Risk pooling mechanisms

Four types of health insurance are widely used to pool risks, foster prepayment, raise revenues, and purchase services: state-based systems funded by the government and operated through ministries of health or national health services, social health insurance, community-based health insurance, and voluntary health insurance. The four approaches differ in important aspects that can affect their performance in countries with different income levels, employment structures, health needs, and administrative capacities. This chapter defines each approach, evaluates its strengths and weaknesses, and assesses its relevance and feasibility for low- and middle-income countries. None of these approaches is found to be inherently good or bad. Rather, the policy maker’s challenge is to create viable “pathways” for the development of health insurance in a country—pathways that steadily improve financial protection through risk pooling and prepayment, increase the quality and effectiveness of health services, improve outcome indicators and equity, and do so in an affordable, equitable, and sustainable manner.

In considering the four prominent risk pooling systems used in connection with the provision of health insurance, policy makers worldwide need to be pragmatic to ensure that the development of health financing is well aligned with broader, country-specific economic, institutional, and cultural development. Therefore, both a general understanding of financing mechanisms and more specific methods for evaluating them at the country level are important. This chapter examines each of the four types of risk pooling mechanisms in detail and describes frameworks for the government regulation of voluntary health insurance systems. The principal conclusions about the appropriateness of each risk pooling system for developing countries are summarized here and discussed in detail in later sections:

- **State-funded systems.** The advantages of state-funded health care systems explain why they are the most widespread form of health financing. They provide universal access to coverage, can rely on many different financing resources, and can be relatively simple to manage. However, since they must compete annually for a share of the state budget, they may receive insufficient and unstable resources. In many countries, the publicly financed health delivery system has...
been found to be inefficient, like many other publicly managed services. Furthermore, state-funded systems tend to benefit the rich more than the poor, particularly in developing countries. Therefore, to successfully implement a state-funded system in low- and middle-income countries, conditions must be established to raise sufficient resources for health (through sustained economic growth, a competent tax administration, and a consensus within the population in favor of taxation). Sound institutions must also be in place to make the system work. In addition, specific efforts must be made to target the poor while preserving the universal character of the system—in other words, to avoid making it “a poor system for poor people” (Mossialos and Dixon 2002).

- **Social health insurance.** Social health insurance can be an effective way to raise additional resources for health and to reach universal coverage. In particular, by making the financing of health care more transparent and stable, social health insurance may encourage the population to contribute more to the health coverage system. But these objectives can be reached at different speeds, depending on the political and socioeconomic characteristics of each country. For many low-income countries, particularly those with stagnant economies and ever-growing proportions of workers in the informal sector, these objectives may be unrealistic in the foreseeable future. Therefore, before implementing a social health insurance scheme, a government should examine its suitability for the country’s socioeconomic and political conditions and assess potential problems to determine whether they can be overcome or reduced to the degree needed to ensure that the advantages of social health insurance outweigh its potential drawbacks. This preparatory work may lead to the conclusion that it is appropriate to proceed with the reform, but it can also lead to a decision to postpone reform until the necessary preconditions are satisfied. Experience also shows that, in its initial stage of development, social health insurance has a tendency to divert resources from the poorer segment of the population to the richer segment. Consequently, countries considering establishment of a social health insurance system should be aware of this side effect and include mechanisms to protect the poor within their system framework. Finally, social health insurance can induce cost escalation, as observed in many countries of the OECD. Therefore, governments wishing to implement social health insurance schemes must design appropriate mechanisms to contain costs.

- **Community-based health insurance.** These schemes provide financial protection for people who otherwise would have no access to health coverage, and they can result in some degree of resource mobilization. Nonetheless, because most community-based systems are small and often barely financially viable, they are not particularly effective in reaching the poorest segments of the population. Community-based health insurance can be established in settings with informal labor markets and limited institutional capacity, but a strong sense of local community solidarity is a prerequisite. The intervention of governments—
through subsidies, technical assistance, and initiatives to link community-based health insurance schemes with more formal health financing—is important to improve the efficiency and sustainability of such schemes. What emerges from the literature on community-based health insurance is that it is “better than nothing” in low-income settings where the implementation of any kind of collective financing scheme is problematic. But community-based health insurance is not likely to be the solution to all health care financing problems in low-income countries and should be regarded more “as a complement to—not a substitute for—strong government involvement in health care financing” (Preker and others 2004, p. 41). The most challenging and promising issues include how to design community-based health insurance schemes to ensure the best possible compatibility with larger systems and how to make these small schemes evolve toward more comprehensive and sophisticated health financing systems.

• **Voluntary health insurance.** Voluntary systems require a certain level of commercial institutional capacity and can benefit from (but not necessarily depend on) a similar level of public sector institutional capacity. Unlike social health insurance (which is harder to develop, widen, or sustain when national social solidarity is low, government institutional capacity is weak, and labor markets are informal), voluntary systems do not rely as much on local or national social solidarity and stable formal labor markets, although those conditions certainly help. However, such systems, unless subsidized by the government, can benefit only those citizens or businesses with the ability to pay. Moreover, these systems may be prone to certain types of market failures in addition to equity challenges (Tapay and Colombo 2004). They must therefore be developed cautiously and with an appropriate regulatory framework.

**State-funded health care systems**

State-funded systems are suitable for most countries that have the administrative and economic capacity to raise taxes, establish an efficient network of providers, and the capacity to target the poor. State-funded health care systems constitute the most widespread health financing mechanism around the world. General government revenues represent the main source of health care expenditures in 106 of 191 countries belonging to the WHO (Savedoff 2004b). In high-income countries, two-thirds of public health expenditures are funded by general revenues; in middle-income countries, almost three-quarters; and in low-income countries, virtually all public health expenditures come from general revenue (WHO 2004; see chapter 2, table 2.1).

Most health specialists claim that these systems originate from the Beveridge report published in 1942, and they are often called “Beveridgean systems” (Beveridge 1942). Indeed, although that report actually recommended funding health care through defined contributions—not general taxation1—the National Health
Service Act of 1946, largely inspired by Beveridge’s work, established the provision of tax-funded services in Britain, free of charge, for the prevention, diagnosis, and treatment of disease. The British national health system thus emerged as the model for government-funded health systems, even though similar arrangements already had existed in the Soviet Union (1918) and New Zealand (1938).

In theory, a national health service system is a universal pooling arrangement under which the entire population has access to publicly provided services financed through general revenues. In practice, except for some OECD countries, national health service systems usually coexist with one or more of the other risk pooling arrangements. In most low- and middle-income countries, ministries of health act as national health services for substantial segments of the population, while other mechanisms, such as community-based health insurance (in low-income countries) and social health insurance provide coverage for other segments of the population. Such fragmentation tends to increase administrative costs and limits the efficiency and equity of the risk pooling arrangements. However, for clarity, this section concentrates on the main characteristics of the “pure” form of general revenue-funded systems. It defines national health service systems (box 3.1), examines their main strengths and weaknesses, and assesses the key factors necessary to ensure their development and effectiveness in developing countries.

Economic impact, equity, and simplicity of financing modalities depend on actual revenue sources used by the government. In theory, pure national health services perform well because they pool the risks of the entire population and are financed through the government budget, which “prepays” the costs of care. But it is very difficult to give a general opinion on the equity, efficiency, and sustainability of these general revenue–based systems because financing depends on the mix of general and specific taxes, other public revenue sources, and the types of external assistance received. As discussed in chapter 2, although broadly based general taxes (such as income and sales) in theory perform better in terms of revenue raising, efficiency, and equity than earmarked taxes or out-of-pocket payments, the specific institutional characteristics of developing country economies generally preclude the most effective use of such broad-based revenue sources.

**Strengths of state-funded health care systems**
The main strengths of state-funded health care systems are a direct consequence of their organizational principles.

**Comprehensive coverage of the population.** Given their noncontributory nature, national health service systems are easy to extend to all citizens, including workers in the informal sector. The comprehensiveness of coverage prevents risk selection problems and makes state-funded systems theoretically the most equitable form of health financing. Inclusion of all citizens in one pool makes the systems
potentially very effective in managing risk because of “the law of large numbers.” This law increases their financial viability compared with fragmented systems.

Large scope for raising resources. Contrary to social health insurance systems, which are financed mainly by payroll contributions, national health service systems can rely on a very broad revenue base of tax and nontax sources. Consequently, the financial burden may be spread over a larger share of the population. Unlike many social health insurance systems, in which the burden is concentrated on formal sector workers, who may represent a small part of the population (especially in low- and middle-income countries), national health systems may resort to value-added taxes, sales taxes, or imports taxes, which affect the whole population (Savedoff 2004b). In fact, state-funded systems are much more often developed in those low- and middle-income countries where the informal sector represents a significant share of the population.

**Box 3.1 What is a national health service system?**

National health service systems are characterized by three main features: their funding comes primarily from general revenues, they provide medical coverage to the whole population, and they usually deliver health care through a network of public providers.

**Financing from general revenues**

Most of the time, national health service systems receive budget allocations from the national government. Therefore, the origin of their resources is the same as the budget in general. Resources include mainly general (as opposed to earmarked) taxes, other public revenues from sales of natural resources, sales of government assets, and public tolls (for instance, tolls for use of the Suez Canal) but also include borrowing and grant assistance. In many countries, however, central government revenues are complemented by earmarked taxes or funds from local authorities. In England, for instance, for fiscal 2005, it is estimated that 74 percent of the resources of the National Health Service will come from general taxation and 20 percent from “national insurance contributions” (earmarked taxes); the rest will come from miscellaneous sources (U.K. Department of Health 2005).

**Universal coverage**

In principle, tax-financed systems cover every citizen, regardless of individual health status, occupation, or income. In other words, in national health service systems, health care coverage is considered an attribute of citizenship.

**Public health delivery system**

Even though there is no automatic connection between the source of financing of health services and the way they are delivered, many general revenue-funded systems rely mainly on public providers. In these countries, the ministry of health heads a large network of public providers organized as a national health service. Facilities are owned by the government, and health personnel are public employees. However, some countries reimburse or contract with private providers. Although an examination of the advantages and disadvantages of public provision is outside the scope of this analysis (see World Bank 2004), the key issue is not the type or ownership of providers, but rather how to ensure that whatever approach is used results in efficient and equitable purchasing arrangements that promote allocative and technical efficiency and guarantee access to covered persons.

Source: Authors.
A simple mode of governance and a potential for administrative efficiency and cost control. Most national health service systems are integrated systems in which responsibilities are clearly organized in a hierarchical way. This organization makes governance much simpler than in less coordinated arrangements involving multiple players. There is a hierarchical chain of command and control that goes directly from the head of state or the parliament to the ministry of health and to local authorities in some cases. Where public providers are used, there is a direct line of authority between the providers and the overseeing financing authority. The simplicity of governance provides the opportunity to organize the health care system more efficiently and with lower transaction costs. For this reason, in many developing countries, state-funded systems allowed the implementation of successful public health programs. However, in certain countries where the central government shares its responsibilities with local authorities, the decision schemes are not very clear and coordination problems arise. With the recent emphasis on decentralization reforms in many countries that have national health service systems (discussed in chapter 6), this situation is developing. Ultimately, state-funded systems are also very exposed to political pressure, which limits their capacity to make purely rational decisions (discussed below).

As single pool organizations, state-funded systems can also benefit from economies of scale, which makes them potentially more efficient than fragmented systems. Furthermore, despite a large diversity of cases, national health systems seem to control health expenditures more effectively than other arrangements. This control may stem from the fact that they “combine in one authority both the incentive and the capacity to contain costs to a greater extent than is possible with any of the other financing mechanisms” (Evans 2002, p. 45). Of course, this is true only if cost control is a priority for the government. The extent of this advantage depends on the structure of health service provision. Certain inefficiencies may accompany this approach, such as a bloated provider structure and limited managerial authority or capacity on the part of the ministry of health. In the 1970s, many tax-financed health systems in OECD countries were among the most costly. But since 1990, control of health expenditures has become one of the main issues for high-income countries and, for the most part, the only systems that have been able to reduce the share of GDP spent on health care were those financed through general revenues (Evans 2002). These issues are discussed further in chapter 9.

Weaknesses of state-funded health care systems

Unstable funding. Since national health service systems are financed from the general budget, the amount of funding available depends on the outcome of annual budget discussions and is vulnerable to changes in political priorities or external shocks (such as military conflict that requires additional defense spending).
Ministries of health have to compete with other sectors for the same resources, which is not the case when health care is financed through earmarked taxes or contributions. Although this process theoretically might allow the population to express financing priorities, it explains why complaints of underfunding and poor quality are common in tax-based systems, particularly in contrast with social or private health insurance, where the major health system debates often focus on containing costs (Savedoff 2004b). This problem is even more acute in low-income countries where the tax base is very small. On the basis of an analysis of national health accounts data, the Commission on Macroeconomics and Health found that the portion of total general government expenditures devoted to health was almost always less than 10 percent in developing countries (WHO 2002). The amount allocated to the health sector also reflects the traditionally weaker institutional power of the ministry of health within the government, particularly in relation to the ministry of finance (Mossialos and Dixon 2002).

Disproportionate benefits for the rich. National health service systems are supposed to provide free health care to the whole population. They seek to ensure equal access to health care for all citizens irrespective of their income. But the reality is somewhat different. In many low- and middle-income countries, health services tend to be used mainly by urban high- and middle-income households. Benefit incidence analyses in seven African countries that rely mainly on state-financed medical care showed this pattern clearly (Castro-Leal and others 1999). In all these countries, the poorest 20 percent receives a significantly smaller amount of public subsidy than the richest 20 percent. With the exception of one country where the rich use private care, the share allocated to the richest 20 percent is far more than 20 percent (between 24 and 48 percent), while the share received by the poorest 20 percent is systematically lower than 20 percent (between 4 and 17 percent).

Several factors explain this phenomenon. First, the poor tend to use fewer health services when they are ill than the rich, mainly because they face problems of access (health services are often far away from where they live) and high opportunity costs for the working time they lose (Castro-Leal and others 1999). In some cases, user charges imposed by the government to complement public resources also limit their access to health care. Second, there is a disproportionate use of costly hospital services by the rich, while the poor use mainly less costly local primary care facilities (WHO 2000). Third, country studies show that local health services often do not satisfy the population (for reasons such as unreliable staff and unavailable drugs). Thus, the people living in remote areas without access to urban hospitals have to pay more accessible, but uncovered, practitioners with their own resources (WHO 2002). Finally, health professionals serving those with public coverage sometimes charge their patients illicit fees (“informal charges”), which automatically exclude the poor (box 3.2), or use publicly funded facilities to
provide care to private patients. This pattern is facilitated by the inability of many governments to control the activity of public hospitals (WHO 2000).

Potential inefficiency in health care delivery. In countries with a long history of national health service systems, there have been recurrent criticisms about the systems’ lack of efficiency. These criticisms are reinforced by the fact that in many countries users cannot access alternative providers. The main criticisms concern aging infrastructure, unresponsive staff, inability to downsize or reorient priorities, abuse of monopoly power, obsolete medical technology compared with the private sector, and waiting lists for nonemergency treatments. Notably, however, many of these criticisms focus on provision rather than on financing.

In the past two decades, many reforms have focused on improving the efficiency of the system mainly through decentralization and the introduction of internal markets (which includes purchasing/provider splits; provider payment reform; and diverse forms of hospital autonomy, including privatization) (Enthoven 1985). This phenomenon also reflects a general decline of the role of the state all over the world through “the transformation from centrally planned to market-oriented economies, reduced state intervention in national economies, fewer government controls, and more decentralization” (WHO 2000, p. xiv).

Perhaps the most ambitious and symbolic reform might be the one initiated in Britain in March 2000 with the publication of the “NHS Plan.” Aimed at improving the efficiency of the system and increasing devolution while raising resources allocated to the National Health Survey (NHS) system, this plan is still being implemented. However, there have been significant restrictions to the full imple-

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**Box 3.2 Informal payments to health care providers in Azerbaijan**

Earning only 28 percent of the average salary in the country, Azerbaijani health care providers often try to find complementary resources. Direct payments by patients represented 57 percent of total health expenditures in 2001. Some of these payments are formal user charges introduced in 1998 for listed services in government-funded health facilities. But they also include a significant amount of informal fees, including charges for drugs and medical supplies, fees for visiting patients, direct unofficial payments to doctors and other health care staff for services provided, and fees for positions obtained in medical institutions.

The 2003 World Bank Poverty Assessment estimated that unofficial charges for childbirth vary from $100 to $150 in smaller towns to $300 to $700 in Baku hospitals, up to 14 times the average monthly salary (World Bank 2005). Altogether, informal fees are estimated to constitute 20 percent of all health expenditures, creating important problems of access to health care for the poor. Yet they are seen more as a means to supplement insufficient government funding than as a form of corruption.

*Source: Holley, Akhundov, and Nolte 2004.*
mentation and functioning of such reforms in many countries (for example, Ukraine and Portugal). This is often because it can be difficult for public providers to adjust their organization in the absence of major reforms to public sector management, particularly personnel management (for example, the challenge posed by rigid civil services statutes). More generally, it is linked to the difficulty of reforming long-standing organizations.

_Sensitivity to political pressure._ Tax-financed health systems are highly exposed to political pressure. Because the government is directly responsible for the system, it cannot ignore pressures from the public, unions representing health care professionals, or local officials defending the interests of their constituencies. This situation may lead to irrational and inefficient decisions and prevent needed reforms, such as hospital closures or mergers and staff reductions, from being implemented.

**Feasibility of state-funded health care systems in developing countries**

_Revenue-raising capacity._ The ability of a country to raise revenues primarily depends on its economic situation, which affects its potential to levy taxes and thereby generate revenue (see chapter 2). This is why revenue-raising capacity is directly correlated with income, even though there are important regional variations. In particular, as shown in chapter 2, countries with important oil or gas revenues (such as those in the Middle East and North Africa region) or with centralized revenue-raising systems created under socialism have higher ratios of revenue to GDP. In contrast, countries in East Asia and the Pacific or Latin America and the Caribbean have low ratios, which may be caused by ineffective tax administration or preferences for individual rather than government responsibility (Schieber and Maeda 1997).

As discussed in chapter 2, while low-income countries might be able to mobilize an additional 1–4 percent of GDP in revenue domestically, revenue performance over the past few decades has been fairly disappointing—even stagnant in some regions. Given that future economic growth projections are also modest, low-income countries in particular will face difficult challenges in mobilizing additional government revenues. Therefore, raising additional resources for health through domestic resource mobilization efforts constitutes a real challenge for developing countries: they have to improve their tax administration while improving growth and building consensus in favor of the acceptability of taxation within the population, particularly the elite.

_Quality of governance and institutions._ The crucial importance of strong tax administration has already been emphasized. The quality of a country’s institutions also plays a key role in determining the effectiveness of health spending, as
shown in chapters 5 and 6. Research has shown that additional government spending on health has little significant impact on the key health indicators for the Millennium Development Goals in countries with poor governance (as measured by the World Bank’s mechanism for evaluating a country’s institutions—the Country Policy and Institutional Assessment) (Wagstaff and Claeson 2004). Therefore, it is crucial for low- and middle-income countries to be able to rely on solid and competent institutions to ensure the quality of state-funded health systems.

**Ability to target the poor while maintaining the universality of the system.** It is essential, particularly in developing countries, to ensure equal access to health care. As health benefits often accrue more to the better off, specific measures must be implemented to improve the targeting of spending to the poor. First, budget reallocations toward primary care would improve the situation, but only if the quality of local health services is improved at the same time. However, targeting the poor must not lead to a situation in which the system does not meet the needs of the middle- and high-income population. Otherwise, this population may increasingly rely on privately funded providers and refuse to support the publicly financed system. Such a flight from public services may have negative consequences for the whole system. Indeed, the “coalition supporting tax financing may begin to weaken” (Evans 2002, p. 51). In this respect, a key challenge for national health systems is to make sure that publicly funded facilities provide good quality services, so that the wealthier segments of the population continue to use them.

**Social health insurance**

Social health insurance is distinguished from general revenue-funded systems by the presence of independent or quasi-independent insurance funds, a reliance on compulsory earmarked payroll contributions, and a clear link between these contributions and a set of defined rights for the insured population. Social health insurance systems have been established in more than 60 countries, beginning with Germany at the end of the nineteenth century. Twenty-seven have reached universal coverage through social health insurance (Carrin and James 2004). Social health insurance is particularly widespread among OECD countries, but is also in use in developing countries, mainly in Latin America (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Peru, Uruguay, República Bolivariana de Venezuela, and others) and to a lesser extent in other parts of the world (Algeria, Kenya, Lebanon, and Tunisia). Today, many low- and middle-income countries have instituted, or are considering starting, social health insurance systems (Bosnia and Herzegovina, China, Croatia, Estonia, Ghana, Hungary, Indonesia, the Kyrgyz Republic, Macedonia, Moldova, Morocco, Nigeria, the Philippines, Poland, the Russian Federation, Serbia, Slovenia, Tanzania, and Vietnam).
Very often, policy makers view social health insurance as an effective way to raise additional resources for health and as a means for decreasing the financing burden of health care coverage (Carrin 2002). There is also a strong presumption that individuals may be more willing to be taxed (pay payroll taxes) if there is a specific individual entitlement that accompanies the tax (a benefit tax). In some cases, especially in countries that experienced communist rule, social health insurance provides an opportunity to reduce the role of the state or to build democratic and participatory institutions (as in China, Estonia, and Hungary). Finally, countries that used to have national health service systems or “Beveridgean” systems may experiment with social health insurance as a way to improve the efficiency of the health care system by “outsourcing” health insurance coverage (as in Jamaica, Kenya, and Malaysia).

Many donors, especially in Europe, tend to support governments that wish to implement social health insurance, because of their long and positive experience with such systems in their own countries. However, there is no consensus on the merits of social health insurance. Some researchers think it can be introduced successfully only in countries with suitable characteristics and that, in most developing countries, instead of improving the situation, it can increase the problems of governing the health system (Savedoff 2004a).

To help resolve this debate, it is necessary to focus on the definition of social health insurance (box 3.3), its weaknesses and strengths, and the economic, administrative, and political feasibility of its implementation in low- and middle-income countries.

**Main technical features of social health insurance**

**Financing mainly through employee and employer payroll contributions.** In most countries, the financing of social health insurance is mainly based on payroll contributions made by employers and employees. However, there are big differences among countries relating to the absence or existence of a contribution ceiling, the distribution of employer and employee contributions, the uniformity of the rate, and the receipt of other types of resources (Normand and Busse 2002).

General taxation often remains an important source of income for the health care systems in social health insurance countries. Indeed, contributions may not be sufficient to attain universal coverage, because the number of people to be covered is greater than the number that can actually contribute to the system. Therefore, government subsidies through general taxation are often needed (Carrin and James 2004). In some countries, such as Armenia and Lithuania, social insurance funds were even created entirely from transfers of general revenues.

External aid and earmarked taxes are other sources of funding often used to subsidize social health insurance. In some countries, earmarked taxes are targeted
to products that harm people’s health (for example, tobacco, alcohol) to reduce their consumption.

**Management by nonprofit insurance funds.** In most social health insurance schemes, the state defines the main characteristics of the system: the conditions of affiliation, the content of the benefit package, and the way contributions are
calculated and collected (Busse, Saltman, and Dubois 2004). However, most social health insurance systems are managed by sickness funds that are set apart from the government, at least to some degree.

The sickness funds are usually nonprofit institutions supervised by the government. Their role and organization are established by the state. However, they enjoy a degree of managerial freedom and are often run by a board, some members of which are elected. The board usually includes the main stakeholders. Sickness funds often directly collect contributions even though, in some cases, resources are first collected by the state and then redistributed to the existing funds. Social health insurance funds finance health services provided either in their own facilities or by private or public providers. For private and public providers, the funds either directly cover all or part of the costs of the providers or cover them indirectly by reimbursing the insured population, and the relationships between the providers and the funds are often governed by contracts. These contracts may specify the prices of covered services, terms regarding the quality of care, and payment schedules, among other elements.

Depending on the country, there might be several funds (as in Argentina, Chile, Colombia, France, Germany, Japan, the Netherlands, and Russia) or a single one (as in Estonia and Hungary). Assignment of beneficiaries to a particular fund may be based on employment (as in Argentina, Bolivia, and Mexico), geography or age (as in Japan), or individual choice (as in Chile, Colombia, and Germany). Very often, the number of funds does not proceed from a deliberate choice but can be explained by history. As a result, it is often impossible to eradicate or merge existing local or employment-based funds when a broader social health insurance scheme is implemented.

In existing systems, there is usually a progressive evolution toward fewer funds in order to achieve better risk pooling and economies of scale. Having fewer funds reduces administrative costs and spreads risk over a larger membership, although there is a trade-off between efficiency and client choice, which would be fostered by more competing funds (Bärnighausen and Sauerborn 2002). Moreover, when several funds survive, financial mechanisms are often implemented to compensate for the differences in their incomes and standardized expenditures (as in France). Finally, if several funds are allowed to compete, the administrative costs of the system are generally higher because of the costs involved in efforts to attract clients.

Existence of a benefits package. Social health insurance systems usually fully or partially cover a defined benefits package for all members. This benefits package is more or less comprehensive, depending on the resources of the system.

Apart from these few common characteristics, social health insurance systems often vary greatly in their structure and scope. This is particularly true regarding the delivery of health care and the patient-provider relationship. In Western European countries, social health insurance systems generally provide care by contracting with public and private providers, and people benefit from individual
choice of providers and freedom of access, although some countries have imple-
mented gatekeeper systems. In contrast, in many developing countries, sickness
funds provide care to the insured population through their own providers (as in the
Arab Republic of Egypt, India, Islamic Republic of Iran, Jordan, Turkey, and a num-
ber of Latin American countries) and beneficiary choice of providers is restricted.

**Strengths of social health insurance**

The performance of social health insurance can be assessed according to the
WHO's characterization of the purpose of health financing schemes: "to make
funding available, as well as to set the right financial incentives for providers, to
ensure that all individuals have access to effective public health and personal health
care" (WHO 2000, p. 95). Because social health insurance is primarily a way of rais-
ing resources, it is also necessary to consider the fairness of financial contributions
and the system's impact on the economy. Using these different evaluative criteria,
the advantages and drawbacks of social health insurance are described below.

*More resources for the health care system.* Social health insurance is often viewed
as an easy and effective way to raise resources to improve health. Indeed, social
contributions are supposed to be easier to collect than general taxes because the
employer can deduct them from salaries. More important, citizens may be more
willing to pay their contributions because the destination of the money is visible,
specific, and related to a vital need. Finally, in situations when there is no room for
an increase in government spending for health, countries may want to look for a
more diverse revenue base specifically earmarked for the health sector. This is
what happened in most Eastern European countries in the late 1980s and early
1990s when they had to cut real spending for health in the first years of the transi-
tion: 17 of them have introduced payroll contributions, 10 as a predominant
mechanism of financing and 7 as a complementary resource to general tax rev-
enues and out-of-pocket payments. However, the results of this policy have been
somewhat disappointing (see below).

*Less dependence on budget negotiations than state-funded systems.* Systems
financed through earmarked payroll taxes are less subject to yearly budgetary
negotiations than funds coming from general taxation. Therefore, they are
regarded as a more stable source of income. But, financing social health insurance
through contributions alone may not generate sufficient resources, especially if
policy makers wish to cover more of the population than those who have con-
tributed through payroll contributions. Indeed, the unemployed, the retired, stu-
dents, and the poor also need coverage. Thus, in many social health insurance
systems, contributions are supplemented by government subsidies financed
through general taxation. Moreover, in some countries, governments offer guar-
antees for the social health insurance funds' debt (as in France). Finally, most
Social health insurance systems are funded on a pay-as-you-go basis. As a result of the demographic transition, large contingent liabilities for future retirees are accumulating in many systems, particularly in developing countries, raising serious questions about their long-term solvency.

High redistributive dimension. Existing social health insurance systems usually are highly redistributive, with cross-subsidies from high-income to low-income participants (especially if there is no ceiling on the income subject to contributions), from high-risk to low-risk participants (individual health risks have no impact on the level of contributions), from young to old, and from individuals to families (usually, dependants of a contributing person are covered with no increase in the contributions paid).

There is no clear conclusion regarding the relative progressivity of social contributions versus general revenue financing. However, some studies seem to show that social contributions are less progressive or, at best, as progressive (Normand and Busse 2002). Obviously, in countries with income ceilings, the progressivity is limited.

Strong support by the population. Countries with a long history of social health insurance tend to display a striking, very strong, almost emotional attachment to it. The reasons for this phenomenon lie mainly in the fact that social health insurance systems are perceived to be privately funded and delivered (which gives the patient the status of a customer), managed by the participants themselves, and (most important), very stable in organizational and financial terms. Social health insurance is also viewed as a way of fostering solidarity and empowering citizens through participation (Saltman 2004).

Whatever the reasons, this phenomenon cannot be denied and may explain part of the appeal of social health insurance for countries seeking to implement a new health financing system. Moreover, in many of these countries, when governments have failed to provide good coverage to the population, social health insurance is seen as a last resort solution. But social health insurance also has major drawbacks and, to be successfully implemented, it is best if countries meet the set of preconditions discussed later.

Weaknesses of social health insurance

Possible exclusion of the poor. Most countries start implementing social health insurance for a limited part of the population. Very often, it first covers civil servants and big private firms’ employees. In the earlier stages, the poorer segments of the population (most informal sector workers, unemployed people) are often left without coverage or are covered by the state, even though governments generally contend that universal coverage is the ultimate goal of the reform. However,
there is a risk that the system may never move beyond the initial narrow base of formal sector workers and that, instead of improving the situation of the poorer groups, it may increase inequities (Conn and Walford 1998).

First, it is usually very difficult and expensive to add informal sector workers to the covered population. They tend to live in remote areas and not fully understand the benefits they can get from being part of the system, and their income is very difficult to assess. Second, public subsidies to the health infrastructure are often needed to supplement the resources coming from contributions. This phenomenon diverts money to the insured population that could otherwise be used to finance services for the poor. Third, in most developing countries, tax administration is weak, making it difficult to collect taxes from rural and informal sector employees.

**Negative economic impact of payroll contributions.** Although in theory and in the long run, a tax on wages would be shifted onto employees, in countries where product and labor markets are not very competitive, employers may not be able to reduce wages to compensate for an increase in payroll contributions in the short run. Therefore, social security contributions may increase labor costs and, in turn, lead to higher unemployment. They may also reduce the competitiveness of the country and deter investments, thus slowing down the growth of the economy. Further, if the government is a major employer, payroll contributions will significantly increase public expenditures.

Even in developed countries, such as France, social contributions have been blamed for the high level of unemployment. This led to a major reform of the financing of the social health insurance system, which was intended to reduce the weight of payroll-based deductions by transforming employees’ contributions into a tax on all sources of income (salaries, social benefits, capital gains, gambling income).

**Complex and expensive to manage.** These systems involve many different players, complex interactions, and complicated tasks—all of which must be managed. Among other functions, sickness funds must often negotiate contracts with providers and set up appropriate monitoring mechanisms. They must reimburse the expenses of the insured population efficiently and control its consumption behavior to avoid abuse. They also have the responsibility to manage substantial amounts of money, which involves investing reserves when they exist and ensuring the long-run solvency of the fund. The government must establish effective supervision rules to avoid fraud and foster efficiency. Finally, new collecting mechanisms must be created for social contributions.

Therefore, in social health insurance systems, administrative costs are higher than in national health service schemes. Where these tasks have not been properly managed, the implementation of social health insurance has not been very successful. This is the case in many Latin American counties, where
weak regulation and inefficient health institutions have hindered the development of social health insurance.

*Escalating costs.* Social health insurance, like national health service systems, can generate an excess demand for health services, because the costs of the services are heavily subsidized (a moral hazard). It can also lead to excessive provision of services when a fee-for-service payment method is applied without appropriate regulatory tools. Moreover, it is often easier to increase social contributions, which are generally well accepted by the population, than to reduce benefits, because people feel they have paid for their benefits. Finally, the management of sickness funds by people representing diverse interests (members of trade unions or employers organizations, civil servants, local authorities) makes it very difficult to take radical measures. These tendencies have been observed in countries with a long history of social health insurance. For all these reasons, countries with social health insurance systems usually spend more on health than those with national health systems (see chapter 9).

*Poor coverage for chronic diseases and preventive care.* Fee-for-service provider payment methods and freedom of access to health care services—often attributes of such schemes—make social health insurance a very efficient system for meeting health needs that can be provided by an individual provider during a single consultation. Conversely, it is not the best system for chronic diseases, which require the intervention of several professionals and strong coordination among them. Nor is it ideal for preventive care, such as immunizations and screenings, because the links between public health services run by the government, private providers, and sickness funds are often too weak to facilitate adequate cooperation (McKee, Delnoij, and Brand 2004).

**Feasibility of social health insurance in developing countries**

As this list of strengths and weaknesses demonstrates, social health insurance is neither a good nor bad system in itself. In fact, the success of its implementation in a given country depends on the presence of a series of preconditions and governments’ abilities to influence them.

*Level of income.* A variety of countries started implementing social health insurance when their GNP was in the lower-middle-income range, and they had strong economic growth during the transition period leading to universal coverage (Carlin and James 2004). Indeed, it is easy to absorb new contributions in a prosperous economy. In countries where growth is very slow or nonexistent, it might be better to wait, because social health insurance will not be able to mobilize additional resources. Korea is a good example of rapid implementation of social health insurance thanks to a booming economy. During the main phase of extension
(1977–89), the average annual growth rate of GDP per capita was 13.3 percent. Therefore, universal coverage was achieved only 26 years after the creation of the first voluntary health insurance fund in 1965 (Bärnighausen and Sauerborn 2002). Conversely, many Latin American and Caribbean countries have not had rapid enough economic growth to allow them to affiliate the majority of the population. In Bolivia, for instance, less than 10 percent of the population is covered through social health insurance, despite the system being founded in the 1930s.

Size of the informal sector. Where the informal sector is large, the payroll base for contributions is very narrow, providing limited ability to raise significant resources for health care. In contrast, countries where the formal sector is dominant are able to register workers much more easily. This is particularly true in countries with a high proportion of industrial workers, because most companies in this sector will have a formal payroll system from which contributions can be paid. It is also the case when the state sector is the main employer, although this situation might not be stable in countries where the economy is in transition between a state-run system and a market-led one. Because employment in the public sector tends to decrease while informal private employment grows, the market transition often has a negative impact on the collection of revenue (Ensor 1999). On the whole, far from decreasing, the informal sector is still growing in developing countries (ILO 2005). Finally, although it is always difficult to assess and levy taxes on the income of self-employed workers, it is even more difficult to do so with respect to people working in agriculture, because their income might be very uneven over the year and from one year to another (Normand and Weber 1994).

Distribution of the population. Successful experiences seem to be associated with growing urbanization and increased population density, because these evolutions facilitate the registration of social health insurance members and the collection of contributions (Ensor 1999; Carrin and James 2004). Conversely, case studies show that countries where the rural population is preponderant have seen much slower implementation of social health insurance.

A very interesting study confirms the importance of the first three preconditions described above. A group of low- and middle-income countries were ranked according to a composite index of four variables: population density, percentage of the population urbanized, percentage of the workforce in industry, and per capita income. A high ranking implies that social health insurance is relatively easy to implement. The study shows that in most of the countries on top of the list coverage is actually very high: Argentina, Brazil, and Korea, among others (Ensor 1999).

Margin to increase labor costs. It is necessary to assess the extent to which increased wages due to payroll contributions affect the competitiveness of a given
In some cases, they may represent an excessive burden and negatively affect growth and employment. They may also harm the labor market by increasing tax evasion and reducing the size of the formal sector. Furthermore, in many countries, salaries are already a major source of taxation (income tax, unemployment insurance contributions), and this burden limits the potential to impose significant new payroll taxes (Normand and Weber 1994).

**Administrative capacity.** Social health insurance systems require skilled administrative staff, particularly to run health insurance funds and to regulate and supervise their activity. Sometimes, it is possible to utilize people formerly employed in private health insurance companies, or “mutuelles.” In any case, it is essential to determine whether the capacity to run these systems exists before establishing them (box 3.4).

**Good-quality health care infrastructure.** The quality of the health services available to the insured population is critical to the success of social health insurance systems. Social health insurance gives the insured population a right to access these services. Yet the successful implementation of a social health insurance scheme depends on the effective availability of services. The best-designed social health insurance system remains an empty shell if a country does not have a functional health care infrastructure.

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**BOX 3.4 The impact of poor management and supervision on the implementation of social health insurance**

Kenya has the oldest insurance scheme in Africa. Theoretically, its National Hospital Insurance Fund (NHIF), established in 1966, is supposed to pay for hospital stays, treatment, and drugs for the whole population. But the reality is completely different. Often, the NHIF covers only board and lodging expenses, and patients have to pay all the other costs of treatment themselves. And a mere 7 percent of the population is insured. The main reason for the failure of the system is the lack of trust people have in the NHIF. It is seen as one of the most corrupt institutions in the country, and more than half of its budget is spent on administrative costs.

Similar problems occurred in Armenia and Kazakhstan, where health financing was moved off-budget and out of the control of the treasury system before other accountability measures were developed. The lack of accountability and clearly defined financial flows rapidly led to suspicions of corruption, which were soon confirmed. In Kazakhstan, millions of dollars of revenues disappeared from the health insurance system during its brief existence, and the director of the federal fund was under investigation for fraud and eventually fled the country. In Armenia, site visits revealed that no government funds had reached most health care facilities for more than nine months after the State Health Agency was established as an autonomous off-budget fund and became responsible for allocating government health care funds and purchasing services.

*Sources:* GTZ 2004 and Langenbrunner 2005.
have the infrastructure to provide the health services included in the benefits package. In turn, the existence of good-quality infrastructure will encourage the population to join the system and support it.

In countries where the facilities available to the insured population are inadequate, those who can afford it prefer to pay out of pocket or to buy private health insurance to gain access to better services. Over the long term, this phenomenon may endanger the whole system. For example, in countries where an insured person is covered only if he or she uses facilities managed by the sickness funds, the person is encouraged to join a second system. This is the origin of the so-called doble affiliación that is common in many Latin American countries, including the Dominican Republic (Savedoff 2005). It also happens in countries where social health insurance gives access only to public providers. In Tunisia, for instance, many private sector employees who are covered by a social health insurance scheme, which gives them only the right to be treated in public facilities, voluntarily get private insurance to be able to resort to private providers.

Existence of a consensus in favor of social health insurance. The successful implementation of social health insurance depends to a large extent on the existence of a broad consensus among the main stakeholders to comply with the scheme’s rules. Indeed, the society as a whole may place a limit on the degree of equity it is ready to accept or fund. For instance, when all contributions are pooled and the benefit package is universal, differences in contributions between groups may turn out to be so large that they are no longer acceptable to many people. If the same benefits are granted to everyone, it may bring an end to the health care privileges of the elite. Consequently, they may resist the implementation of social health insurance. Thus, the acceptability or sustainability of the social health insurance scheme may be jeopardized, as a significant part of the population may be unwilling to accept this important implicit redistribution.

Political stability and political rights. The political context of a country also plays a fundamental role in the successful implementation of social health insurance. Indeed, without a high level of political rights, it is doubtful that the government will get the support needed for expanding social health insurance. The government might also lack incentives for improving the living conditions of the population through health care reform.

Therefore, the feasibility of the implementation of social health insurance systems depends on a set of country-specific socioeconomic and political factors, principally the rate of economic growth, the extent of the formal sector, the geographic distribution of the population, the extent of urbanization, the possibility of increasing labor costs, the administrative capacity of the system, the quality of the health care infrastructure, the level of solidarity, the support of the main stakeholders, and the stability of the political context. If some or most of these
preconditions are missing, the establishment of social health insurance will likely face obstacles and may be disappointing. In particular, hopes that it will help to raise additional resources for health might be dashed. In that respect, the experience of many Eastern European countries in the 1990s and early part of this decade is particularly revealing (box 3.5).

A model used in a recent paper also shows the importance of some of the preconditions discussed here to the successful expansion of health coverage. It indicates that four variables go far toward explaining the ability of a country to

**Box 3.5 Failure of payroll contributions to increase health funding in Eastern Europe**

Contrary to the expectation that payroll contributions would increase overall levels of funding for health care, the diversified tax base often failed to bring about additional revenues. This phenomenon has several explanations.

First, employers often failed to comply with payroll tax requirements. In general, the countries of Eastern Europe and especially those of the former Soviet Union have faced considerable difficulty in collecting payroll taxes for health. Some countries, such as the Czech Republic, Estonia, and Hungary, have structural characteristics that increase the likelihood of successful introduction of a payroll tax, including relatively higher per capita income and a large percentage of the population living in urban areas and working in the formal sector. Ensor (1999) noted that registration was initially made easier because of the large number of employees in the government sector or the number of large state enterprises in many countries, such as Kazakhstan. But there have been major challenges in many countries. A significant economic burden was created by new health and social insurance taxes (totaling 44 percent in Hungary). The region as a whole has traditionally suffered from much higher payroll taxes than other regions.

Some countries had less developed regulatory and administrative capacity to raise revenues, a large proportion of unemployed or self-employed workers, and weak tax collection systems, as in Albania and Romania. Other countries—Kazakhstan, Kyrgyzstan, Russia, and even Estonia—have reported similar problems of collection caused by tax avoidance by labor and small businesses. Also contributing to the problem were the weakness of collection mechanisms, the high debt of enterprises, and the large populations outside the system, particularly farmers and the unemployed. Low levels of compliance may have been further exacerbated by the frequent absence of a link between contribution and benefit. The historical legacy of the socialist era meant that all citizens of many countries had a constitutional right to health care, and this right was generally retained in the transition period. Premium collection only resulted in 9 to 52 percent of expected revenues in different oblasts in Kazakhstan in 1996 and only 40 percent on average in 1998. Consequently, the new social health insurance system became discredited and was canceled at the end of 1999.

A final major factor was the overall weak macroeconomic context. Many countries experienced negative growth in the 1990s. Despite introducing social health insurance, these countries continued to rely on general taxation as the main source of funding for health care. Finally, the countries that have moved furthest toward reliance on earmarked contributions (accounting for more than 60 percent of total expenditure on health) are also those with the highest levels of per capita GDP.

*Source: Langenbrunner 2005.*
expand population health coverage: a good level of income per capita, a well educated workforce, low income inequalities (a sign that redistribution is well accepted), and a high level of political rights (Carrin and James 2003).

In any case, given the complexity of social health insurance, every country willing to implement such a scheme may have to go through a long transition period. In eight social health insurance countries where sufficient information was available, the average length of the transition between the passage of the first law related to health insurance and the passage of the law implementing universal coverage was 70 years (Carrin and James 2004). The length of this transition phase depends on the preconditions described above.

It is beneficial for countries to have a number of these preconditions already in place, but a government can help foster the development of some of them. Thus, the context is fundamental, but political will and appropriate decisions can compensate for an unfavorable initial situation, at least to some degree.

Capacity of the government to expand social health insurance

Ability to extend the system. One of the biggest challenges faced by social health insurance in developing countries is extending coverage from its original narrow base of formal urban and modern rural sectors to the entire population. Governments play a decisive part in the success or failure of this undertaking.

First, it is essential that institutions and policy makers design a realistic and progressive scenario of extension and stick to it. The scenario must be realistic, because if initial promises are not kept the government might lose the support of the population, which may endanger the whole process. In that respect, it is fundamental to carry out very solid actuarial studies before implementing the system. It is also very important to be as transparent as possible to gain the trust of the main stakeholders.

The expansion should be progressive, not only because expansion over time helps address the fundamental question of financial sustainability, but also because social health insurance is essentially complex and requires time to understand and fully implement. Starting with a limited share of the population will allow administrators of the system to gain the necessary experience before extending it either on a geographical basis or from employees of big firms to workers in smaller firms, as was done in Korea (Ron, Abel-Smith, and Tamburi 1990).

Second, the government’s choice of method to develop social health insurance is critical. It must be as transparent and participative as possible to gather the support of the population. The government must also insist on the advantages of the system by pointing out its benefits for specific groups of the population in order to build consensus (Normand and Weber 1994).

Third, the government must find ways to encourage informal workers to join. It must show them that social health insurance will improve their access to care.
Indeed, at the beginning, the payment of regular contributions may not be a readily understood concept. People may wonder why they have to pay when they are not sick (ILO and ISSA 1999). In that sense, it is essential to design an attractive (and financially sustainable) package, but also to make health services available for informal sector workers, who may not have ready access to care. It is also very important to market the reform and communicate its advantages. Innovative techniques may also be used to collect the contributions of informal sector workers: assessment of their income on the basis of property, payment of flat-rate or minimum contributions, and involvement of local networks to reach informal workers (such as bus drivers’ organizations, fishing cooperatives, church organizations, and village communities in Kenya, and village cooperatives in the Philippines). Finally, a more “coercive” approach can be used by requiring people to pay the full costs of health services if they do not contribute to the social health insurance. In Costa Rica this method significantly reduced tax evasion (MSH 2000). Voluntary enrollment is not advisable because it presents the risk of adverse selection.

Fourth, the government may need to subsidize the extension of social health insurance to the poor (box 3.6). Indeed, the people initially covered are often reluctant to extend social health insurance, because this will mean a high level of cross-subsidization between them and the newly insured. Therefore, countries such as Chile, Colombia, Costa Rica, and the Philippines have subsidized the poor

**BOX 3.6 Government subsidies to extend social health insurance to the disadvantaged**

The 1993 health sector reform in Colombia is a good example of a successful government initiative to extend social health insurance to the poor. The reform reorganized health care finances from supply-side subsidies for public hospitals to a managed competition model with demand-side subsidies for the poor. It set up a scheme for poor individuals with subsidized premiums provided through an equity fund. The equity fund receives resources from the budget and part of the resources generated from the payroll tax for the contributory scheme. The equity fund subsidizes insurance premiums for poor individuals identified on the basis of a proxy-means test. The subsidized basic package was supplemented by public hospitals with the existing supply subsidies. Eventually all of the supply subsidies are to be phased out and replaced by an expanded benefits package to the poor. As a result of the reform, Colombia increased the share of its population that is financially protected from health shocks from 23 percent in 1993 to 62 percent a decade later. More than 11 million poor participants benefited from the insurance. Child mortality rates fell from 44 per 1,000 births to 15 per 1,000 among the insured. Now, this reform has to face the bigger challenge of its financial sustainability, largely because it remains incomplete. Subsidies to public hospitals continue and add to the fiscal cost of the equity fund. The government also had to cover the deficits of the previous social insurance system, which was badly affected by the obligation to compete with private insurers.

Sources: Escobar 2005; Escobar and Panapoulou 2002; Cataneda 2003.
so that they can be integrated into the system, either by paying money to the insurance funds directly or by paying part of the premiums for the poor, informal, and self-employed workers joining the system.

**Ability to contain costs.** Because social health insurance is often associated with high costs, it is fundamental for the institutions running the system to contain costs, particularly by controlling adverse selection and moral hazard–induced behaviors on the part of providers and patients. A varied set of tools can be used to reach this goal: performance-related provider payments, expenditure caps, risk-adjusted capitation arrangements, well-designed contractual agreements between providers and health insurance funds, and good monitoring of the system, among others. Although this section does not discuss these techniques, it is nonetheless important to stress that cost containment is a key element in the success or failure of social health insurance systems.

**Community-based health insurance**

Community-based health insurance schemes have existed all over the world for centuries. They have served as the building blocks for the creation of social health insurance systems in countries such as Germany, Japan, and Korea.

But today in low-income countries, community-based health insurance plays an increasing role in providing medical coverage to populations without access to other forms of formal medical protection, such as social health insurance or private insurance. Community-based health insurance is part of an overall health financing strategy in a number of countries, given the high out-of-pocket financing of care, the uncertainty surrounding anticipated financial flows from donors, the large rural and informal sector populations, and the weak capacity of governments to raise taxes. Community-based health insurance is found throughout the world, but it is particularly prevalent in Sub-Saharan Africa: in West Africa alone, the number of community-based health insurance schemes grew from 199 in 2000 to 585 in 2003 (Bennett, Kelley, and Silvers 2004). Many community-based health insurance schemes have also developed in Asia in China, India, Nepal, and the Philippines, and in Latin America in Argentina, Colombia, Ecuador, and Mexico.

Therefore, with interest in cost recovery fading as a mechanism to mobilize resources for health in low-income countries, the attention of the global community has turned increasingly to community-based health insurance for resource mobilization and allocative efficiency. Another factor contributing to the rise in interest in community-based health insurance pertains to financial protection.

Community-based health insurance schemes are sometimes referred to as health insurance for the informal sector, mutual health organizations, or microinsurance schemes. They can be broadly defined as not-for-profit prepayment plans for health care, with community control and voluntary membership. They
generally spread risk from the healthy to the sick, but if premiums are based on income, there can also be risk sharing from the better off to the poor. However, there is a large variety of community-based health insurance schemes. They are quite heterogeneous in populations covered, services offered, regulation, management, and objectives. It can be difficult to compare the community organized and managed *mutuelles de santé* prevalent in francophone West Africa with some of the hospital-run and organized community financing schemes common in East Africa. Moreover, some of the plans are closely associated with government health care financing policies (Rwanda, Tanzania), whereas in West Africa, most of the plans are set up, run, and managed by the community. This section focuses on the definition of community-based health insurance (box 3.7), before describing its main weaknesses and strengths.

**Box 3.7 What is community-based health insurance?**

Community-based health insurance schemes are highly diverse and defy efforts to arrive at a single, widely applicable definition. Based on a substantial analysis of the existing literature on community-based health insurance, however, Jakab and Krishnan (2004) identify three features common to most existing schemes:

- **Affiliation is based on community membership, and the community is strongly involved in managing the system.** The term “community” refers to a group of people who share common characteristics. This broad definition covers various situations. Members of community-based health insurance schemes can be linked by geographic proximity or by the same profession, religion, ethnicity, or any “other kind of affiliation that facilitates their cooperation for financial protection” (Jakab and Krishnan 2004). In community-based health insurance schemes, affiliation is based on community membership, although all members of the community may not be part of the scheme, particularly if they are too poor to pay the premiums. Members of the community also participate in the management of the scheme: designing the rules and collecting, pooling, and allocating resources. But this participation does not mean that community-based health insurance schemes are owned by the community. The ILO/STEP study shows that communities are the legal owner of the schemes in only 9 percent of the 128 cases reviewed (ILO and STEP 2002). The main owners are central or local governments (44 percent), NGOs outside the community (25 percent), and hospitals (11 percent) (ILO and STEP 2002).

- **Beneficiaries are excluded from other kinds of health coverage.** Community-based health insurance schemes regroup poor people excluded from other forms of financing methods. For example, they may be excluded from social health insurance because they work in the informal sector, from government-funded services because these services are not accessible, or from private health insurance because they cannot pay the premiums.

- **Members share a set of social values.** Most schemes convey deeply rooted values and principles, such as voluntary affiliation, participation, and solidarity. Often, these schemes have existed for a long time as traditional forms of solidarity of the poor. The design of community-based health insurance schemes, in particular the rules governing the collection of resources and the benefits, generally reflects these principles.
The various forms of community-based health insurance

Community-based health insurance schemes differ widely in size, organization, objectives, and management. The following classifications convey some of the diversity of these arrangements:

- Atim (1998) divides mutual health organizations in West and Central Africa on the basis of two dimensions: their ownership (traditional clan or ethnic social network, social movement or association type, comanaged provider, or community scheme) and their geographical and socioprofessional criteria (rural/urban or profession/enterprise/association/trade union).

- Another typology by Bennett, Creese, and Monash (1998) is based on the nature of the risks covered. They distinguish “type 1” schemes covering high-cost, low-frequency events and “type 2” schemes covering low-cost, high-frequency risks.

- Based on a study of community-based health insurance schemes in several Asian countries, Hsiao (2001) identifies five types of schemes: schemes involving direct government subsidy to the individuals (such as the Thai Health Card), cooperative health care in which financing and provision are integrated at village and subdistrict levels, community-sponsored third-party insurance, provider-sponsored prepayment (free access to specific providers in exchange for monthly premiums), and producer or consumer cooperatives (such as the Grameen Bank, which functions as an insurer and a provider for its members and nonmembers living in the same operational area).

- Based on a wide review of nearly three dozen case studies, Jakab and Krishnan (2004) classify schemes in four categories: community cost sharing (resource mobilization through out-of-pocket payments, but the community is involved in fixing user fees, allocating resources, developing exemption criteria, and managing the scheme); community prepayment or mutual health organizations (prepayment, risk sharing, strong involvement of the community in the design and management of the scheme); provider-based health insurance (schemes centered on a single hospital—often started by the providers, prepayment, risk sharing, coverage of catastrophic risks, community role more supervisory than strategic); and government or social health insurance support for the community scheme (schemes attached to social health insurance systems or government-funded programs, active participation of the community in the management of the system, but significant financial contributions of the government or social health insurance funds).

Strengths of community-based health insurance

Precisely assessing the overall impact of community-based health insurance schemes is very difficult because “in most cases, community-financing arrangements
are not registered,” and therefore “centrally maintained data do not exist” (Jakab and Krishnan 2004, p. 69). However, the literature suggests the following conclusions.

**Better access to health care for low-income people.** Jakab and Krishnan (2004) reviewed more than 45 published and unpublished reports on the experience of community-based health insurance and evaluated the schemes along three main dimensions: resource mobilization, financial protection, and access by the poor. The authors find good evidence that community financing arrangements make a positive contribution to the financing of health care in low-income settings. The variation in ability to raise resources is attributed to the low income of the contributing population. Financial protection provided by the plans is found to be significant, both through reductions in out-of-pocket spending and through increased use of health care resources. Regarding access by the poor, the authors find that community-based health insurance “extends coverage to a large number of people who would otherwise not have financial protection” (p. 75).

Ekman (2004), however, is a bit less categorical. He applies a systematic as opposed to a narrative review to assess the impact of community-based health insurance. Schemes’ results are evaluated on the basis of the following criteria: resource mobilization, quality of care, provider efficiency, moral hazard, financial protection, out-of-pocket spending, and access to care. He finds that “[o]verall, the evidence base is limited in scope and questionable in quality. There is strong evidence that community-based health insurance provides some financial protection by reducing out-of-pocket spending. There is evidence of moderate strength that such schemes improve cost-recovery” (p. 249).

**Useful as a component of a health financing system involving other instruments.** Community-based health insurance schemes may complete or fill the gaps of other health financing schemes (social health insurance or government financing), or they may be a first step toward a larger-scale system. When they start to operate, most community-based health insurance schemes are independent from governments or social health insurance systems. Very often, they were created precisely because these institutions were unable to provide medical protection to the population. But as they develop, community-based schemes must coordinate with other existing financing instruments in the interest of the population. More important, a way to overcome the limits of community-based health insurance might be to consider it not as the answer to all the health financing needs of a country, but as part of a solution involving other financing mechanisms.

Community-based health insurance may be very useful to supplement other forms of medical coverage. Indeed, as previously discussed, community-based schemes cannot provide medical coverage to the whole population. But they can help meet the needs of specific categories of people, such as the rural middle class and informal workers (Bennett, Kelley, and Silvers 2004). For this reason, in many
countries governments try to launch community-based health insurance schemes (as in Rwanda) or use existing ones to extend health coverage to certain populations. For instance, in Tanzania, the Community Health Fund targets informal workers, while workers in the formal sector are covered through a new social health insurance scheme (Bennett, Kelley, and Silvers 2004). A similar strategy is used in Ghana. Community-based health insurance may also cover all or part of the user fees people have to pay in government-funded health care facilities or cover services that are not covered in the benefit package offered by the government or social health insurance. In some cases, they may also finance access to private providers (Bennett, Kelley, and Silvers 2004).

Governments may use community-based health insurance to extend coverage funded by larger financing instruments, such as social health insurance. In this respect, a very interesting development is under way in the Philippines, where the government is using existing community schemes to develop the national health insurance system (box 3.8).

The ILO/STEP study sums up these elements by claiming that “the very significant prevalence of CBHOs as ’entry points’, with significant pooling outside the scheme and important presence of direct and indirect subsidies (…) suggest that more than searching for impact of CBHOs as isolated self standing organizational arrangement, its impact and importance should be evaluated as a potential strategy to link the community with (…) other alternative organizational arrangements for extending social protection in health” (ILO and STEP 2002, p. 50).

The Philippine Health Insurance Corporation (commonly known as PhilHealth) was created in 1995 by the Philippine government. The aim was to reach universal coverage within 15 years. However, 10 years later, formal sector workers still account for two-thirds of the members of the scheme, although about half of all workers make their living in the informal sector.

Therefore, to accelerate the expansion of PhilHealth to the informal sector, the PhilHealth Organized Groups Interface (POGI) was launched in June 2003. In this program, local and regional community-based health insurance schemes can be accredited and rated and then become POGI partner organizations representing PhilHealth in their communities. According to their financial and managerial skills, the community-based schemes are delegated more or less extensive responsibilities, ranging from the marketing of social health insurance in the community to the collection of contributions, for which they receive financial incentives.

This initiative is currently being tested in 12 communities in two provinces. Even in this pilot phase, positive results have been observed. The boards of two community-based health insurance schemes have decided to mandate that their members join PhilHealth.

Weaknesses of community-based health insurance

Limited protection for members. The ability of community-based health insurance schemes to raise significant resources is limited by the low overall income of the community. Therefore, such schemes usually have to complement their basic resources with user fees, government subsidies, and donor assistance.

Furthermore, the protection they can provide is, most of the time, hindered by the small size of the pool. Even though the size varies widely (from several dozen members to several millions), most schemes are very small. Based on 85 cases, the ILO/STEP study finds that 22 percent of the schemes have fewer than 100 members, almost 70 percent have fewer than 2,000 members, and 83 percent have fewer than 10,000 members (ILO and STEP 2002).

Moreover, effective population coverage within a given community is very limited: about 10 percent of the targeted population on average, according to Ekman (2004), and 8.2 percent according to Waelkens and Criel (2004), based on data available for 103 schemes in Sub-Saharan Africa. The main reasons so many people choose not to participate are that they do not understand the need for health insurance or they do not trust the managers of the scheme. Hsiao (2001) finds that, because membership is voluntary, people will tend to join a scheme if they expect the benefits to be higher than the costs and if the community has a high level of social cohesion. He also argues that trust in the managers of the scheme is essential to explain the willingness of community members to join.

As a result of limited resources, small size, and scanty coverage, most community-based health insurance schemes are not very effective, as demonstrated in the comprehensive review recently completed by the ILO (ILO and STEP 2002). The outcome variables for the evaluation are health status, utilization, and financial protection. The authors find “no evidence from the documents reviewed that CBHOs positively impact health status or at least the utilization of services and financial protection for their members and/or for society at large, particularly the poor” (p. 49).

Sustainability is questionable. The small size of the pool makes many community-based health insurance schemes vulnerable to failure. Indeed, the realization of one single large risk might lead them to bankruptcy. Moreover, most schemes are especially subject to covariant risks, because in a limited geographical area, an individual’s health is not independent from the health of his or her neighbors, especially when an epidemic or a natural disaster occurs (Tabor 2005). This is the reason researchers increasingly focus on reinsurance (Dror and Preker 2004). Reinsurance would pool the risks of several schemes, thus granting them greater financial stability. However, today, there is “very limited experience with and capacity to undertake reinsurance” (Bennett, Kelley, and Silvers 2004, p. 14).

The financial stability of community-based health insurance schemes is also affected by problems of adverse selection inherent in voluntary prepayment.
schemes. Bennett, Creese, and Monash (1998) found that benefit packages were very seldom defined precisely. The tendency was to include all services that could be delivered by the facilities participating in the scheme. This broad approach made it easier for people with preexisting conditions to join, thus creating severe adverse selection issues.

The viability of community-based health insurance is very often jeopardized by the limited management skills available at the community level. Given their small size, most community-based health insurance schemes are fragile “by construction.” However, it is necessary to qualify this conclusion, given that many schemes do not bear the financial risk. In the ILO and STEP study of 136 cases for which information is available, the financial risk was supported by central or local governments (and in a few cases by NGOs) in 66 percent of the cases (ILO and STEP 2002).

**Limited benefit to the poorer part of the population.** On the issue of financial protection, Ekman (2004) finds that community-based health insurance works for those who enroll, but that the enrollees tend to be relatively well off. He finds that “there is strong evidence that such programs do provide effective protection to the members of the schemes by significantly reducing the level of out of pocket payment for care,” but that “the findings suggest that most schemes fail to cover the least well off groups in the catchments areas” (p. 252). Bennett, Creese, and Monash (1998), based on a review of 82 nonprofit insurance schemes for people outside formal employment in developing countries, also found that very few schemes were able to reach the very poor without the support of subsidies from governments or other partners.

Preker and others (2004) agree that the poor do not have access to such plans. They attribute this phenomenon mainly to lack of affordability. Indeed, even very small premiums may be too expensive for the very poor. Moreover, payments in kind are rarely accepted because of the difficulty of managing them, which represents a barrier for cash-poor people (Bennett, Kelley, and Silvers 2004). Finally, the pro-poor orientation of community-based health insurance schemes is often thwarted by the fact that most are financed through regressive flat-rate contributions. Therefore, the report of the Commission on Macroeconomics and Health calls for increased support for community-based health insurance and for the establishment of a cofinancing scheme that would complement premiums paid by individuals toward their health insurance with government or donor funding (WHO 2001).

Nonfinancial reasons have also been put forward to explain the incapacity of the poor to benefit from community-based health insurance. These include providers’ attitudes toward the poor and the lack of geographic proximity of services (Bennett, Kelley, and Silvers 2004).
Limited effect on the delivery of care. Some authors argue that community-based health insurance improves the quality of health services by contracting with health providers, thus prompting them to improve their services (Tabor 2005). Based on a review of numerous schemes in Africa and Asia, Hsiao (2001) finds that community-based health insurance does not have a significant impact on the level of resources for health, but he argues that it is a way to better organize health spending to purchase cheaper and better services and goods.

However, most studies based on an extensive analysis of the literature on community-based health insurance tend to contradict this finding. According to Ekman (2004), there is weak or no evidence that schemes have an effect on the quality of care or the efficiency with which care is produced. This finding is somewhat confirmed by the ILO and STEP study, which finds that only a minority of schemes (16 percent of the 62 cases for which information is available) negotiate the quality and costs of services with providers. Most simply purchase services at market prices (ILO and STEP 2002).

In conclusion, community-based health insurance schemes face very difficult issues that affect both their effectiveness and their sustainability. Solutions to these difficulties are not easy. In their comprehensive review of the literature on community-based health insurance, Jakab and Krishnan (2004) identified many cumulative conditions necessary to ensure the success of a scheme: the ability to prevent adverse selection, accommodate an irregular revenue stream of membership, prevent fraud, and accommodate the poorest; good management with strong community involvement; organizational linkages between the scheme and providers (which enable the community to negotiate preferential rates); and the steady availability of donor support and government funding. Hsiao (2001) also stresses that an appropriate intervention of the government may be necessary to ensure the success of a scheme. In particular, governments may subsidize premiums for the poorer part of the community, thus facilitating their participation both by decreasing the cost of premiums and by making the gains attached to participation in the scheme more visible (as with the Thai Health Card). Government funding may also reinforce the impact of community-based health insurance, either by financing some of the health care providers contracted by the scheme or by subsidizing the scheme directly, as in Tanzania, where insurance contributions are matched by subsidies from the government.

Voluntary health insurance

“Private” or “voluntary” health insurance is a health financing model that is particularly prevalent in high-income countries as a supplement to publicly financed coverage (box 3.9). In practice, private or voluntary health insurance arrangements encompass a wide spectrum of voluntary financing mechanisms (that is, mechanisms not mandated by the government) and diverse relationships with public and
private health sector inputs. Recent analysis in this area includes work by the OECD (OECD 2004) and WHO (Sekhri and Savedoff 2005), as well as work by researchers at the London School of Economics (Mossialos and Thomson 2002). This section seeks to define and distinguish voluntary and private health insurance from each other and related mechanisms, summarize some strengths and weaknesses of voluntary health insurance, and examine its desirability and feasibility in low- and middle-income countries.

Core competencies of carriers
Bowie and Adams (2005) have identified 11 generic commercial competencies that voluntary health insurers require if they are to develop and sustain a market position: define and develop products, price products, sell products, collect premiums, administer claims, manage risks, manage external relations, provide relevant service and information to customers and suppliers, utilize communications and information technology, manage (operationally), and govern (strategically). Some of these skills differ from those needed to manage a public or social health insurance system—particularly in product development, pricing, and sales.

BOX 3.9 What is voluntary health insurance?
“Private health insurance” has been defined in various ways, including health insurance providing economically private goods (personal health services rather than public health services), health insurance provided by private (for-profit) organizations, and health insurance characterized by premiums not based on income, in contrast to tax-based or social security contributions (OECD 2004). Voluntary health insurance is defined as any health insurance that is paid for by voluntary contributions. Voluntary health insurance can thus be distinguished from national health service systems and social insurance financing models, which are both characterized by mandated payments. The level of compulsion is important, because it often determines the breadth of the risk pool and may also indicate the importance policy makers assign to coverage. The analysis in this book focuses on the level of compulsion as a key distinguishing factor and examines voluntary health insurance schemes.

In reality, most private health insurance markets are voluntary. For example, Switzerland is alone among OECD member countries in mandating the purchase of private health insurance (by individuals). Uruguay requires persons in certain income bands ($600–$1,800 annually) to purchase private coverage, and Saudi Arabia is in the process of introducing compulsory private health insurance for expatriates (Sekhri, Savedoff, and Tripathi 2005).

When analyzing and evaluating voluntary health insurance, it is important to identify the functions or roles that such insurance plays in a particular country context—that is, whether the voluntary scheme is a primary or additional source of health care funding. The taxonomy of private health insurance functions developed by the OECD breaks down voluntary health insurance functions as follows: (a) the main source of health coverage for a population or subpopulation (primary), (b) coverage of the same services or benefits as the public system (duplicate) (although the providers and timely access to, quality, and amenities of the services may vary), (c) coverage of cost sharing under the public system (complementary), or (d) coverage of services uncovered by the public system (supplementary) (OECD 2004). This division of functions facilitates meaningful comparisons across systems.

Source: Authors.
Voluntary health insurance carriers must also manage various risks, several of which also differ from those faced by publicly funded programs. Bowie and Adams (2005) analyzed voluntary health insurance as sets of income, expenditure, asset, and liability risks. Additional work by Bassett (2005) has highlighted sets of contextual, policy, and regulatory risks; commercial risks; market structure risks; and behavioral risks. A revised version of this analysis is presented in table A3.1. Some risks arise from the country and economic context of particular markets and are higher in poorer economies with less stable market, policy, competitive, and regulatory contexts. Others arise from the particular market structure of private and voluntary health insurance markets and the potential behavior of competitors and other stakeholders (such as relative bargaining power of buyers and sellers).

Strengths of voluntary health insurance

Even in high-income countries, it is very difficult to draw generic, empirically based, policy lessons from the experience of voluntary health insurance. The systemwide impact of voluntary health insurance appears to be influenced by a variety of factors, including its functions, the nature and extent of mandated financing, and the extent to which there are binding (and relatively inelastic) constraints on key inputs (such as the number of doctors practicing in a country).

In examining the strengths of voluntary health insurance markets, this section considers both its historical and potential performance. In its study of OECD countries’ markets for private health insurance, the OECD concluded that, on balance, private insurance makes the following contributions (OECD 2004):

1. Affords financial protection (compared with out-of-pocket expenditure)
2. Enhances access to health services (when mandated financing is incomplete)
3. Increases service capacity and promotes innovation
4. Helps finance health care services not covered publicly, in the case of supplementary private health insurance.

An alternative approach is to consider the “potential” of voluntary health insurance as a set of financing functions—collection, allocation, pooling, claims administration, and purchasing (of benefits)—that can be (following Kutzin 2001) “integrated within or separated across” (p. 198) both public and private organizations. In these circumstances, the performance of voluntary health insurance can be considered not only in terms of the competence and efficiency with which each financing function is undertaken, but also in terms of the synergies that can be obtained through “vertical integration” (process or ownership) between insurers and providers and through “horizontal integration” with other insurance, financial, or social protection products.

Over the past decade some health insurance companies, particularly in the United States, have been exploring different models of vertical integration, including “staff model” and “contracting” managed care organizations and “preferred
provider organizations.” Similarly, in other country markets, various combinations of financial products are bundled to reduce marketing and administrative costs. It is, for example, worth noting that in Thailand the great majority of voluntary health insurance is sold as a supplement to life insurance (Pitayarangsarit and Tangcharoensathien 2002).

Kutzin has stressed the benefits that might arise from health insurers’ development of an “active purchasing function” in terms of quality assurance (and enhancement) and cost control (and reduction) (Evans 2002, p. 183). To date such benefits have (in the private/voluntary health insurance market) been largely confined to vertically integrated not-for-profit insurers such as Kaiser Permanente in the United States. These types of arrangements often incorporate the providers within their health plan by ownership, salary arrangements, or contracts and are thus able to exert more influence over the quality and quantity of the health care services they cover and finance.

Another benefit of private/voluntary health insurance, often overlooked, is its role in the accumulation of capital and the development of financial markets. Private and voluntary health insurance organizations typically hold between 10 percent and 30 percent of annual premiums in reserves (for future liabilities and shocks)—in cash, bonds, stocks, property, and other investment instruments. Cumulatively, therefore, insurance markets can make a significant contribution to a country’s overall savings rate.

**Weaknesses of voluntary health insurance**

The OECD work concludes that private health insurance markets have generally posed these challenges:

- They have not reduced certain financial barriers to access (such as affordability and price volatility).
- They have increased differential access to health care in some countries (but decreased it in others).
- They have not served as an impetus to quality improvement, with some exceptions.
- They have removed very little cost pressure from public health financing systems.
- They have increased total health expenditure in several OECD countries.
- They have not been able to achieve value-based competition.
- They have generally incurred high administrative costs.

The OECD notes that “there is a complex interplay between competition in health care insurance and delivery markets. . . . Providers’ market power in the context of competing insurers affects the extent to which the PHI [private health insurance] market can be expected to promote efficiency and the provision of high-quality care. More competition across insurers does not necessarily result in
lower cost if the V/PHI [voluntary/private health insurance] is fragmented in its relationships with providers” (OECD 2004). Although a large market share might enhance an insurer’s bargaining clout with providers, this same large share might hinder competition. The OECD also quotes research by Nichols and others (2004) that suggests the importance of an additional contextual factor: “vibrant price and quality competition amongst providers has been identified as a necessary prerequisite of competitive health insurance markets.”

Several of the drawbacks of voluntary health insurance markets arise from the related risks of adverse selection and cream skimming. Adverse selection has been defined as “a situation,” often resulting from asymmetric information, in which “individuals are able to purchase insurance at rates that are below actuarially fair rates” or as “a process that occurs when individuals with different expected losses are charged the same premium, whereby those with low expected losses drop out of the insurance pool, leaving only individuals with high expected losses” (European Observatory on Health Systems and Policies 2005, citing World Bank 2000 and Witter 1997). The danger of such behavior in a voluntary health insurance market is that it will tend to drive other potential customers out of the market. Adverse selection can be ameliorated by “full underwriting” (that is, prior clinical examination of the insured life’s health status), targeted benefit exclusions, and waiting periods prior to benefit entitlement. Yet all of these mechanisms have equity implications (restricting access to, or raising costs for, sicker individuals) and tend to depress demand.

Where adverse selection is present (or perceived as a risk), voluntary health insurance carriers may be tempted to cream skim, that is, to seek to enroll only so-called good risks and avoid enrolling customers whose profile suggests that they may pose the risk of adverse selection. Adverse selection and cream skimming are both behaviors that limit the scope of voluntary health insurance and may undercut the potential for meaningful competition among carriers. Certain regulatory provisions can combat such activity. These include open enrollment provisions, which require insurers to accept all applicants at specified times in the year or throughout the year, and community rating, which prohibits or limits the consideration of health status factors in setting premiums. Yet insurers may resist these regulations on the grounds that they may reduce consumers’ motivation to purchase insurance before they need medical services, thereby increasing adverse selection. Hence, governments will need to balance concerns about cream skimming with legitimate concerns about adverse selection. Table 3.1 details some of the regulatory interventions used in voluntary health insurance markets and highlights some of the problems they seek to address.

**Relevance of voluntary health insurance in developing countries**

Is voluntary health insurance relevant for low- or middle-income countries? The answer may depend on how willing a country’s political leaders and policy makers
### TABLE 3.1 Instruments to regulate health financing mechanisms not funded by governments in high-, low-, and middle-income countries

<table>
<thead>
<tr>
<th>Purpose of regulation</th>
<th>High-income countries</th>
<th>Low- and middle-income countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establish basic conditions for market exchange</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solvency of insurance plans</td>
<td>Establish adequate minimum capital and surplus standards</td>
<td>Modest regulation of private health insurance with weak enforcement</td>
</tr>
<tr>
<td></td>
<td>Limit investment options</td>
<td>Huge profits usually made by companies that are able to obtain a license to sell.</td>
</tr>
<tr>
<td></td>
<td>Establish financial reporting requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish standards for long-term actuarial soundness for both private and social insurance</td>
<td></td>
</tr>
<tr>
<td>Sales and marketing practices</td>
<td>Advertising</td>
<td>Some regulations but weak enforcement</td>
</tr>
<tr>
<td></td>
<td>Disclosure of commission rates, limit maximum sales and marketing expenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Content and form of insurance policy</td>
<td></td>
</tr>
<tr>
<td><strong>Perfect when market can’t do equitable distribution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk pooling</td>
<td>Require insurance to set premiums on a communitywide basis</td>
<td>Similar laws for social insurance, but weak enforcement</td>
</tr>
<tr>
<td></td>
<td>Compel eligible households to enroll in social insurance plans</td>
<td></td>
</tr>
<tr>
<td>Equity in financing and benefits</td>
<td>Premium based on a percentage of wages in social insurance</td>
<td>Similar</td>
</tr>
<tr>
<td><strong>Correct market failures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk selection</td>
<td>Require open enrollment; prohibit medical underwriting</td>
<td>Social insurance is usually regulated, but not private insurance</td>
</tr>
<tr>
<td></td>
<td>Establish risk-adjusted premiums</td>
<td></td>
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<tr>
<td></td>
<td>Reinsure high-risk individuals by transferring funds retrospectively from insurers with lower average risks to those with higher risks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Require insurance to set premiums on a communitywide basis</td>
<td></td>
</tr>
<tr>
<td>Adverse selection</td>
<td>Disclosure by enrollee of medical history and condition</td>
<td>Very few regulations</td>
</tr>
<tr>
<td>Monopolistic pricing</td>
<td>Require minimum loss ratio: that is, pay a minimum percentage of premiums for health service benefits</td>
<td>Very few countries regulate</td>
</tr>
<tr>
<td><strong>Correct unacceptable market results</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free-rider</td>
<td>Compel all eligible people to enroll in social insurance</td>
<td>Same, but less effective enforcement</td>
</tr>
<tr>
<td>Cost-effectiveness</td>
<td>Regulate benefit package of compulsory insurance</td>
<td>Similar</td>
</tr>
</tbody>
</table>

*Source: Roberts 2004.*
are to trade broad equity goals for limited (but better) access for some to personal health services on the basis of ability and willingness to pay. Voluntary health insurance can, in principle, increase financial protection and access to health services for those willing and able to pay. One of the necessary conditions for demand for voluntary health insurance—high levels of out-of-pocket expenses—exists in many low- and middle-income countries (Xu and others 2003). However, as Sekhri and Savedoff (2005) have illustrated, voluntary health insurance represents more than 15 percent of private health expenditures in only a minority of low- and middle-income countries.

Several factors explain at least some of the reasons for the relatively small contribution of voluntary health insurance in out-of-pocket health spending in low- and middle-income countries. First, some out-of-pocket expenditures go to “informal” (illegal) payments to obtain access to notionally prepaid national health service systems or social insurance health services. Second, some go to legal copayments at the point of use to gain access to the same services. Third, some are spent on health care services and pharmaceuticals from providers and suppliers of doubtful technical quality. Multinational health insurers are therefore often reluctant to establish a presence in such markets. Fourth, in some low- and middle-income countries the population willing and able to pay is not sufficiently geographically concentrated to make it practicable to sell or administer voluntary health insurance. Finally, in some low- and middle-income countries, formal financial service sectors in general and insurance markets in particular are still in their infancy, and people are wary of investing in a product of uncertain personal benefit.

In these contexts, it could be challenging to establish an organization with the whole range of competencies required to administer a full-fledged voluntary health insurance scheme. Actuarial and accounting skills are in particularly short supply. Furthermore, many insurers are hesitant to enter a market without an established regulatory system because the rules of the game are unclear. Governments therefore need to invest in the establishment of a regulatory infrastructure to encourage the development of the market and a fair, competitive landscape.

In some low- and middle-income countries, policy makers might seek to constrain the allowed roles or performance of voluntary health insurance because of concerns that such a financing mechanism would either diminish support for alternative (mandated) health financing mechanisms or that voluntary health insurance would capture a disproportionately large proportion of the available human resources (such as doctors and nurses). The elasticity of the supply of clinical personnel will affect the potential risk in this area.

**Feasibility of voluntary health insurance in developing countries**

Is voluntary health insurance a feasible health financing mechanism in low- and middle-income countries? Should policy makers be encouraged to develop the role of voluntary health insurance in countries where there are significant and
intractable gaps in effective population coverage or technical capacity in mandated health financing schemes?

In low-income countries, only a minority of the population is likely to be willing and able to afford unsubsidized voluntary health insurance. This constraint at least partly explains why voluntary health insurance entities have limited presence in many developing countries. In Accra, Ghana, for example, there is just one small private health insurance business (run by a medically qualified entrepreneur) aimed at middle-class professionals working in the city’s financial sector (Atim and others 2001). Nonetheless, even in low-income countries, some voluntary health insurance presence does exist. A WHO report identified 38 countries where private health insurance contributed more than 5 percent of total health expenditures. Nearly half of these are in low- and lower-middle-income countries (Sekhri, Savedoff, and Tripathi 2005).

In middle-income countries with large literate and mobile urban populations, voluntary health insurance becomes a more plausible instrument as either a primary or additional source of health financing. In fact, in some countries, such as Brazil, Chile, Namibia, South Africa, and Zimbabwe, private health insurance contributes more than 20 percent to total health spending (Sekhri, Savedoff, and Tripathi 2005).

Employer-based or affinity group insurance schemes are likely to raise fewer challenges (and to be more financially stable) than individual subscription schemes, which tend to attract a disproportionate number of high-risk subscribers—the problem of adverse selection. Risk-rated premiums, medical examination before contract, and waiting or qualifying periods are reliable and well-tested market mechanisms for controlling adverse selection, but they do not address access concerns and may not be the most appropriate solutions in all cases.

Among the documented market failures of voluntary health insurance markets, some of the most problematic for policy makers in developing countries are those that worsen inequalities in care and access for the poor (Sekhri, Savedoff, and Tripathi 2005). Concerns about the equity effects of voluntary health insurance can be addressed through a variety of policy instruments, including tapered premium subsidies from public funds, limits on allowed functions or roles for such coverage within the health system, controls on access to public service providers, and regulation of the issuance of insurance products, as well as their content and price. Private health insurance is also often associated with high administrative costs, although the extent and nature of these costs vary by country, type of insurance, and insurer (OECD 2004). These costs can include billing, medical underwriting (where permitted), agents’ commissions, distribution, marketing, and other expenses. Fraud and abuse may become a concern, as it has sometimes in public coverage programs, and regulatory systems must also have provisions to prohibit false claims. Therefore, policy makers wishing to establish or encourage a voluntary health insurance market will need to anticipate the
Overall impact of voluntary health insurance on the demand for and supply of health services and address any anticipated bottlenecks. Policy makers will also need to establish effective mechanisms for regulating voluntary health insurance and related markets.

**Regulatory frameworks for voluntary health insurance**

This section provides an overview of frameworks for regulating voluntary health insurance when insurance is provided through competing nongovernment carriers. It identifies key regulatory questions and describes some experience with regulation in developed and developing countries.

The term “regulation” can be used narrowly to mean the instruments by which governments implement legislative requirements. It can also be used in a broader sense to “include the full range of legal instruments by which governing institutions, at all levels of government, impose obligations or constraints on private sector behavior. Constitutions, parliamentary laws, subordinate legislation, decrees, orders, norms, licenses, plans, codes, and even some forms of administrative guidance can all be considered ‘regulation’” (OECD 1995, p. 20). This section discusses regulation in its broader sense.

Regulation of voluntary health insurance encompasses principles of both health care and financial regulation. Roberts (2004) cites the following four fundamental objectives of health care regulation; these broad objectives encompass many of the key goals behind the regulation of voluntary health insurance markets:

1. To ensure that market exchanges and transactions are done honestly and openly;
2. To rectify market failures;
3. To deal with the unequal distribution of income and variations in health needs (differences in endowments);
4. To constrain market results on ethical grounds (organ sales).

In simple terms, objectives 1 and 2 can be regarded as the financial or market-related objectives, and 3 and 4, as the equity objectives of health care regulation. Yet, in some cases, market failures within voluntary health insurance markets result in inequitable access to coverage; thus, the consequences of market failures are not limited to financial issues. Some regulators of voluntary health insurance markets focus on the financial pieces of regulation, but it is recommended that policy makers consider the equity and health care challenges that can arise within voluntary health insurance markets and make explicit decisions with respect to whether and to what extent they wish to tackle them through regulation.

**The structure of regulation.** The traditional approach to regulation has been institutional; that is, it has assigned separate regulatory agencies to each category of institution or sector (or both). This approach is coming under pressure for
three reasons. First, regulatory frameworks within market economies tend to have at least three tiers: the general framework of civil and criminal law, sector-specific regulation, and the regulation of private firms (competition, advertising, consumer protection, and so on) (Jones 1994). Second, some financial and health care suppliers (known as conglomerates) are integrating both horizontally into related markets and vertically up and down the supply chain (as when health insurers purchase hospitals), posing challenges to this traditional model. Third, as cited by Carmichael and Pomerleano (2002, p. 40), there is legitimate concern about “regulatory arbitrage”—the attempt to select institutional forms to exploit (and gain competitive and financial advantages from) differences in regulation that apply to institutionally distinct suppliers operating in a single market.

Countries tend to employ various regulatory models in their oversight of voluntary health insurance markets. Private health insurers are often regulated, at least in part, by the same regulator as other lines of insurance, particularly in the area of plan solvency. The OECD study on private health insurance found that there was a trend among OECD countries to regulate according to entities’ activities and functions, rather than by the type of entity (for-profit, not-for-profit) (OECD 2004). This trend probably stems from the potential for entities to otherwise exploit institutionally based regulation. These regulators are often, although not always, located within the ministry of finance or a similar agency. In addition, health care regulators often play a role in the regulation of voluntary health insurance, as is the case in Mexico and the Netherlands. In some cases, as in Australia, Ireland, and some U.S. states, the health authorities are the main regulators of such insurance, generally with support from financial regulators relating to the financial aspects of the market and carriers (OECD 2004, table 3.17). Uruguay has divided its regulatory responsibilities for voluntary health insurance between two agencies: the Ministry of Public Health monitors the operations of nonprofit institutions, whereas the Ministry of Economy and Finance oversees for-profit insurers.

In general, voluntary health insurance markets are rarely under the sole control of a single oversight body. A full range of issues, including competition, antitrust, consumer protection, and advertising, touch on the activities of voluntary health insurance carriers. Hence, it is likely that multiple players will be involved in regulation. However, the extent to which the health system issues are actively addressed by regulation varies greatly across countries and is a product of resources, expertise, and governmental priorities, among other factors.

*Regulatory “backing” and implementation* The effectiveness of a regulator is determined by its ability to address its regulatory objectives in a timely and cost-effective manner. Regulators require high-level political support, legislative backing (including powers of enforcement), adequate funding, and a strong skills base (Carmichael and Pomerleano 2002). Only then can they effectively implement regulations.
Roberts has used his analysis of the objectives of health care regulation to develop a specific tabulation of instruments used in both high-income and low- and middle-income countries to regulate financing mechanisms that are not funded by the government (table 3.1). Many of Roberts’ regulatory instruments are designed to address the unequal distribution of income and the variations in health needs and the resulting consequences of such redistributive instruments (such as increased adverse selection). He also identifies measures that can help correct market failures common in voluntary health insurance markets, such as risk selection, adverse selection, and problematic pricing mechanisms, all of which also have equity and distributive effects.

Table 3.1 includes many key features of voluntary health insurance regulatory frameworks and indicates that, in Roberts’ review, many key protections are not in place or are weakly enforced in low- and middle-income countries. The scope and content of voluntary health insurance regulatory frameworks in developing countries is still not well understood and could benefit from further research and analysis.

In contrast, developed countries tend to have more advanced voluntary health insurance regulatory frameworks, although they do not always touch on the full range of issues highlighted in Roberts’ analysis. The OECD examined the scope and type of private health insurance regulations found in OECD countries. It found that the scope of regulation varied significantly and, in European countries, was limited by European Union insurance directives. As a general matter, the role played by such insurance within the nation’s health coverage system had a significant impact on the depth and breadth of government involvement in this sector. Areas addressed under some countries’ private health insurance regulatory frameworks include the following (OECD 2004):

- Access to coverage
- Adverse selection
- Benefits package
- Premiums and price regulation
- Disclosure
- Tax or other fiscal incentives or subsidies to purchase
- Prudential and financial requirements
- Regulation of consumer complaints or inquiries

The imposition of access and premium requirements has been most controversial in markets where health insurance products are marketed through individuals, rather than employers, because the potential for adverse selection, for “premium spirals” (whereby lower-risk persons drop out in response to premium prices, initiating a downward spiral of enrollment and an upward spiral of premium costs), and for persons to opportunistically purchase cover (when they foresee a need for
a medical service) are particularly high. Heated debates have surrounded the extent to which premium and access standards may hinder broad purchase of coverage and increase costs in a voluntary market where such standards tend to protect those of higher risk. However, in the absence of such standards or voluntary industry practices that favor broad nondiscriminatory issuance of policies, it is difficult to ensure that voluntary health insurance products can be purchased by higher-risk individuals at an affordable cost. This issue is one of the key dilemmas facing regulators of private health insurance markets.

Nonetheless, some have argued that many types of regulations on voluntary health insurance contracts diminish the efficiency of such markets. Zwiefel, Krey, and Tagli (forthcoming) find that some measures used in OECD countries, such as imposed premiums, obligations to provide certain products or benefits, and product approval, have effects that tend to run counter to proper market incentives and competition. Zwiefel, Krey and Tagli favor a focus on capital and liquidity requirements, information disclosure requirements to regulators and consumers, and standard accounting and auditing requirements. However, they indicate that a mandatory risk adjustment scheme among insurers can complement premium regulation and help avoid cream skimming by insurers. This approach has been controversial in certain markets, where the industry has argued it is anticompetitive. The relative competitive and efficiency merits of many voluntary health insurance regulations are often the subject of differing viewpoints and may depend on the particular traits of the insurance and health care markets in which they are implemented, as well as on the goals of policy makers and regulators.

A fundamental policy decision with major implications for the scope and nature of the regulatory task is whether to impose redistributive goals on voluntary health insurance and, if so, whether the redistribution is to occur between known high risks and low risks, between rich and poor, or between dependent and working age populations. The imposition of related standards—such as standards for access or premiums—may have consequences for the profile of likely purchasers, as well as for the financial health of the plans. These consequences need to be considered and an effort made to counter their potential negative effects through particular instruments within the regulatory scheme.

Ultimately, the balance between mandated and voluntary health financing mechanisms and the gradient of redistribution (and other constraints) in each segment must be a matter of sovereign decision making by individual governments on the basis of their revenue-raising ability, the population’s willingness to purchase voluntary health insurance, and the country’s regulatory capacity, among other factors. In low- and middle-income countries, salient concerns also include whether limited public funding for health should be devoted to voluntary health insurance schemes that often cover the comparatively better off, or whether such resources are better spent on direct financial support for services for the poorest and most vulnerable populations.
Annex 3.1 The four types of financial risk in voluntary/private health insurance

<table>
<thead>
<tr>
<th>TABLE A3.1</th>
<th>Selected risks in voluntary/private health insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources of risk</td>
<td>Financial risk type</td>
</tr>
<tr>
<td>Contextual, policy, and regulatory risks</td>
<td>Income risk</td>
</tr>
<tr>
<td>Public policy risks</td>
<td></td>
</tr>
<tr>
<td>Poor economy—low and unstable growth</td>
<td>risk increases</td>
</tr>
<tr>
<td>High and unstable burden of disease</td>
<td>*</td>
</tr>
<tr>
<td>Demography—dependent population increasing</td>
<td>risk increases</td>
</tr>
<tr>
<td>Unclear or unstable public policy context and allowed roles</td>
<td>risk increases</td>
</tr>
<tr>
<td>Unstable or heavy regulation</td>
<td>*</td>
</tr>
<tr>
<td>Low control over composition of benefit package</td>
<td>risk increases</td>
</tr>
<tr>
<td>Low control over price of benefit package and/or low loading</td>
<td>risk increases</td>
</tr>
<tr>
<td>Market structure risks</td>
<td></td>
</tr>
<tr>
<td>Low concentration of supply</td>
<td>risk increases</td>
</tr>
<tr>
<td>Degree of competitor horizontal integration</td>
<td>risk increases</td>
</tr>
<tr>
<td>Degree of competitor vertical integration</td>
<td>*</td>
</tr>
<tr>
<td>Behavioral risks</td>
<td></td>
</tr>
<tr>
<td>Abuse and fraud</td>
<td>risk increases</td>
</tr>
<tr>
<td>Moral hazard</td>
<td>risk increases</td>
</tr>
<tr>
<td>Adverse selection</td>
<td>risk increases</td>
</tr>
<tr>
<td>Commercial risks</td>
<td></td>
</tr>
<tr>
<td>Low risk aversion</td>
<td>risk increases</td>
</tr>
<tr>
<td>High diversity of preferences</td>
<td>risk increases</td>
</tr>
<tr>
<td>Low pool size</td>
<td>risk increases</td>
</tr>
<tr>
<td>Low control over utilization</td>
<td>*</td>
</tr>
<tr>
<td>Low control over provider payments</td>
<td>*</td>
</tr>
<tr>
<td>Low density of provision</td>
<td>risk increases</td>
</tr>
<tr>
<td>High density of provision</td>
<td>*</td>
</tr>
<tr>
<td>Barriers to exit</td>
<td>*</td>
</tr>
<tr>
<td>Threat of new entrants</td>
<td>risk increases</td>
</tr>
<tr>
<td>Threat of substitute products</td>
<td>risk increases</td>
</tr>
<tr>
<td>Bargaining power—suppliers</td>
<td>*</td>
</tr>
<tr>
<td>Bargaining power—buyers</td>
<td>risk increases</td>
</tr>
</tbody>
</table>

Source: Authors.

Note: * denotes no impact.
The categorization of selected risks in voluntary/private health insurance by their source and financial type (table A3.1) aims to help insurers, policy makers, and regulators profile the existing or likely risks under different conditions.

For the sources of risk, one evaluative framework proposes five main elements: public policy, demand, market structure, behavior, and performance (Mossialos and Thomson 2002). The public policy, market structure, and behavior categories are used here. The fourth source of risk in the table, “commercial risks,” comprise the risks that insurance carriers assume from consumers, service providers, and competitors. The bottom five commercial risks—barriers to exit and so on—are from “five competitive forces” (Porter 1980).

For the financial risks borne by voluntary/private health insurance, Bowie and Adams (2005) categorize such risks according to their major accounting categories: income, expenditure, and assets and liabilities. Income risks reduce the likely income of a voluntary/public health insurance scheme. Expenditure risks increase such schemes’ likely expenditures in the present financial year. Liabilities refer to the expenditure risks such schemes face in future financial years. All financial risks can, indirectly and cumulatively, become risks to the assets of a scheme. Table A3.1 highlights only risks that are “direct” risks to scheme assets.

Assets can be divided into three major categories: cash, investment assets, and other assets. The key features of “investment assets” are their security, return, and liquidity. “Other assets” are often held in property or in businesses that support or complement the core insurance businesses. An example of “other assets” held by voluntary/private health insurers in developing countries includes an ownership or “controlling” interest in a piece of the pharmaceutical supply chain—to ensure the reliable, efficient, and quality-assured supply of this key health care resource funded by such voluntary/private health insurance carriers.

Liabilities can also be divided into three main categories: outstanding claims, unearned income, and unexpired risk. Unearned income refers to premiums received for future time periods. Unexpired risk is a provision for any anticipated difference between the expected costs of future claims and the unearned premium reserve, when the latter is not expected to cover all liabilities (for example, tough winter months in temperate climates).

Endnotes

1. Beveridge wrote, “Benefit in return for contributions, rather than free allowance from the State, is what the people of Britain desire.”

2. The model is applied to 149 countries using general taxation financing, social health insurance, or a mixed system, with no differences in terms of results for each type of system.

3. Based on 238 cases for which data were available, the ILO and STEP study (2002) found that 94 percent of the schemes had prepayment mechanisms.

4. Examples include the Chagoria Hospital plan in Kenya, Kisiizi in Uganda, and the Evangelical Lutheran Church of Tanzania plan.
5. CBHOs, or community-based health organizations, is the term used by the ILO and STEP report for community-based health insurances.

6. Another dimension, dignity, was proposed for the evaluation, but insufficient evidence was found to make a determination.

7. This section is based mainly on a theoretical analysis of community-based health insurance. Indeed, very little empirical evidence exists on the longevity of community-based health insurance schemes, because most are very recent and because the literature focuses mostly on surviving schemes (ILO and STEP 2002).

8. All following quotations in this section are taken from OECD 2004, p. 94–167. A synopsis of the longer OECD work is found in Tapay and Colombo (2004).

References


