional revenues can be raised by collecting new taxes or by strengthening tax administration. Lower-priority expenditures can be cut to make room for more desirable ones. Resources can be borrowed, from either domestic or external sources, or released through debt relief. Governments may benefit from the fiscal space arising from the receipt of grants from outside sources. Finally, governments can use their power of seignorage (having the central bank print money to lend to the government). The following sections review the constraints found in generating such fiscal space from the perspective of the health sector as well as the constraints faced by low-income countries in pooling and allocating resources.

**Tax collection**

One way of increasing fiscal space is to increase domestically available resources by raising tax revenues. However, raising revenues through tax reforms may be easier said than done. As shown in chapter 2, the low tax and nontax resource base and the slow growth rates of low-income countries imply that any increases in health expenditures derived from domestic financing will be slow to come, unless drastic changes take place in domestic revenue generation capacity. Yet, countries such as Benin, Ghana, and Zimbabwe have shown that such efforts are possible and can also support increases in expenditures in the health sector.

The evolution of tax and nontax revenue for 16 African countries during the 1990s shows that these countries had on average a low base of tax and nontax revenues, amounting to 16 percent of GDP in 1999. This average, however, conceals big differences across countries, four of which have shares above 25 percent (the Republic of Congo, Kenya, Lesotho, and Zimbabwe), seven between 15 and 20 percent (Benin, Burundi, Cameroon, Côte d’Ivoire, Ethiopia, Ghana, and Senegal), and five below 15 percent (Burkina Faso, the Republic of Congo, Guinea, Madagascar, Rwanda, and Sierra Leone). The evolution of tax and nontax revenues as a share of GDP also varies across countries. It decreased in five countries over the 1990s, grew at less than 2 percent a year in another four countries, and grew at faster rates (above the population growth rates) only in six countries (figures 7.4 and 7.5).

Low ratios of tax to GDP imply that developing countries have room to increase revenues from taxation to accommodate some increase in expenditures, including those for health. Developing countries may want to replace narrow, distorting tax bases that have widely differentiated rates and numerous loopholes
FIGURE 7.4 Annual percentage change of tax and nontax revenue in Sub-Saharan Africa in the 1990s

Sources: World Development Indicators (WDI) database and IMF Poverty Reduction and Growth Facility (PRGF).

FIGURE 7.5 Annual percentage change in total revenue in Sub-Saharan Africa in the 1990s

Sources: WDI database and IMF PRGF reports.
with broader tax bases that generate higher revenues at lower rates and that do not
discriminate against the various sources and uses of income. Doing so would result
in efficiency gains and greater administrative simplicity and horizontal equity.

However, the practical difficulties of implementing tax reforms must not be
underestimated. Increasing revenues through tax reforms affects many interests
and cannot be done effortlessly, especially when institutional changes in the tax
authorities are required, rural and informal sectors are important, borders are
large, and wealthy elites are politically powerful. Countries are unlikely to attempt
tax reforms only to accommodate additional health expenditures within their
budget constraints.

**Budget reallocation**

Governments may decide to reallocate resources from other lower-priority expen-
ditures to generate fiscal space for health. This path, too, is difficult. From an eco-
nomic point of view, the marginal social benefits derived from government
expenditures should equal the marginal costs. Therefore, expenditures could the-
oretically be reallocated from unproductive public uses to more productive ones
(or from uses that generate a lower marginal social benefit per dollar spent to
those that produce more marginal social benefit per dollar spent). However, this
rarely works in practice. In the first place, governments do not really have an opti-
mizing function, so it is difficult to prove unproductive expenditures, beyond the
obvious “white elephant investments,” such as subsidies to the rich or excessive
payrolls. Second, reallocation of expenditures implies cutting expenditures to a
particular institution or program. Automatically, this raises a political or regional
struggle. It is especially difficult when the reallocation of expenditures involves
cutting payrolls.

Of course, inefficiencies are abundant and should still be addressed. For every
rupee reaching the poor in a rice-subsidy program in India’s Andhra Pradesh state
in 1996, 3.6 rupees were lost in leakage to the nonpoor (Radhakrishna 1997).
Although difficult, change is possible. In the late 1980s, only 30 percent of Bolivia’s
average government investments went to the social sectors; the remainder went
primarily to public sector companies. But in 2000 the reverse was true: only 25
percent of government investments went to other sectors, while 75 percent was
invested in the social sectors. This reversal, however, took almost 10 years and sub-
stantial structural reform, including the privatization of all major public compa-
nies (petroleum, energy, telecommunications, railroads, airline, and others).
Therefore, although reallocation of resources is possible, it requires major politi-
cal will and significant time for an important impact to take place.

**Debt relief**

Countries can increase their fiscal space through additional borrowing. However,
a large number of low-income countries already have a large debt burden and do
not have much room for additional borrowing. Moreover, scaling up health services requires increases in recurrent expenditures (such as salaries), which should not be financed with debt but rather with permanent sources of funding. The complement to additional borrowing is obtaining debt relief to release domestic resources that could be used for additional investment and recurrent spending in the country.

In principle, the Heavily Indebted Poor Countries Debt Initiative is a mechanism to increase the financing available for the social sectors in the target countries. It has important features to help address constraints to improve health, nutrition, and population outcomes. Debt relief is based on the delivery of measurable outcomes. Debt relief, and thus increased expenditures in the social sectors, are based on each country’s poverty reduction strategy, taking into consideration the views of civil society and overall budget constraints. Poverty reduction strategy papers must look at overall constraints that affect absorptive capacity beyond the social sectors where expenditures are taking place.

Countries are eligible for the initiative if they receive concessional loans from the International Development Association (IDA) and would still have unsustainable levels of debt after full use of traditional debt relief mechanisms. Forty-two countries are now eligible, and another 38 are expected to qualify for debt relief. Countries reach the decision point, the first stage of debt relief, based on a three-year record of macroeconomic stability and preparation of an interim or full poverty reduction strategy paper. At that stage they begin to receive “interim” relief. Simultaneously, the criteria for the completion point are established. In addition to maintaining macroeconomic stability, finalizing a full poverty reduction strategy paper, and successfully implementing it for one year, countries must set performance benchmarks for structural and social reforms. Once a country reaches the completion point, the remaining debt relief is scheduled and is irrevocable. To date, 27 countries, including 23 in Africa, have reached the decision point and are receiving some interim debt relief. Nine African countries had reached the completion point (Benin, Burkina Faso, Ethiopia, Mali, Mauritania, Mozambique, Niger, Tanzania, and Uganda) as of May 2005.

The initiative provides eligible countries with substantial savings in debt service payments. The relief committed to the 27 countries that have reached their completion points or are in their interim period, together with other debt relief, represents a two-thirds reduction in the countries’ overall debt stock (IMF/IDA 2004). But, from an expenditure perspective, what is relevant is whether the beneficiary countries had access to resources for additional expenditures as a result of debt relief. Debt service payments relative to fiscal revenue in these 27 countries have declined from an average of 24 percent in 1998–9 to 15 percent in 2003 and are expected to decline to less than half the 1998–9 average by 2006. Not surprisingly, there are large variations across countries. A recent study of 23 African countries shows that the ratios of debt service to government revenues in 2003...
ranged from 6.1 percent in Rwanda to 30 percent in The Gambia and Malawi (Hinchliffe 2004).

An important question is whether the resources made available through debt relief were used to increase expenditures in the social sectors. Progress on this front is measured by IDA and the IMF as the share of poverty-reducing spending to GDP and to total spending. The definition of poverty-reducing spending is country specific and includes, for example, outlays on basic health, primary education, agriculture, infrastructure, housing, basic sanitation, and HIV/AIDS. The definition of such expenditure for each country is established in its poverty reduction strategy paper. According to the IMF and IDA 2004 Status of Implementation report, poverty-reducing expenditures in the 27 highly indebted poor countries have increased on average from 6.4 percent of GDP in 1999 to 7.9 percent of GDP in 2003 (Hinchliffe 2004).

As expected, the increase also varies across countries. According to Hinchliffe (2004), while poverty-reducing expenditures increased on average from 39 percent in 1999 to 48 percent in 2003 as a share of total revenues in 23 of the 27 highly industrial poor countries, it increased by as much as 76 percent in Mozambique and declined by 27 percent in Chad. Of 20 countries for which there was full information, 13 had significant increases in the share of total revenues directed toward poverty-reducing expenditures. Exceptions were Benin, Madagascar, and Niger, where the share remained roughly constant, and Chad, Ghana, São Tomé and Principe, and Zambia, where it fell.

Comparisons across countries make little sense, however, as the definition of poverty-reducing expenditures varies substantially from one country to another. The tendency has been for countries to widen the definition of “priority sectors.” This wider definition can easily mask what is happening to expenditures in education and health, in particular. An analysis by Hinchliffe (2004) of the trend in health expenditures as a share of total government expenditures in 20 highly indebted poor countries between 1998 and 2002 (table 7.2) shows that the share increased on average from 6.2 percent to 8.1 percent. Of the 20 countries, 13 had increases. Exceptions are Guinea-Bissau, where data is not available for enough years to discern a trend; Malawi and Zambia, where the share remained essentially constant; and Burkina Faso, Ethiopia, Madagascar, and Mali, where the share declined.

Low-income countries have recognized the need for greater investments in health. In the 2001 Abuja Declaration on HIV/AIDS, Tuberculosis, and Other Related Infectious Diseases, African leaders pledged to increase health spending to 15 percent of government budgets. Achieving this larger proportion of expenditures in health is going to be a slow process, as the data in table 7.2 show. Debt relief for poor countries is important, but if the country did not have resources to repay the debt in the first place, it may have difficulty complying with the increases in poverty spending required by the program. Even though debt relief
can generate significant savings in debt repayments, it does not automatically generate additional flows of resources to the recipient countries. Of the 20 countries in table 7.2, only 4 reported expenditures in health of 10 percent or more of total government expenditures in 2002. Reallocation of expenditures across sectors is a difficult political process, especially in a very constrained resource environment, as discussed later in this chapter.

**Donor funding**

As discussed in chapter 1, development assistance for health accounts for about 20 percent of country-weighted health expenditures in low-income countries. It plays an especially important role in Sub-Saharan Africa: all 12 countries in which external funding exceeded 30 percent of health expenditures in 2000 were in Africa (WHO 2001).
However, official development assistance in general and health aid in particular have serious problems (chapter 4). These include lack of predictability, increased focus on specific diseases or interventions, large numbers of new actors and donors, lack of responsiveness and flexibility to crises, and donors’ lack of accountability for the absence of results and progress. Volatility is especially damaging, as is the fact that commitments are a bad predictor of disbursements. This hampers the ability of any government to plan appropriately. Commitments are made for short maturities (three years at best), but increased recurrent expenditures in health require long-term resources. Only a small share of aid (about 20 percent) is provided as budget support; the rest of financing is provided as either earmarked project support, off-budget support for disease- or intervention-specific programs, or even technical assistance that is not registered in the recipient country’s balance of payments. Coordinating health plans is extremely difficult, if not impossible, under such circumstances.

Despite these problems, donor funding seems to be the only alternative in the short run for scaling up expenditures in health in many low-income countries, especially in Africa. Yet, to increase the effectiveness of such funding, additional efforts are necessary—to increase the maturity of resources, decrease volatility, and improve harmonization. It is particularly important for donors not to second-guess recipient countries’ preferences, but rather to fund gaps in country programs.

National health services
National health service systems have three main features (see box 3.1): funding comes primarily from general revenues, they provide (or at least aim to provide) coverage to the whole population, and they usually (though not necessarily) deliver health care through a network of public providers. Most low-income countries have a national health service run by the ministry of health. National health service systems finance a basic package of public health services for the entire population and some level of financial protection against catastrophic illness for at least some segments of the population. Financing also includes out-of-pocket payments and purchases of private services, limited social and private health insurance, and community risk pooling schemes.

The problems with national health service systems have been well documented (World Bank 2004b; Wagstaff and Claeson 2004). These include management, accountability, corruption, incentives, underfunding, and misallocation of expenditures. Poor countries with very limited resources have weaker institutions (chapter 6 and below) and limited resources to finance essential services and provide financial protection (chapter 1). The results are limited access and poor-quality health services as well as limited financial protection against catastrophic health expenditures, particularly for the poor in rural areas. More troublesome is that
only one of the three basic financing functions (revenue collection), is fully under the control of the ministry of health.

Revenue collection. National health service systems receive their funding from general revenues. Thus, how much is collected and the proportion of the total amount collected that is allocated to health is largely outside the control of the ministry of health. Significant donor financing of health activities outside the government’s budget may motivate ministries of finance to allocate domestic resources to uses other than health, thereby reducing the additionality of such funding and overall resources devoted to the ministry of health. In addition, the tax and revenue system is outside the control of the ministry of health, the ministry has little ability to affect the equity aspects of revenue raising.

Pooling. Given that collection of resources is outside the control of the ministry of health and the whole population is generally covered by the national health service, risk and equity subsidization will be determined by ministry of health decisions on resource allocation and purchasing functions and by service delivery functions. Risk pooling and prepayment functions are central to the creation of cross-subsidies between high-risk and low-risk individuals (risk subsidy) as well as between rich and poor (equity subsidy).

Resource allocation and purchasing. For a given budget, resource allocation and purchasing are the key endogenous functions of ministries of health. How a ministry of health allocates its resources will largely determine quality, efficiency, access, and equity of services. Ministries of health must determine, within their own political economy constraints, what to purchase, how to purchase, and for whom to purchase. But although these functions are fundamental to attaining access, equity, and efficiency in the health system, they are not solely under the control of the ministry of health. National health service systems have usually been associated with the delivery of services by public providers. Problems such as capture by medical unions, misappropriation of public funds, lack of accountability, and interregional inequities in the distribution of facilities and personnel have been associated with public sector delivery. These problems may result in inequitable physical access to services for the poor, particularly in rural areas. Supply-side subsidies can further impoverish those who are already poor. For every dollar of services that is subsidized for the overall system, one less dollar is available to subsidize services for the poor, who often have access only to a very limited benefit package. As a result, the poor seek additional coverage from the private sector, becoming further impoverished. Although public sector delivery of services is not an inherent characteristic of all national health services, separation of financing from provision, as in Rwanda (box 7.2, later in the chapter), can generate the appropriate incentives to improve the services efficiency and equity.
Social health insurance

Social health insurance systems have been established in more than 60 countries all over the world (see chapter 3). Some low-income countries, especially in Africa, are considering introducing or implementing social health insurance. For instance, Tanzania implemented its National Health Insurance Fund in 2001, and Ghana passed a national health insurance law in 2003. Kenya introduced the National Hospital Insurance Fund in 1966 but is currently considering a major reform.

When low- and middle-income countries propose to adopt or reform social health insurance systems, the most common goals according to the ILO (2001) are to:

- mobilize funds for health care expenditures (introduce a new “tax”),
- improve insurance coverage (eliminate barriers to health care services and protect households against incurring large medical expenditures),
- improve equity (redistribute income and ensure equitable access to medical services), and
- build democratic and participatory institutions (promote solidarity and social cohesion, empower citizens, strengthen civil society organizations).

It is an open question whether these public policy goals can be reached through social health insurance, especially in low-income countries. The enabling conditions discussed in chapter 3 are especially difficult to meet in low-income countries.

First, while some countries have supportive economic conditions, with rapid growth and increasing formalization of the labor market, others are experiencing economic stagnation and have large informal sectors. Further constraints to developing social insurance schemes arise in economies that rely on exports of raw materials, agricultural products, or products with international market-set prices in which a competitive labor force is fundamental for the country to remain competitive. Moreover, policy makers should fully understand the equity implications of the slower growth that can result from implementation of a social health insurance system, as the population that might benefit from introducing such a system is not likely to be the same as the population affected by the slower growth or the population that benefits from government-contracted services.

Second, economies with large rural areas will face difficult challenges introducing social health insurance. Some countries in Latin America, such as Bolivia, Ecuador, and Peru, which have large rural populations and large informal sectors, have had difficulty increasing coverage beyond 25 percent of the labor force, despite having social insurance schemes in place for more than 60 years. Coverage has been expanded in some Latin American countries (Colombia, for instance) through demand-side subsidies from government for a predetermined population. Such subsidies must be analyzed from equity, efficiency, and sustainability perspectives.
Third, administrative capacity is an important constraint in low-income countries. Policy makers must consider the opportunity cost of using scarce administrative resources in the development and administration of a social health insurance system, which is likely to concentrate coverage among the formally employed and expand slowly to other, often more needy groups. More important, to function appropriately, a social health insurance system must be soundly governed. The supervisory structure and systems needed to attain the required quality of governance are difficult to find in low-income countries.

**Private sources of revenue for health**

Private spending plays a large role in health financing in low-income countries, where private spending invariably means out-of-pocket expenditures, not private insurance. The same is true of many lower-middle-income countries, such as China. The main consequence is that households have difficulty accessing health care services or are exposed to the risk of impoverishment because of catastrophic health expenses.

Evidence also suggests that exposure to the risk of catastrophic medical expenses as a result of highly limited insurance coverage causes rural households to hold more wealth and to keep it in liquid form (Wagstaff and Claeson 2004). This self-insurance is only partially successful at smoothing consumption when income shocks (due to a variety of factors including illness) occur. For example, in India, it has been estimated that nearly one-quarter of people admitted to hospitals were above the poverty line when they were admitted but were below the poverty line at the end of their stay because of the health expenditures they incurred. In Vietnam, health expenses are estimated to have pushed about 3.5 percent of the population into absolute poverty in both 1993 and 1998 (Wagstaff and van Doorslaer 2003). The risk of large-scale impoverishment is clearly greater the poorer the country.

Low-income countries’ abilities to provide financial protection to their populations are limited by the scarce opportunities for risk pooling, as well as by very limited public and private resources to finance health expenditures.

Could enhanced pooling of private resources—whether through private health insurance or community-based health insurance—improve financial protection in low-income countries? Both of these kinds of voluntary insurance have some significant constraints on their potential, which require sustained efforts to overcome.

**Voluntary health insurance**

Voluntary health insurance can be a mechanism for harnessing and pooling private resources to finance health expenditures (see chapter 3). However, in low-income countries, private and community-based risk management and insurance
schemes are in the initial stage of development. Voluntary health insurance represents less than 5 percent of health expenditures in low-income countries, and it plays more of a role in supplementing private care for middle- and upper-income groups. This section highlights some of the pros and cons often attributed to voluntary health insurance that were discussed in chapter 3. It is important to note, however, that these are largely untested in a low-income context.

**Potential advantages.** From the perspective of low-income countries, there are some good public policy reasons for exploring the development of both private and community-based voluntary health insurance systems:

- Mobilizing additional funding for the health care system
- Reducing the potential that catastrophic health costs could push the nearly poor into poverty
- Freeing public resources by inducing individuals, particularly those in the upper income groups, to opt out of the public sector in favor of the higher-quality private sector

If the poor had improved access to voluntary health insurance, they might obtain better access to health services. Nonetheless, this potential remains untested in low-income countries. Table 7.3 highlights the small percentage of private health expenditures originating from pooled funds within prepaid plans in several low-income countries.

Another possible advantage of voluntary health insurance is that it could encourage individuals to opt out of public sector health care in favor of the private sector, depending on the scope of coverage. Moreover, because private insurance is often concentrated among upper-income groups, expanded insurance coverage to

<table>
<thead>
<tr>
<th>Country</th>
<th>Private health expenditures (percent of total health expenditures)</th>
<th>Prepaid insurance plans (percent of private health expenditures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>78.6</td>
<td>9.5</td>
</tr>
<tr>
<td>Nigeria</td>
<td>76.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>40.4</td>
<td>0.0</td>
</tr>
<tr>
<td>India</td>
<td>82.1</td>
<td>—</td>
</tr>
<tr>
<td>Pakistan</td>
<td>75.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>51.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>74.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>71.5</td>
<td>4.2</td>
</tr>
</tbody>
</table>


— not available.
these groups might permit better targeting of public expenditures to the poor (Gertler and Sturm 1997). However, there is limited evidence of this occurring in OECD countries with widespread voluntary health insurance coverage, and the publicly financed system often continues to play a role for those with voluntary coverage (OECD 2004). Moreover, such opting out might result in reduced political support for the public system by those who no longer use it, to the detriment of those for whom it remains the only option.

Furthermore, the administrative and regulatory costs required to establish and maintain a voluntary health insurance market are not insubstantial. Regulatory, cultural, and systemic barriers also contribute to the low level of voluntary private health insurance penetration, some of which may not be easily tackled. Table 7.4 outlines some of the key barriers to the development of a voluntary health insurance market in India. One key barrier is a high capital requirement. Other low-income countries may face some or all of these barriers. It is therefore important to assess the potential for a voluntary health insurance market within the specific cultural, historic, and economic context of each country.

**Community-based health insurance schemes**
Community-based schemes have developed largely as a community response to the absence of alternative financial protection mechanisms (ILO 2002). Most community-based health insurance schemes in Sub-Saharan Africa are based on voluntary participation of individuals and have fewer than 500 members (see chapter 3). The population covered by these schemes is still relatively small in most low-income countries.

There are exceptions, such as Rwanda, where the government and more than 90 community-based schemes have decided to subsidize premiums for the poor to encourage coverage of a defined package of services. As a result, coverage has risen to 4 percent of the total population. However, evidence shows that most community-based schemes do not reach the very poor. Another exception is the Yeshashvini scheme in the Indian state of Karnataka. The scheme concentrates on financial protection for surgical treatment and operates as a “cashless service” to the 2.1 million insured farmers in a network of 2 public hospitals and 73 private hospitals across the state. The scheme is managed by a third-party administrator, whose responsibilities include enrolling members, processing claims, and developing a network of providers.

**Realities of achieving significant risk pooling and financial protection**
As discussed above, low-income countries are plagued by both low absolute levels of health spending and a high proportion of nonpooled out-of-pocket spending. The question remains: can low-income countries realistically finance universal coverage for a basic package of essential services and provide financial protection
for their populations? Both the breadth and depth of coverage (the percentages of the population with public and private formal coverage and the percentage of out-of-pocket spending) need to be evaluated. In theory national health services cover everyone and may appear to provide universal coverage. In practice, that does not necessarily mean that services are available or accessible. Indeed, in most countries, services are rationed through supply- and demand-side constraints (unavailability of services in certain areas, waiting lists, need for under-the-table payments).

High-income countries have high absolute levels of health spending and a relatively small share of out-of-pocket spending—20 percent or 10 percent if country weighted (see chapters 1 and 9). Population health risks are pooled, and households have financial protection. In looking at the financial protection and depth-of-coverage issue in low-income countries, where out-of-pocket spending is around 60 percent of total health spending (40 percent if country weighted), one might initially use the 20 percent out-of-pocket spending threshold of high-income countries as a measure of financial protection and coverage depth and pose the question: how many low-income countries meet this threshold? Examination of 2002 country-level spending information shows that of the 58 low-income countries for which data are available (WHO 2005) perhaps 7 would meet this criterion, almost all of them small Pacific islands. In other words, almost no low-income countries, irrespective of their risk pooling mechanisms, have been able to provide their populations with high levels of financial protection.

This finding reinforces the need for low-income countries to use the most appropriate public and private mechanisms at hand, given their individual circumstances, to equitably, efficiently, and sustainably provide universal access to an essential package of public health and curative services and to provide financial protection to the extent feasible, particularly for the poor. There are no ideologically correct templates or one-size-fits-all solutions. The proposed scaling-up of aid and development assistance for health is likely to be a necessary condition to assist countries in providing universal access to essential services and financial protection, but in the absence of appropriate policies and targeting, that will not be sufficient. Given the extreme resource constraints in most poor countries, the entire armorarium of available instruments including users fees, needs to be considered.

User charges

Few health policy issues are as controversial as user fees for health care. Most countries in Sub-Saharan Africa impose user charges for health services. In China, user fees are widespread and account for a substantial share of total health financing. Cambodia has recently formally imposed user fees. In Eastern Europe and Central Asia, informal user fees have proliferated to make up for major shortfalls in public financing brought about by economic transition.

In the 1980s, the pervasive lack of public financing for basic health services, particularly for primary health care and drugs, led to calls for the expansion of
user fees. User fees were considered an appropriate financing mechanism to make resources available at public facilities to improve the quality of services and health outcomes. The adopting countries, other proponents of user fees, and the literature at the time recognized that the introduction of user fees could limit access to services by the poor, as well as limit overall utilization of preventive and primary health care. Therefore, policy papers recommended that fees be accompanied by appropriate systems of waivers for the poor and exemptions for preventive and some primary health services.

Given the current focus on countries achieving the Millennium Development Goals, the recognition that demand-side constraints may be one of the impediments to achieving the goals, the poor progress (especially in Africa) in reducing poverty, and the large actual and proposed increases in donor aid for health, there has been a strong push by several global development partners to eliminate user fees. Unfortunately, much of the debate has been clouded by rhetoric, selective interpretation of the global evidence, and a lack of clarity about context and definitions, including confusion between goals and instruments, as well as a lack of understanding of how user fees for publicly covered services are a small part of consumers’ overall out-of-pocket payments.

Distinguishing goals and instruments. The goal of most proponents of the elimination of user fees (Save the Children 2005) is improved access, especially by the poor, to essential health services in low-income countries. Nonetheless, user fees are merely one of many instruments (others include domestic resource mobilization, external assistance, and improved technical and allocative efficiency of spending) used to provide the revenues needed to achieve this goal. The political discussion surrounding the abolition of user fees often does not deal with this broader overall revenue question. In other words, raising sufficient revenues to ensure access to essential services and financial protection for a country’s population in an equitable, efficient, and sustainable manner must be addressed in terms of a holistic assessment of all public and private financing instruments.

Distinguishing user fees for public services and overall out-of-pocket health spending. There is a lack of clarity in the precise definition of user fees, as well as a lack of distinction between user fees and out-of-pocket payments for costs incurred in the use of health services. In the classic public finance definition, user fees are charges for publicly provided services. Others define user fees as payments for publicly and privately provided services. Whatever the definition, there are other direct and indirect “costs” and payments incurred by families in their use of health services. These include the opportunity costs of the individual’s and family’s time in lost wages, work at home, studying, and so on; transportation costs to and from the health care provider; and costs that the patient and accompanying relatives or friends incur for food and lodging while seeking and obtaining care (box 7.1).
Moreover, the debate never takes into account that a large portion of the user payments made at the facility level are informal or under the table, such as in China and India, and will not disappear merely with the approval of legislation (Lewis 2000).

Arguments for and against user fees. Most of the debate has focused on required direct payments by households to providers for publicly provided health services.
Such payments include charges for the use of publicly covered or provided services (the abolition of these public charges is at the center of the current debate) and charges to consumers made by private providers for direct purchase of their services, including drugs, physician care, and diagnostic tests. While public and private providers may charge user fees, regulatory mandates (law, presidential decree, or other) can eliminate only the user charges for publicly covered services.
Charges for privately financed nonpublic services remain. It is extremely rare for a country to restrict its citizens’ ability to purchase privately provided health services on a purely commercial private basis. Abolition of user fees at public facilities may not lead to a substantial reduction in the total out-of-pocket payments because the user fee charged by public programs is likely to be small relative to all the other payments (direct and indirect) incurred by the user. Moreover, if the quality of service declines as a result in public facilities (which previously retained the fees), then consumers may go to private facilities and pay higher fees, resulting in an increase instead of a decrease, in out-of-pocket payments. Table 7.5 summarizes some of the arguments for and against user fees.

Evidence of the impact of user fees on access to quality health services by the poor is mixed (Bitran forthcoming; World Bank 2004b; Pearson 2004; Wilkinson and others 2001). This evidence shows that where user fees have been removed, demand by the poor has increased in some places and decreased in others. It also shows that demand can be both price inelastic and price elastic. This diverse and seemingly contradictory body of evidence may result from varying circumstances where the studies have been undertaken and from the use of different research methods.

A key variable is what is done with user fee revenue, specifically whether it is used to finance improvements in health care quality at the local level. Evidence shows that where the revenue has been kept locally and spent on drugs or salary improvements, quality of care has improved, leading to increased demand and improved welfare for both poor and nonpoor patients (Niger and Cameroon are

### Table 7.5 Arguments for and against user fees

<table>
<thead>
<tr>
<th>Arguments for user fees</th>
<th>Arguments against user fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Generate additional revenue with which to improve health care quality</td>
<td>• Are rarely used to achieve significant improvements in quality of care, either because their revenue-generating potential is marginal or because fee revenue is not used to finance quality improvements</td>
</tr>
<tr>
<td>• Increase demand for services owing to improvement in quality</td>
<td>• Do not curtail spurious demand because in poor countries there is a lack, not an excess, of demand</td>
</tr>
<tr>
<td>• May reduce out-of-pocket and other costs, even for the poor, by substituting public services sold at relatively modest fees for higher-priced and less-accessible private services</td>
<td>• Fail to promote cost-effective demand patterns because the government health system fails to make cost-effective services available to users</td>
</tr>
<tr>
<td>• Promote more efficient consumption patterns, by reducing spurious demand and encouraging use of cost-effective health services</td>
<td>• Hurt access by the poor, and thus harm equity, because appropriate waivers and exemption systems are seldom implemented; where they are, the poor receive lower-quality treatment</td>
</tr>
<tr>
<td>• Encourage patients to exert their right to obtain good-quality services and make health workers more accountable to patients</td>
<td></td>
</tr>
<tr>
<td>• When combined with a system of waivers and exemptions, serve as an instrument to target public subsidies to the poor and to reduce the leakage of subsidies to the nonpoor</td>
<td></td>
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</table>
examples). There seems to be growing evidence that the demand for health care is more price responsive among the poor (Indonesia, Peru), and therefore the need to find well-functioning waiver systems for better targeting public subsidies to the poor remains a priority. Evidence from Africa, Asia, and Latin America is showing that the adoption of effective waiver systems by poor countries is possible, albeit difficult. Evidence has also shown that implementation of user fees can lead to quality improvements, but that such a link is not automatic and requires careful design and implementation.

The recent decision by the government of Uganda to remove user fees has helped fuel the debate, because of the reported impact of the removal on the poor’s use of services in public sector facilities. Indeed, the more rigorous studies show that the benefit incidence in public facilities after abolition has improved (for example, utilization by the poor has increased relative to the nonpoor) (Xu and others forthcoming). Unexpectedly, however, the incidence of catastrophic health expenditures among the poor did not fall. Xu and others (forthcoming) claim that the most likely explanation is that the frequent unavailability of drugs at government facilities after 2001 forced patients to purchase from private pharmacies. Informal payments to health workers may also have increased to offset the lost revenue from fees. This occurred in spite of Uganda’s track record of improving public expenditure management, increasing government health expenditures, and other restructuring in the health sector before the abolition of user fees.

As low-income countries emerge from poverty over the coming decades, they are likely to move toward greater public financing of health care and universal coverage, either through the establishment of national health service systems or through social health insurance. But while they transition to those systems from their current situation of underfinancing and user fees, countries will require help from their development partners to lessen any detrimental impact of fees on the poor. During this transition, blanket abolition of user fees may appear to be an attractive policy option. In reality, however, the abolition of user fees may result in the exclusion of many basic services, or worse, a reduction in quality and even access for the poor, the population the policy is intended to help. There are a range of policy options that could mitigate negative effects caused by user fees, each of which should be adapted with consideration for the individual country context. Some governments may decide that user fees should remain a policy option, even when new health financing systems are adopted.

Donors should focus on helping countries promote demand for preventive, primary, and other health services that can make the greatest contributions to achieving the Millennium Development Goals. They should also help countries find mechanisms for increasing poor people’s access to needed medical care without jeopardizing their consumption of other basic goods and services. In addition, support should be given to local and national initiatives aimed at raising additional revenue for health care (such as local taxes and local health insurance) and ensuring
that part of that revenue is targeted to the poor (with waivers or other targeting systems) and to underprovided, cost-effective health services.

The importance of country-specific factors and the resulting multitude of organizational and health financing arrangements suggest that no single solution can be formulated for all. The overall operational sustainability of health systems may depend on user fees for some time to come. Although small as a source of health financing at the aggregate health system level, user fees may constitute an important resource for the payment of variable costs, especially for primary care at the individual facility level. This flexible (not earmarked) income for primary care facilities will be difficult to replace with other funding sources until a number of conditions are met, most notably improvements in governments’ ability and readiness to mobilize funding for health care through alternative sources and to make those resources reliably available at the facility level. The international community must assist low-income countries to obtain equitable, efficient, and sustainable financing to provide their citizens with an essential package of basic services and financial protection against the impoverishing effects of catastrophic medical expenses.

**Equity and efficiency of health spending in low-income countries**

Although government health expenditures are likely to increase in low-income countries attempting to reach the Millennium Development Goals for health, budget constraints will surely remain, and low-income countries will continue to face allocation decisions that have important implications for equity and efficiency.

The use of currently available resources may not be directed toward interventions that have the greatest marginal impact on health outcomes. Tradition, corruption, political pressures, and other factors generate incentives to use increased health resources as additional subsidies to university hospitals, sophisticated equipment, specialized diagnostic laboratories, or elite cardiovascular or cancer institutes (World Bank 2002). The mix of recurrent inputs in the health sector is unique, demanding a large scope and scale of labor skills, as well as the continued availability of a large variety of drugs and supplies. To make adequate use of additional funding, each country will require individual support to understand clearly the production function and to maximize the impact of services on improved outcomes for the Millennium Development Goals.

However, progress toward the Millennium Development Goal targets could be achieved through a pattern that benefits primarily the better-off, while largely bypassing the poor (Gwatkin and others 2000). As mentioned above, there is an incentive to use increased available resources in tertiary hospitals, where utilization trends tend to favor the rich (Castro-Leal and others 1999). Moreover, a study in 2000 of the benefit incidence of public spending on health in Africa showed that among seven countries only Kenya and Tanzania exhibited a pro-poor
pattern of utilization of primary care services (Sahn and Younger 2000). In the remaining five countries (Côte d’Ivoire, Ghana, Guinea, Madagascar, and South Africa), the richest 20 percent of the population accessed primary care, as well as higher-level care facilities, more than the poorest. This implies that shifting resources to primary services alone will not necessarily increase their use by the poor. Other efforts will be required.

To overcome the allocative and technical efficiency problems and increase the probability that the additional resources will have the desired effect on health outcomes, countries will need to strictly monitor and adjust their poverty reduction strategies. And they will need technical assistance to improve their capacity to absorb and make efficient use of any additional resources derived from debt relief and other initiatives. Given budget constraints, countries must carefully answer some fundamental questions through the health plans imbedded in their poverty reduction strategy (Preker and Langenbrunner 2005):

- What services should the government purchase?
- How should it purchase those services?
- From whom should it purchase services?
- For whom should it purchase services?

**What services should the government purchase?**

The answer to this difficult question is determined by economic, social, and political factors. In low-income countries, budget constraints impose restrictions or become binding at relatively low levels of expenditure per capita. This implies that states must make their financing choices with careful consideration of whether they are merited. A small but important collection of health-related activities must be financed by the state if they are to be provided at all or provided at the socially optimum level of consumption. These interventions appear to account for much of the impact of health spending on health improvements (Musgrove 1996). These public health activities are especially important at low income levels, for both epidemiological and economic reasons, so that public financing may be particularly crucial for health in poor countries. However, as Musgrove (1996) points out, numerous other criteria influence government decisions to finance and directly provide health services.

From the perspective of reaching the Millennium Development Goals, effective health interventions exist for all health targets. There is an impressive array of interventions to fight child malnutrition, child mortality, maternal mortality, and communicable disease mortality (Wagstaff and Claeson 2004, pp. 47–54). Many of these interventions should be financed by the public sector, because they provide public goods or generate externalities. Many of these interventions are underused, especially by the poor. Public financing of the portion of these interventions that are private goods can also be justified from an equity perspective for a targeted population.
In 1993 the World Bank recommended a basic package of health services that costs about $12 per capita (World Bank 1993). More recently, more inclusive packages with costs of $30–$40 per capita have been recommended (CMH 2001). These packages include treatment of AIDS with antiretroviral therapy, which is very costly. In Ethiopia, a package of services that is designed to reach the maternal and child health Millennium Development Goals and includes prevention and treatment of other communicable diseases (except for HIV/AIDS) was estimated at $16 per capita. Treatment for HIV/AIDS would essentially double the cost per capita. Moreover, with increases in life expectancies afforded by antiretroviral therapy, HIV/AIDS can, in some cases, become a chronic as well as an infectious disease, imposing the challenge of maintaining treatment levels over an extended period (Lewis 2005). From this perspective, the inclusion of antiretroviral therapy in publicly financed interventions needs to be weighed against the high opportunity cost of other investments not undertaken and the implications of this decision for economic growth, education, and other health interventions.

Determining which health services the government should purchase or cover is a difficult decision that low-income countries must face. This decision is usually made on social and political grounds rather than economic reasoning alone. Yet the decision has important implications for the opportunity cost of the resources used and the impact on outcomes and growth. Moreover, it can generate far-reaching fiscal contingencies, even if financed in the short and medium terms with donor funding. Governments are encouraged not to promise what they cannot deliver. It would seem to be best for these governments to first finance a universal, small package of services, essentially encompassing public goods, goods with externalities, and other interventions with proven impact on the health Millennium Development Goals or other goals set by each country and reflected in its poverty reduction strategy. Any other clinical care and catastrophic expenditures would then be financed for the poor through some targeting mechanism.

**How and from whom should the government purchase services?**

Public funds may be used to pay for the provision of services by public providers (budget allocation), to purchase services from private or public providers, or to contract managed care institutions, which in turn do the purchasing and/or provision. Once resources are available to a low-income country, restrictions on how to use them are determined by the country’s absorptive capacity. Although absorptive capacity constraints are usually discussed in relation to international aid, they also relate to any increase of expenditures (independent of the source of funding), especially at the sector or regional level. For instance, the ministry of health may have difficulty spending additional resources allocated in a given year or a municipal government may have difficulty executing a budget.
From the perspective discussed above, absorptive capacity includes the ability of the public sector to design, disburse, coordinate, control, and monitor public spending. This coordination is both vertical (between central and local governments) and horizontal (between line ministries at any given level). The question is whether governments or even institutions such as health ministries have the capacity to manage a large increase in real expenditures beyond a usual trend. These issues have to do with public expenditure management but also with more general administrative systems, such as registries for contracts and property, systems for arbitrating contractual conflicts, and transparent judicial systems.

As discussed in chapter 6, the World Bank’s Country Policy and Institutional Assessment (CPIA) Index rates countries on a composite scale of 1 (low) to 6 (high). The Africa region, where further efforts are required with respect to Millennium Development Goals, had the lowest CPIA score of all regions in 2004. Only five countries in the region scored 4 or higher. On another indicator of institutions, Transparency International’s Corruption Perceptions Index, more than a third of the countries in the Sub-Saharan region scored below 3 (on a scale from 1 to 10, with 1 being most corrupt) in 2001. The perception of corruption, payment delays and difficulty adhering to contractual agreements, and the overall lack of absorptive capacity in African governments negatively affect prices and terms offered to African countries for pharmaceuticals and medical supplies as well as for other services and result in delays or cancellation of donor financing to the health sector. They may lead ministries of finance to conclude that health financing is excessive, thereby inhibiting further budgetary increases to the health sector.

Thus, programs to improve public expenditure management are an important priority and may even constitute a necessary precondition for scaling up programs in health or other social sectors. Well-designed health plans need to be part of a multisectoral strategy, reflected and costed as part of poverty reduction strategies. Moreover, poverty reduction strategies need to be reflected in medium-term expenditure programs, disbursed and monitored according to compliance with objectives measured in outputs.

Good practices in these areas were discussed in chapter 6. Box 7.2 illustrates the case of Rwanda, where the government costed a health strategy that was part of a poverty reduction strategy. The costs of the poverty reduction strategy—in particular, the cost of the health plan—were negotiated with the Ministry of Finance and included in the medium-term expenditure framework, with important increases in the health budget. What is to be accomplished, in terms of outputs, is clearly established in the strategy and is part of the medium-term expenditure framework. The Ministry of Finance is clear about what it will provide from the increased budget and may cut future allocations in cases of nonperformance, thus generating a clear mechanism of accountability. The World Bank supports the program through a poverty reduction support credit.
For whom should the government purchase services?

A major problem with allocations of resources is that increased expenditures often may benefit the better-off more than the poor. Studies have repeatedly shown that the poor benefit much less than the nonpoor from government health expenditures in many countries. Supply-side subsidies (such as the financing of public hospitals) and gratuities (under-the-table payments to physicians) are common in Eastern Europe, and together they imply a subsidy to the rich, who take advantage of a public facility by paying an amount that does not cover the full cost while receiving a privileged service because of their ability to pay the gratuity to the doctor. Similarly, supply-side subsidies to deficit-ridden social insurance institutions in Latin America (for example, Argentina) imply a subsidy to the nonpoor, since such institutions cover mostly formally employed urban workers.
How can governments improve the allocation of resources so that they favor the poor? There is no conclusive evidence that either of the collective resource generation mechanisms for health services—social insurance (Bismarck model) or general taxation (Beveridge model)—works better for the poor. To favor the poor, both require some level of cross-subsidy—through either differential premiums or progressive taxes (World Bank 2004b). However, in a low-income country, given the limits of the formal economy, as well as the binding constraints faced by government at low levels of per capita expenditures, the options for reaching the poor are even less clear. Beyond a basic universal package, special targeting mechanisms are needed to ensure financing of needed services for the poor population. These were discussed in chapter 6. The enabling conditions for decentralization were also discussed in chapter 6. Box 7.3 on Vietnam shows how growth and even
improved health outcomes may leave the poor lagging behind and thus the need to give special consideration to the targeting mechanism.

**Conditional cash transfers: seeking results from targeting**

A recent social safety net innovation from Latin America and the Caribbean, which constitutes a de facto “negative” user fee, is the conditional cash transfer (Rawlings 2004). Conditional cash transfers provide direct cash payments to poor households contingent on certain behavior, such as completing a full set of prenatal visits or attending health education classes. In some pilot programs, cash grants were based on an estimate of the economic cost of travel and waiting time for the beneficiary and so represent a negative user fee. The focus of conditional cash transfers is both on short-term income support and on longer-term human capital accumulation and not necessarily on strict financial protection against illness shocks. Nonetheless, the cash grants can be fairly large, up to 25 percent of household income, and
so potentially constitute a buffer against financial shocks due to illness (in addition to having a direct effect on incentives to use mandated health care interventions) (Gertler 2000). Evaluation of the programs has been rigorous, usually involving random assignment designs. The results are generally positive; the programs have demonstrated gains in human capital outcomes, including health.

The applicability of such programs to health care financing in low-income countries is still unresolved. The evidence suggests that well-designed conditional cash transfers have the potential to improve human capital and health outcomes and to reduce poverty, with relatively modest administrative costs. However, testing of the programs has been confined almost exclusively to middle-income countries, many in Central and South America, where the programs constitute social sector spending on top of existing health spending. Further research is needed to determine whether conditional cash transfer programs can be an effective means of improving health outcomes and cushioning households from illness shocks and whether they can be effectively implemented in low-income country settings.

**BOX 7.3 (continued)**

What explains this inequality and what policy options are available for accelerating the pace of decline of child mortality among Vietnam’s poor?

Extensive analysis of data from several sources points to two important factors: declining education levels among poor mothers and declining use of skilled birth attendants and medical facilities among the poor. In 1993, mothers in the bottom income quartile averaged 5.8 years of schooling. In 1998, this figure had fallen to 5.4 years. In 1993, 62.7 percent of births in the poorest quartile were attended by a medically trained person, and 43.1 percent of births took place in a medical facility. In 1998, these figures had fallen to 57.3 percent and 33.3 percent, respectively. Reversing the decline in maternal schooling and in deliveries in medical facilities and attended by medical personnel would reduce the under-five mortality rate by an estimated 11 percent.

**Success factors**

Econometric analysis shows that growth in household incomes accounted for only a small proportion of the improvement of child and maternal health in Vietnam from 1993 to 1998. Looking to 2015, even under quite optimistic assumptions about annual income growth, the projected levels of child mortality are likely to be higher than the targets. In other words, economic growth is not enough. Ensuring that it is not just the better-off who benefit from improvements that increase the impact of health determinants on child survival is central to achieving the Millennium Development Goals.

What policies can promote this objective? Better targeting is essential. In improvements in health services, drinking water, and sanitation, where the poorest quartile of children lag far behind the best-off are also necessary. Closing these gaps—by bringing the poor up to the levels enjoyed by the better-off—is likely to have a sizable effect on child mortality. The largest impact would come from raising health service coverage among the poorest quartile to the level of coverage enjoyed by the best-off three quartiles.

Source: World Bank 2004a; WHO [www.who.int].
Annex 7.1 Four models to estimate the cost of the Millennium Development Goals for health at the country level

Millennium Development Goal needs assessment (MP) model developed by the UN Millennium Project (UN Millennium Project 2004a)—The MP model yields total cost estimates for full coverage of the needs of a defined population with a comprehensive set of health interventions in a given year. It uses the unit cost of covering one person multiplied by the total population in need in a given year to yield the direct health cost. Resource requirements are added (on the basis of assumptions rather than actual inputs) for improving the health system; increasing salaries for human resources, administration, and management; and promoting community demand and research and development (UN Millennium Project 2003).

Marginal budgeting for bottlenecks (MBB) model developed by the United Nations Children’s Fund (UNICEF), the World Bank, and WHO (Soucat and others 2004)—The MBB model determines the additional resources required for removing a set of health system bottlenecks, which are thought to hinder the delivery of essential health services, through family/community, outreach, and clinical delivery modes. The MBB method also estimates the impact on outcomes (for instance, child and maternal mortality) of increased coverage and use of health services. First, a set of high-impact services are selected on the basis of a country’s epidemiological needs. Second, health system bottlenecks hindering delivery of these services are identified. Then strategies for removing the bottlenecks are discussed and the inputs for improving coverage (for example, in a village) are identified. Cost estimates are based on these inputs by scaling up the cost to cover the district, province, or nation (Soucat and others 2004).

Elasticity estimates through econometric modeling developed by World Bank staff—A few studies use econometric techniques to analyze the impact on Millennium Development Goal outcomes of certain cross-sector determinants (such as economic growth, water and sanitation, education, road infrastructure), as well as government expenditures on health (Filmer and Pritchett 1997; Wagstaff and Claeson 2004; Bokhari, Gottret, and Gai forthcoming). Econometric analysis has been used mostly to analyze the impact of changes in government health expenditures on outcomes, using cross-sectional or panel data at a global scale. But in one study in India, the methodology was used to estimate the marginal costs of averting a child’s death at the state level. The estimates could vary from as low as $2.4 per child death in a low-income state to $160 in a middle-income state.

Maquette for multisectoral analysis (MAMS) of Millennium Development Goals under development by the World Bank—the basis for this new approach is that development aid is a key ingredient of the development process of a country, but its effectiveness has to be assessed at the country level within each country’s local implementation and macroeconomic constraints. The objective of the model is to calculate the financial needs to attain a targeted path to 2015 and determine an optimal allocation of additional funding directed to different social sectors for the Millennium Development Goals. The model captures some aspects...
of absorptive capacity (such as the impact of increased demand for skilled labor on public sector overall wages); spillovers across sectors and across Millennium Development Goals; implications of additional financing, such as grants, on the macroeconomy (for instance, on the exchange rate); and interactions between growth and the Millennium Development Goals (Bourguignon and others 2004).

Endnotes

1. Sri Lanka is the only low-income country in South Asia where public sources of financing for health services are significant, accounting for half of the spending.

2. An alternative methodology establishes a “production” frontier using the health expenditure level (total and public) for the 20 percent of countries in a sample of 135 that performed best on health indicators such as under-five mortality, maternal mortality, and HIV prevalence (Preker and others 2003). The gap in expenditures between each country and the production frontier is calculated, adjusting for population and controlling for level of income (measured by GDP per capita). The methodology was used to estimate a global expenditure gap to reach the Millennium Development Goals—estimated to be between $25 billion and $70 billion—by aggregating individual country expenditure gaps.

3. Obviously, a more ambitious assumption of real GDP growth per capita would reduce health expenditures as a percentage of GDP. However, the percentages are likely to be high unless very ambitious GDP per capita growth rates are assumed. If GDP per capita grows at an average of 3 percent a year in real terms, the average expenditure per GDP in the countries in figure 7.3 would have to increase from 2.3 percent in 2000 to 16 percent in 2005. Ghana, Kenya, Tanzania, and Zambia would still be spending on health more than they tax.

4. For a detailed discussion of organizational, institutional, and management constraints of community-based health insurance schemes see Dror and Preker (2002).

5. The scheme basically leverages an existing institutional mechanism in order to minimize adverse selection and moral hazard issues by restricting coverage to members of the cooperative and insuring a huge number of members (2.21 million lives were insured as of March 2005); reduce the transaction costs in providing insurance coverage for people in rural areas, which are thinly populated; and ease administration, as an existing administrative set-up is used to administer the scheme.

6. Leaving aside the low levels of absolute spending, which clearly make it more difficult to provide large amounts of financial protection against catastrophic illness costs.

7. The seven countries meeting the threshold are Timor-Leste, Solomon Islands, Papua New Guinea, Bhutan, São Tomé and Principe, Mozambique, and Lesotho. The information for Mozambique is clearly suspect and not consistent with data from other sources.

8. This section of the report relies heavily on Bitran (forthcoming).

9. A recent decision by the Supreme Court of Canada has called into question the validity of some Canadian provinces’ restrictions on people’s ability to buy private health insurance to cover privately provided health services. In this case, the court ruled that the Quebec government cannot prevent people from paying for private insurance for health care services obtained from private providers outside the publicly reimbursed system (Chauvilli v. Quebec, June 9, 2005).

10. In 2000, Mauritania allocated most of the additional HIPC resources for its tertiary hospital. Senegal allocated HIPC funds to building a secondary hospital, although the Ministry of Health had proposed allocating the funds to recurrent cost requirements of existing primary-level infrastructure.
11. Included in the package for instance would be preventive and treatment interventions for child and maternal mortality as established in Wagstaff and Claeson (2004, figure 3.2). If resources were not available to guarantee universal coverage of such services, limits would be based on morbidity and mortality indicators. If additional resources were available, still other interventions would be undertaken and targeted to the poor though alternative mechanisms.
12. For a detailed analysis of purchasing, see Preker and Langenbrunner (forthcoming).
13. Claeson and others forthcoming.
14. These methodologies have different objectives and produce different estimates, which cannot be compared with each other. Each methodology has strengths and weaknesses, the discussion of which is beyond the scope of this report. It is, however, fundamental to have a clear objective of what is to be measured in order to select the appropriate tool.

References
Financing health in low-income countries


