A Strategic Framework in Mobilizing Domestic Resources for Health

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I. Introduction

The principal objective of this paper is to develop a framework for designing financing strategies for middle- and low-income countries. High-income countries are examined mostly to shed light on what the lower income countries can learn from their experience. The framework also suggests ways to think about equity and health care and tries to provide an approach for thinking strategically about health finance for different population groups. Financing refers to the way in which money is mobilized to fund health activities, and how it is used (i.e., allocation of funds). There are five modalities of financing: general taxes; social insurance; private insurance; community financing; and out-of-pocket payments. A financing strategy is the choice in combining the different modalities. It determines the amount of funds available for health care, who controls the resources, and who bears the financial burden. The strategic choice made has distributive implications for the health status and financial risk protection of various income and age groups.

This framework consists of four parts. A health system is a means to an end. Funds are mobilized to finance programs that will, it is hoped, produce final results desired by a society. The financing strategy should be decided in light of a nation's *goals* for the health system. Second, countries have different "needs" for health care and different economic capacities to raise funds. This gives the *context* in which financing strategies have to be designed. Third, when nations search for financing strategies to improve the performance of their health systems, they need to know the relative strengths and weaknesses of the five financing modalities. A set of *parameters* has to be developed to conduct the assessments. The final part of the framework involves thinking about the alternative *combinations* to achieve societal goals, taking into account the political acceptability and the implementability of the alternative strategies.

In essence, the framework provides an approach to develop a **conditional strategy** in mobilizing domestic resources for health. The strategy is conditioned on the countries' real conditions. The approach is to decompose the population into income and employment groups. Potential financing modalities for

¹ For an exemplary paper on this general subject, covering a broader scope, see Schieber, G. and A. Maeda. "A Curmudgeon's Guide to Financing Health Care in Developing Countries," *Innovation in Health Care Financing*. World Bank (1997): Washington, D.C.

each group are examined. The strategy is to hold the general revenue fund, the most flexible and most equitable source of fund, as the reserve. It would be used and targeted for three major purposes: provide public goods, promote equity, and offer incentive for peasants and workers in informal sector to prepay for health care.

This paper is organized into the four parts of the framework. The next section examines briefly the objectives of a health system so we can think more critically about the alternative modalities in light of their potential influence on the outcomes. The strength of a financing strategy is contextual. In the third section, we analyze the context in which countries are placed, including a discussion of the resource allocation decisions that often are significantly influenced by political economy. In the fourth section, we developed a set of parameters to assess the different modalities and used these parameters to examine each of the financing modalities and their potential consequences. In the last section, we develop a critical approach to think about financing strategy. The key focus here is to thinking strategically to combine the financing modalities for different population groups, and integrate them into a rational whole to achieve societal objectives. A coherent integration could increase resources, pool risks, improve equity, and obtain efficiency and quality gains.

II. Financing and Health System Outcomes

A health system is a means to achieve societal ends (Hsiao, W.C, M. Roberts, P. Berman, and M. Reich, 2000.) Too often, confusion occurs in policy analysis and in public debates where the means is confused with ends, and intermediate goals are confused with final goals. These confusions result in contradictory conclusions and irrational policies. This section briefly discuss the goals, then show how financing as a policy instrument, relates to these goals.

A. Health System Goals

Most nations seem to share the same common final objectives for their health systems: good health for all; financial risk protection for all; and satisfaction of the people, while maintaining an affordable health system (i.e., subject to a given resource constraint). There are two dimensions to each of these three goals: level and distribution. Table 1 illustrates these declared goals (Hsiao, Roberts, Berman and Reich, 2000.) Note that these objectives go beyond the usual concerns of economic analyses, which tend to focus exclusively on efficiency while remaining silent on equity (Okun, 1974).

On the margin a nation has to make trade-offs among health status, financial risk protection, and public satisfaction (e.g., choice of physicians and no waiting lines). Table 1 shows the painful trade-offs. But rarely do nations make these inherent trade-offs explicitly. Implicit boundaries to trading off different objectives exist in deeply-rooted historical processes as well as in fundamental social values. These limit the range of available reform options by creating implicit accountability of policymakers. Health care systems in European nations, for example, are deeply rooted in egalitarian traditions. Policy proposals violating this basic foundation of equity have little overall appeal regardless of how much they would enhance efficiency (Saltman and Figueras, 1997). On the other hand, the health care system of the U.S. is rooted in libertarian traditions. Compulsory health insurance to cover all Americans remains elusive after more than sixty years of public debate (Marmor, 1993).

Table 1: Multiple Objectives of A Health System

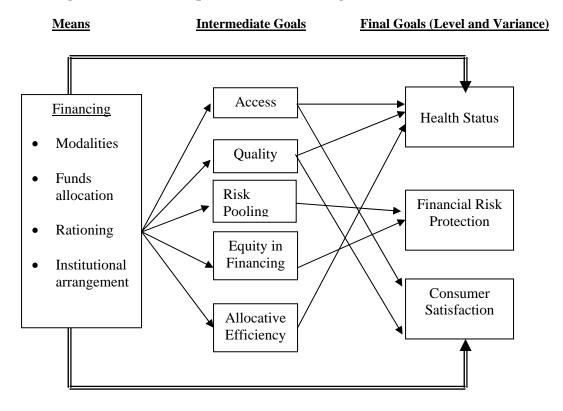
	Health Status	Financial Risk Protection	Public Satisfaction
Level			
Equitable Distribution			

Many policy measures are aimed to improve the immediate outcomes such as equal access to health care, efficiency of production, and quality of health services rather the final ones. However, these intermediate outcomes do not have a one-to-one relationship to the final goals. For example, in the United States, most medical professionals argue that additional resources must be spent to maintain the "quality" of health care. Whether the "quality" produces better health outcomes or greater public satisfaction are not examined, nor concerned given to higher expenditure for quality may results in fewer people being insured.

B. Financing and Health System Goals

Perhaps financing is the most important instrument that can affect the intermediate and final outcomes. How a health system is financed determines how much money is available, who bears the financial burden and controls the funds, and whether health expenditure inflation can be managed. Then these intermediate outcomes, in turn, determine the final outcomes such as health status of the population, and who has access to health care and who is protected against catastrophic medical expenses. Figure 1 illustrates how the instruments of financing may influence the intermediate and final results.

Figure 1: Relationships Between Financing Instruments and Goals



III. The Context

Any health financing strategy has to be thought through in a context. A nation's ability to raise tax revenues for health care depends on its aggregate economic capacity, on the number of rich and poor households, and on the government's ability to collect taxes. The effectiveness of each financing modality depends on whether households are rich or poor, and on how many workers are engaged in farming, and how many work in the formal or informal sector. For example, in developing countries, social insurance can be used to raise funds from higher-income workers employed by large firms. However, it is not an effective method to raise funds from peasants. Consequently, we have to examine in some detail a country's distribution of households by income and employment status to ascertain its fiscal potential for raising health funds.

While we are concerned with the amount of money that can be raised for health care, this amount has to be judged relative to what that country may "need" and "should" spend for health. A country's "need" for health care depends on its incidence and prevalence of disease, which in turn are greatly influenced by race, age distribution, climate, and socioeconomic conditions. Also, *needs* can never be completely met because all nations face resource constraint. Then it leads to the question how much a country *should* spend for health care, the answer can not be given solely by marginal benefit calculations, it also depends on how equitable a nation wants health care and health status to be. The *equity* weights vary with the social values and beliefs embraced by a nation. Together, these factors explain why no universal standard can be set as "what percent of a nation's GDP should be spent for health."

Another obvious fact enters the calculus as how much "should" be spent for health care, the efficiency of the health system. The amount needed for a given scope and level of health care hinges on how efficient the services can be produced.

In the real world, financing and allocative decisions are not made based only on technical criteria. The interplay of politics and economics (i.e. political economy) principally decides who bears the tax burden and who receives the benefits. For all nations, general revenue is the major source of financing for health. Ideally this fund should finance public goods and subsidize the poor and disabled. However, the urban affluent and middle-income population with their greater political power, often "capture" the general revenue for their own benefit with their greater political power. The poor and rural peasants are left with less. Unless a country has a coherent overall financing strategy for all of its people, equity, efficiency, and good health may not be enhanced by raising larger amounts for health care. The situation in the U.S. is a good illustration. Among the high-income nations, the United States spends the highest percentage of GDP for health, yet it's health status ranks in the bottom quartile, and has the most inequitable distribution of cost, access to health care and health outcomes (Doorslaer E., and A. Wagstaff and F. Rutten, 1993). Argentina and India are examples of lower income countries where higher spending have not produced more favorable outcomes due to the lack of a coherent overall financing strategy.

We discuss two principal contextual issues in this section.

A. Socioeconomic Development and Health Financing

To state the obvious, the same financing and organizational arrangement cannot be applied to all nations. Health care systems differ enormously across countries, in particular according to a nation's socioeconomic development. What works in the U.K., say, may not work in Kenya. On the other hand, do we have to treat every nation differently? Can we group nations into somewhat homogenous categories and derive general conclusions for the nations within each group?

A nation's fiscal capacity and its ability to use different financing modalities to effectively mobilize funds are highly correlated with that nation's per capita income. Income determines both household demand and capacity to pay for health care services. Besides household income, other major factors affecting fiscal capacity of modalities are also highly correlated with income. They include: the tax base from which a nation can raise tax revenues; the number of workers employed in the formal sector, which influences how much can be raised through social insurance; and the number of poor households that have to be subsidized. A nation's ability to use any given modality effectively depends on these factors. In addition, a nation's ability to collect taxes or premium vary with the competency in public and private management respectively, they are also highly correlated with the nation's per capita income. For these reasons, we use per capita GDP as a first approximate criteria to group nations into somewhat homogenous categories.

Table 2 presents nations grouped by income. We labeled each group as a stage and demarcated the stages according to income. Stage is not a discontinuous variable, or implying that a country jumps from one discrete stage to another. In fact, countries are located in a continuum. The notion of stages is to provide an approximate picture as to what choices in financing modality might be available in each

stage, and the amount of funds that may be raised through the various sources. This grouping gives a broad summary of the financing and organization of health care in each stage. However, it does not imply that all nations in a stage follow exactly the same pattern.

Table 2 illustrates that in low-income countries tax funds usually finance 40-60% of total health expenditures, while social insurance (most likely covering civil servants) finances 10-15% and direct out-of-pocket payments from patients finance 40-50%. Private insurance is negligible or non-existent, because few households can afford to buy private insurance, and because the country may lack the administrative safeguards needed to prevent fraudulent insurance claims. As a country industrializes and its per capita income grows, social insurance usually expands because the number of workers in the formal sector grows. Private insurance begins to emerge but plays a very small role. The major portion of total national health expenditures is still financed by tax funds or patients' direct payments.

As a nation's economy grow and move from low-income to middle-income country, the health system also changes. The major difference lies is the relative share of total health expenditures financed from the various modalities. In middle-income countries, a larger portion of the funds usually comes from social and private insurance. The provision of health services also change. The quality of health services funded by private and social insurance become noticeably higher. These distinctions in the quality of services compartmentalize the health service market. At the high-income level of development, all nations (except the U.S.) have established a system of financing, using either general revenues or social insurance to assure universal equal access to reasonable health care. The health service market becomes less compartmentalized and the quality distinctions are reduced.

Table 2: Evolution of Health Care Financing and Provision Systems at Various Stages of Economic Development

		-		
Service Provision Financing	Stage I (three-tiered system)		(compartmentalized	
Modality	Poor	Low		
	(less than \$1,800)*	(\$1,800-\$4,800)*	(\$5,000-\$12,000)*	(greater than \$12,000)*
General Revenue Financed + Donor	red Public health, prevention Public health services		Public Health Service —	Medisave + Cat. (Singapore)
	(50-60%)	(40-50%)	(20-40%)	, ,
Social Insurance	For civil servants only	(10-20%)	Social Insurance (Dir/Indirect Provision)	→ National HI (Canada, Australia) Bismarckian Social
			(30-60%)	Insurance (Germany, Japan)
Private Insurance	Negligible	(5-10%)	Private Insurance (15-40%)	→Managed Care + Medicare (USA)
Self-pay	Private hospitals & clinics Pharmacists Indigenous providers		Self-pay	Self-pay
	(35-45%)	(20-40%)	(15-25%)	(15-25%)
Examples	Mali, Nigeria, Tanzania, Kenya, Yemen, Bangladesh India	China, Egypt, Peru, Ecuador, Philippines, Indonesia	Turkey, Chile, Mexico, Argentina, Brazil, Lebanon, Venezuela, Thailand, Malaysia	* GDP per capita, 1997 PPP \$ ** Except USA & Hong Kong

These income ranges are not those given by the World Bank and IMF for low, middle and high income countries because we are trying to have income ranges that are more relevant for health developments. The table is taken from Hsiao, W.C. What Should Macroeconomists Know About Health Care Policy? A Primer. Washington, D.C.: International Monetary Fund Working Paper WP/00/136. 2000

B. Uses of Resource

Once funds are raised, how they will be used (i.e., resource allocation) matters greatly in determining who has access to health care and the latter's quality and quantity. This in turn influences health outcomes and financial risk protection, as well as, of course, the allocative efficiency of a health system and a nation's total health care costs.

Formulating financing policy, like other policy decisions, is a profoundly political process. There are several strong stakeholders in the health sector. Each possesses political resources and roles in the political structure that determine their relative power in shaping the financing policy.

Political scientists such as Alvarex (1991), Marmor (1983) and Reich (1994) have long argued that politics plays the critical role in deciding who have to pay and who receive the benefits. They examine the stakeholders in the health sector and analyze their political power and ascertain how they may use that power to benefit their group economically. Organized medicine, labor unions, insurance and pharmaceutical industries have been extensively studied.

Political economists such as Alesina (1986), Donaldson(), Rodrik () and Staniland () have examined the interaction between politics and economic policies. A number of studies have been conducted to show the political influences in health policy. Foltz and Foltz (1997) have documented how the health reform in Chad was skewed in favor of certain groups due to their political power and influence. Marmor et al (1983) compared how politics and economic were interwoven in the benefits and cost burdens in health policies.

A country's economic and political elite wants to ensure that there are at least a few "world class" institutions in the country in which they can get care. These services tend to be provided by the tertiary hospitals or medical centers. Priority is often given to tertiary hospitals utilizing costly equipment (frequently imported) and serving the economic and political elite of the country. It is common for those national and regional centers (which are often also teaching hospitals) to absorb a very large share of the nation's overall health budget. Also, the most prestigious institutions often have substantial political connections and influence which allows them to effectively defend their interests.

The bias of government health financing toward tertiary hospitals, found in many countries, can be illustrated by the case of Kenya. In fiscal year 1993-94, thirteen percent of the total Kenyan government recurrent budget for health was allocated to one national hospital located in the capital. This hospital provides inpatient services for twenty to thirty thousand patients per year. Meanwhile, only twenty-six percent of the government

recurrent health budget was allocated to primary health care for the benefit of all of Kenya's twenty-six million people.

Allocation of tax funds among programs often reduces rather than enhances the equity of health care delivery. General revenues often were used to fund free public health care, intended to assure equal access for the poor and low-income households. However, the reality turns out differently. The benefits frequently do not go to those whom the public funds intended to help. Like what Bates (1981) found in his study of agricultural policy in Africa, the general revenue financed health services tend to be "captured" by the urban upper and middle class rather went to the rural and urban poor. Incidence analyses indicate that the public expenditures tend to benefit the rich disproportionately in a majority of nations (see Table 3).

Table 3 The incidence of public health spending in selected countries

		Share	of subsidy (%)
		Poorest quintile	Richest quintile
Sri Lanka	1979	30	9
Jamaica	1989	30	9
Malaysia	1989	29	11
Brazil	1985	17	42
Egypt	1995	16	24
Kenya	1993	14	24
Vietnam	1992	12	29
Indonesia	1989	12	29
Ghana	1992	11	34

Source: Alailima and Mohideen, 1983, Demery et al 1995, Grosh 1994.

IV. Parameters to Assess Financing Modalities

Financing refers to the way in which money is mobilized to fund health activities, and how it is used (i.e. allocation of funds.) We will distinguish discussions of efficiency in raising funds from efficiency in producing health care. The latter is being analyzed in another paper.

A nation has to decide on a financing strategy—i.e., the use of a combination of financing modalities to fund its health activities. Besides socialistic countries, all countries use a combination of modalities. For example, the U.K. is widely perceived as a nation that relies wholly on general revenues to finance its health system. But in reality, 83% of its health funds comes from general revenues; 11% comes from payroll tax, 3% from private insurance, and 3% from direct out-of-pocket payments (OECD, 2000.)

When nations selecting financing modalities to raise funds, several factors have to be considered, including fiscal capacity of the five modalities and their equity and

efficiency implications. These factors include fiscal capacity, equity, economic effects and efficiency in raising the funds.

We use these factors as parameters to assess the strengths and weaknesses of the five financing modalities. The findings provide the information with which a nation can use to decide which financing strategy can best achieve the desired societal results. In Section IV, we combine the four parts of the framework and suggest a strategy that could increase funding for health, improve equity in health care and health and increase financial risk protection for most of the people.

A. Fiscal Capacity

A key question when considering a financing modality is, can the modality mobilize enough money to meet the desired level of expenditures for that health program? Capacity is contextual—the fiscal capacity of any modality will depend on the economic structure of the society (e.g., are there many workers in the formal sector), and on the government's administrative capacity to collect taxes or social insurance contributions.

Moreover, "capacity" is not really a yes/no, discontinuous variable. Rather, the amount of money that can be raised by a revenue source may well depend on how much a country is willing to give up in terms of other objectives (e.g., trade-off raising payroll tax that may result in higher labor cost with reducing international competitiveness) in order to increase health sector spending. Still, it is useful to think of the match or mismatch between a given financing modality and a nation's health sector funding goal.

Our typology of financing modality presented here is a mixture of the fiscal and organizational aspects of the money-raising process in each option. The categorization therefore reflects both the economic sources used by a given modality, and the organizational arrangements through which the financing is carried out. Finally, our options are best thought of as a set of "ideal modalities." i.e., each alternative is a highly stylized simple "pure case."

General Revenues

The amount which can be raised from general taxes depends on a nation's tax base. The amount of general revenue money that a nation is willing to spend for health depends on how much the nation is willing to give up in terms of other objectives such as spending for defense or education.

Many countries have shifted both control and fiscal responsibility for health care to the provincial or local level in recent years. This can raise serious horizontal equity issues, since more prosperous areas can either finance the same services as poor areas do, at lower tax rates, or better services at the same tax rate. For this reason, nations that have gone the route of fiscal decentralization have often found it necessary to establish interregional equalization funds. Constructing an equalization scheme can be

quite complex—it not only has to take into account need (based on population, illness, and income), but also has to create incentives to prevent poor regions from lowering their own tax efforts and "free riding" on the collective efforts of their neighbors. Decentralizing taxing decisions also runs the risk of creating a "race to the bottom," as regions compete in attracting businesses by lowering taxes. Richer (and politically more powerful) regimes may also object to the creation of an interregional system of redistribution precisely because it threatens to eliminate their own advantages.

A recent IMF study (IMF Government Financial Statistics 1998), reports the median percent of national income collected as tax was 18% (ranging from 8% to 44%) for low-income countries while median for high-income nations was 48%. Despite its relative importance of government financing for health care in low-income countries, low tax ratios often translate to limited capacity and insufficient public finance for health care.

Studies have consistently found that typically low-income countries have smaller tax basis and less ability by the government to collect the taxes. As a result the general revenue is a smaller percentage of GDP (IMF, 2000, and Scheiber and Meada, 1997.) Yet, programs demanding for public funding are greater. As a country develops economically, its tax base tends to increase and general revenue becomes a larger portion of GDP. We present the information on general revenue and sources of general taxes for selected low, middle, and high-income countries in Table 4. It tends to support the point just made. Moreover, Table 4 shows that unlike high-income countries, very few low and middle-income countries able to obtain a large share of their general revenues from income or wage taxes. Most of them rely on value-added taxes. On the other hand, several countries are able to raise substantial sums from social insurance contributions (e.g. Costa Rica, Argentina and Mexico.)

Table 4. GDP per capita (PPP basis), and tax revenue as % of GDP and by source, by income status of country.

Country (by	GDP per	Tax	Source of tax as % of total tax revenue ^g						
income group)	capita (PPP basis) 1998	revenue as % of GDP	Individual income	Corporate Income	Social Security Contributions	Payroll	Value- Added	Excises	Import/ Export Duties
Poor									
Burundi ^a	570	12.7	10.4	12.0	8.7	0.3	17.0	30.7	16.9
Kenya ^c	980	23.4	38	.9 ^f			23.0	18.4	17.1
Vietnam	1689								
Zambia ^a	720	17.6	10.9	9.9			29.7	22.8	13.6
Low									
Egypt ^a	3041	16.9	3.6	26.6	2.2			26.1	19.5
Peru ^b	4282	15.1	23	.2 ^f	9.5	3.9	42.7	13.7	10.8
Philippines ^a	3555	18.1	18.6	13.6	6.2		10.8	14.4	21.7
Middle									
Argentina ^a	12013	12.4	4.8	10.1	30.0		30.2	13.8	8.3
Costa Rica c	5987	40.0	12	2.1	30.9		30.4	13.3	9.6
Malaysia ^a	8137	18.9	12.5	31.7	1.5		10.8	11.8	15.4
Mexico ^a	7704	13.0			14.0		23.6	11.2	4.4
Thailand ^b	5456	14.4	17.8	13.6	1.8		29.4	23.6	10.1
Turkey ^a	6422	19.1	30.6	8.4			30.4	18.4	2.7
High									
Australia ^b	22452	22.6	54.0	18.0		2.5	10.8	10.8	2.8
Canada ^d	23482	17.6	46.0	10.4	20.4		13.4	5.2	2.1
Germany ^a	22169	26.5	14.7	2.2	58.5		12.5	11.2	
Japan ^e	23257	17.6	28.3	14.8	31.5		8.3	7.3	1.5
Spain ^c	16212	28.1	25.5	6.6	41.4		15.5	9.9	
UK ^b	20336	35.0	29.1	11.4	18.5		18.8	11.5	

^a1997 figures. ^b1998 figures. ^c1996 figures. ^d1995 figures. ^e1993 figures. ^fIncludes other unallocated tax on income.

^gPercentages do not add up to 100 because several miscellaneous taxes are omitted.

Source of data: <u>International Financial Statistics</u>, 1999, IMF; <u>Government Finance Statistics</u>, 1999, IMF; <u>Yearbook of Labour Statistics</u>, 1999, ILO.

Social Insurance

Social insurance has three distinct characteristics. First, social insurance is **compulsory**. This is also the major feature that distinguishes social from private insurance. Under social insurance, everyone in the eligible group must enroll and pay the specified premium (contribution). The contribution is most often specified as a percent of wages; the economic literature calls it a dedicated payroll tax. The second distinguishing characteristic is every citizen is not eligible for coverage and benefits under social insurance. Unlike general revenue financed national health insurance, only once an eligible person has paid the minimum number of payments, he or she is entitled to the specified benefits. The third distinguishing characteristic is social insurance premiums and benefits are described in *social compacts* (laws or in a difficult-to-change regulation) established through legislation. The contribution rate and benefits are not easily adjustable by mere administrative action. All this creates an implicit bargain or social contract between the system and those covered by the insurance. Citizens agree to pay a certain amount, with some confidence that it will be used fairly and effectively to reliably fund health care for all who are part of the system.

The capacity of social insurance depends largely on the scheme's ability to collect the contributions from those employers and workers who are covered. Worldwide experience tends to show that for low and middle-income countries, social insurance can be effectively implemented only for workers employed by larger companies (e.g., more than 10 workers) in the formal sector.

We use the Philippines to illustrate the fiscal capacity of social and private insurance. Philippines is on the higher end of the low-income nations. It has a relatively large portion of workers in the formal sector, and relatively few in agriculture. Table 5 shows that in Philippines, 45% of the primary earner of the households is employed in the formal sector, but most are earning very low wages. Furthermore, only seventy percent of the worker in the formal sector are working in firms that employ ten or more workers. This statistics indicates that social insurance, at best, can only cover about 30% of the households.

Table 5. Number of families by income group and main source of income, Philippines, 1994.

Income Group	High		Middle		Low		Total	
Main Source of Income	Number	Per- cent	Number	Per- cent	Number	Per-cent	Number	Per- cent
Employees	273,024	2.1	1,586,059	12.4	4,233,054	33.2	6,092,137	47.8
Formal Sector	242,844	1.9	1,478,026	11.6	4,075,803	32.0	5,796,673	45.5
Informal Sector	30,180	0.2	108,033	0.9	157,251	1.2	295,464	2.3
Self Employed	155,336	1.2	354,709	2.8	3,877,292	30.4	4,387,337	34.4
Professionals	78,174	0.6		-			78,174	0.6
Domestics & Vendors	60,374	0.5	214,417	1.7	912,418	7.2	1,187,209	9.3
Farming	16,788	0.1	140,292	1.1	2,964,874	23.3	3,121,954	24.5
Other	137,054	1.1	500,585	3.9	750,990	5.9	1,388,629	10.9
Pensions	12,224	0.1	48,074	0.4	171,676	1.4	231,974	1.8
Income from Foreign Sources	88,446	0.7	349,739	2.7	423,340	3.3	861,525	6.8
Investment and Rental Income	35,872	0.3	101,617	0.8	154,398	1.2	291,887	2.3
Miscellaneous ^h	512	0.004	1,155	0.009	1,576	0.01	3,243	0.03
Unemployed ⁱ (rely mainly on relief and public assistance)	13,134	0.1	58,106	0.5	815,602	6.4	886,842	7.0
Total	578,548	4.5	2,499,459	19.6	9,676,938	75.9	12,754,945	100.0

Source: Family Income and Expenditures Survey, 1994, National Statistics Office, Philippines.

Notes: Income group distinctions based on poverty threshold and income deciles; informal sector comprises employers and own-account workers, excluding the three Self Employed categories; and unemployed workers chosen based on main source of income and national unemployment rates.

Private Insurance

The distinguishing feature of private insurance is that the buyer voluntarily purchases insurance from independent, competitive sellers (either for-profit, or non-profit) who charge premiums that reflect the buyer's risk rather than his ability-to-pay. Voluntary purchase of insurance can be made on an individual or group basis.

In recent years there has been increased interest around the world in various forms of private insurance as a mechanism for health sector financing. This interest appears to be driven by several different lines of argument. The first is that private insurance will mobilize additional resources. Since non-payers do not get coverage, the problem of tax evasion can be avoided. Advocates of private insurance also argue that when people can choose a plan and an insurer, they will feel more empowered and will become more willing to pay for health care.

A second contention is that those with different attitudes and values, e.g., those at different income levels, will prefer different health insurance plans. It is claimed that a competitive market will respond by offering a differentiated range of products—something a publicly-controlled social insurance monopoly would have neither the incentive nor the inclination to do.

Undoubtedly, private insurance has some capacity to mobilize funds from those who have the capacity to pay, wish to be insured, and are unreachable by other financing methods. Upper-income people, for example, may be much more willing to pay for private insurance that covers expanded or higher-quality services for themselves, than for general taxes that benefit others. The data on Philippines shows that perhaps close to 5% of the households can afford to purchase private insurance. But by the same token, funds mobilized in this way cannot be easily used to help the poor. Those who do not have private insurance—not because they do not want it but because they cannot afford it—can end up in desperate straits.

The most worrisome failure of competitive private insurance is the question of "risk selection." In a world where an ever-increasing portion of disease is chronic disease, health care costs are increasingly predictable on a year-to-year basis. Those who are sick this year are far more likely than average to be sick next year. The 5% or 10% of people in any insurance pool who are the sickest often account for 60% to 70% of the total cost. Together, these facts create enormous incentives for competitive insurance companies to sell health insurance only to healthy people. Or, if they do sell to the sick, to charge rates high enough to yield a profit, even from such poor risks.

Many advocates of private insurance for the health sector believe it is a solution to their financing problems. The lure of the market and the enormous sums generated by private insurance firms in the U.S. make allies of an unlikely array of people ranging from greedy entrepreneurs to economic ideologists to cash-starved physicians. But the very high administrative costs and poor equity performance associated with this approach are not trivial problems. The need for sophisticated regulations that exercise

constant vigilance may be a requirement many countries that are toying with such schemes cannot realistically meet.

Out-of-Pocket Payments

Out-of-pocket payments refer to the situation when patients pay providers directly out of their own pockets for goods and services received. These expenditures are not reimbursable by third parties, e.g., insurance plans. A sub-category is user fees—out-of-pocket payments for services provided by the public facilities, and the government uses these fees to finance a portion of their operating expenses.

Out-of-pocket payments by patients are a common feature in most low- and middle-income countries. Recent National Health Accounts (NHA) studies suggest that there may be substantial willingness and ability to spend on outpatient care, even among relatively poor people in relatively poor countries—especially when we include "informal" payments. The NHA studies show that even in countries with extensive tax-funded public health services independent private practitioners provide quite a high proportion of outpatient care, paid for directly by patients. In higher-income countries selected services may not be covered by insurance mechanisms (e.g., drugs or dentistry). In other situations, patients may pay something even for publicly-provided or insured services (e.g., user fees or co-payments). Or, there may be gaps in what their insurance covers in the form of deductibles (at the front end) or limits (at the back end).

Reliable international studies usually found that among non-socialist low-income countries, forty to fifty percent of the national health expenditure comes from out-of-pocket payments. Poor and low-income households bear a large share of these payments (Berman, P. 1999.) For example, close to sixty percent of the Indian national health expenditure is funded by out-of-pocket payments, mostly comes from lower income households (Berman, P. 1994.) Hsiao found similar situation in China (Hsiao, W., 1993).

Health sector reformers have been interested in out-of-pocket modality for two reasons. First, especially in lower income countries, such payments are seen as a feasible way to raise additional revenue for institutions and activities at the periphery. The idea is that money collected locally will be spent locally. This, it is believed, will diminish "leakage" from graft, corruption, and overhead expense, as local collection and disbursement increase accountability and transparency. The second argument is made by economists, who fear that giving away health services for free only encourages allocatively inefficient overuse. When services have zero price, economists argue, customers will use these services even when the value to them is less than the cost of the production. As a result, more total customer satisfaction could be provided if those low-valued services are not produced. For then, the resources that are used to produce them could be used to produce something of more value to customers elsewhere in the economy. User fees and co-payments are seen as desirable because they avoid the worst misallocation by discouraging customers from consuming those services with the lowest value to them.

Notice that these two arguments are not fully consistent. Those who favor user fees for revenue-raising purposes want to put prices on highly valued services (i.e. low price elasticity) – for their utilization will not change much when those services are charged for. Advocates of pricing-for-efficiency, in contrast, most want to raise prices for services that are both expensive to produce and of low value to customers (i.e. high price elasticity.)

There is another complexity. Given the possibility of strong supplier-induced-demand, there is no guarantee that all health care services really are of value to those doing the purchasing. If doctors influence patients to consume inappropriately low-value services, allocative inefficiency will persist. Indeed, in practice, whether allocational efficiency increases or decreases when fees are imposed will depend on two offsetting effects. One is the impact of fees on discouraging patients from purchasing services of low value. The other is any incentive effects such fees have on providers to cause an increase in inappropriate use. (The magnitude of the latter effect obviously will depend on a variety of factors including professional norms of the relevant providers, their training, and the ways in which fee income flows to clinical decision-makers.)

Out-of-pocket payments can also foster inappropriate utilization through their incentive effects on physicians, pharmacists and other providers — even while they discourage inappropriate overuse from the viewpoint of consumers. They do not have the capacity to finance universal coverage of expensive services. However, they clearly have been attractive to many countries because of their power to mobilize resources otherwise unavailable to the health sector. Moreover, patient direct payments are easy to administer and a potentially effective source of revenue. However, it should noted that international experience show user fees have not been able to mobilized substantial amount to supplement to tax funded public facilities.

Community Financing

Many of the world's low income countries with substantial rural populations have despaired of finding ways to reliably finance and deliver health services at the village and township levels. Where a Ministry of Health directly operates clinics in such areas, it is often difficult to get physicians to staff them. They often simply evade or refuse, and/or do not attend regularly, and/or they provide poor customer service that is culturally insensitive. They also often lack basic drugs and supplies. At the same time, village residents often have little confidence in those services. As a result, they make extensive use of traditional healers, private practitioners, and pharmacists for outpatient care, and when acutely ill, they flood into, and overcrowd, regional and tertiary hospitals.

Community initiated and operated health funds have existed for centuries. The earliest ones were largely sponsored by the local religious organizations such as churches and synagogues. In the last century, community cooperatives, local mutual

aid societies, and local funeral funds have sponsored and managed local health funds. The initiation of a national community-based and managed program in China--the cooperative medical system (CMS), in the late 1950's had captured the world's attention on the potential of community-based efforts to mobilize resources and provide primary care for the rural population. The Chinese government directed the community to establish the CMS, and it was able to cover more than eighty percent of the Chinese peasants and provided public health, primary care, inpatient services at sub-district health centers and drugs. Other well-known successful community-based financing and provision programs include the Thai's Health Card scheme, the Indonesia's Dana Sehat and Phillipines' Banagay. Each scheme covered millions of rural population for primary care and sometimes secondary hospital services.

In recent years, community financing has become a term that is used loosely by health financing specialists to label any financing scheme that may involve some community contribution or involvement. It ranges from government managed prepayment schemes that require residents of a community to contribute to fund public facilities, to hospital sponsored and managed insurance schemes that residents buy, the insurance principally covers only that hospital's services. These schemes are very different in nature and purpose then the original schemes where community financed and managed primary care and health centers. Drug Revolving Funds, relying on user fees to fund a continuous availability of drugs, have been also included as community financing.

Most recently, new labels such rural health insurance and micro-insurance are being used for any scheme that may pool risk in any way, including community based primary care schemes. But these schemes labeled such as rural insurance and micro-insurance differs so much in population covered, benefit structure, extend of risk pooling, and management. The labels lead to confused rather clear representation.

The current variety of "community" schemes may all have some effects on access to health care and/or drugs, but they were established to solve different problems and have vastly different impacts on health outcomes, risk protection, and equity. For example, the hospital sponsored and managed insurance schemes in Africa and India are mostly purchased by the more affluent members of the community who can afford the premiums. These schemes provide only hospital services, preventive and primary care are not covered. The less affluent households are left out. Yet, they are the ones who can least afford to pay for hospital services. Another example is the community funds in some Africa nations. These schemes are organized by government to raise additional funds to support public facilities. They are not managed locally by the community or accountable to it. Those who enroll in the community funds receive reimbursement for the modest user fees charged by the public facilities. There is little motivation for people to enroll unless they expect to be heavy user of the public facilities. Thus these schemes attract only a small percent of the population and adverse selection is rampant. Most of them can not be sustained.

The variety of community-based health care financing schemes is illustrated in Table 6. It shows the source of financing can vary, services covered can vary, who

manages the fund can vary as well as who manages the services. A scheme's success depends on people's willingness to pay. Local people's willingness to pay depends on whether they can trust their fund is being managed for their benefit as well as satisfactory services will be available to them. Yet health officials and researchers have labeled the widely different community-based schemes all as community financing.

Table 6. Comparison of selected "community-based" health care financing schemes in Africa and Asia

Name	Principal method of financing	Types of services financed	Who controls the use of funds ^a	Who manages and controls services delivered ^b	Approximate population covered
Bamako Initiative	Fees	Drugs	Community board	Community board	Many nations
Projet de Sante Rurale (Mali) 1979	Fees	Drugs	Government	Community	(2 provinces)
Bwamanda (D.R. Congo)	Prepayment	Hospital services	Hospital	Hospital	80,000 enrolled out of 135,000 (66% of pop.)
Chogoria (Kenya) 1995	Prepayment	Hospital services	Private insurer	Hospital	1,700 (1.8% of pop.)
Nkoranza (Ghana)	Prepayment	Hospital services	Church, private insurer	Hospital	22,890 (23% of pop.)
Community Health Fund (Tanzania)	Prepayment	Primary care, drugs, hospital services	Community	Choice of public facilities (competition)	(6% of pop.)
Boboye (Niger) 1993	Prepayment	Primary care, hospital services	Community	Primary care— Community Hospital— Government	250,000
Abota (Guinea Bissau)	Prepayment	Primary care, drugs	Community	Community	200,000 (90% of pop.)
China	Prepayment	Primary care, drugs, portion of hospital	Community	Community- primary, gov't- hospitals	80 million (10% of rural population)
Thailand	Prepayment	Primary care	Individuals	Government	15 million (1/2 of poor pop.)
Indonesia	Prepayment	Primary care, with some hosp	Community	Community and Gov't	37 million (before finan crisis)

^aCommunity board (including local community cooperatives, local churches), other NGOs (incl. National churches, large cooperative banks, trade guilds, etc.) local government, hospital, government, private insurer. ^bCommunity board (including community cooperative), other NGOs (inc. church) local government, hospital, government, private insurer, choice/competition.

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Turning back to a more clear and narrow concept of community financing. The essential idea behind it involves taping into the social cohesion and mutual assistance spirit that may exist in a small community. These social forces may make it possible to raise and spend money locally, at the village and township level. Then the local community fund can organize primary care and perhaps also fund a portion of secondary services. Under most community financing schemes, the financing and delivery of primary care are integrated.

A simple fact has to be acknowledged for the rural population in the developing nations. The poor and low-income households have meager income. They have severe limited ability to prepay health care. They have to be subsidized and incentives must be given for them to prepay. Moreover, these households must be assured that the funds will be used for their benefit and used efficiently. That means the funds being managed and accountable to them, not the government.

In effect, the image is of a community-based, mini-health maintenance organization, organized on a "model" with practitioners paid on salary, organized referral arrangements, and organized purchases of drugs and supplies. Secondary care is contracted with district hospitals. This kind of locally organized and managed delivery of primary care may yield large efficiency gains from bulk purchasing and distribution of drugs and supplies, rather than relying on local pharmacists who might charge high prices. The organized referral arrangement may improve quality of medical services, particularly if the upper level facilities have some responsibility for technical supervision and training of village level practitioners. Where community financing is both prepaid and compulsory, it does offer some risk pooling and a certain amount of risk protection.

In the ideal, typical community-financing scheme, there is a combination of local political accountability, community-operated primary care, and universal prepayment. Universal (i.e., compulsory) membership is included, however, in order to get around free-riding by the well, and adverse selection by the sick. Non-compulsory schemes, where there is adverse selection by the sick into the covered pool, have resulted collapse of community financing funds.

The theory is that local control of expenditures will produce transparency and accountability. Such administrative arrangements will be attractive and credible to local people. This will, in turn, increase their willingness to contribute financially to support these services. Advocates of this approach note the significant sums spent by relatively poor local people on traditional healers, folk, and western medicine. They believe those out-of-pocket payment funds can be organized and channeled to support more "mainline" public health, primary care and hospital services at the district level. The local and more transparent administration will, in turn, help ensure honest, efficient and culturally competent services.

Besides the government, a variety of organizations could initiate a community financing scheme, including agriculture cooperatives, local funeral funds, or large

NGOs. This complex variety of real world sponsoring organizations has to be judged in light of each particular economic, social, political and administrative circumstance.

Given the relatively small, and geographically concentrated, nature of the populations covered by such systems, they are unlikely to have the capacity to do enough risk pooling to provide insurance against adverse events like localized epidemics or natural disasters. Recently, ILO and other international organizations have taken an interest in developing reinsurance schemes to ameliorate this problem (Dror and Duru, 2000).

As with any decentralization scheme, implementability will depend critically on capacity and leadership at the local level. This implies the need for the center to invest in capacity building at the periphery in order to help ensure success. It is also recognized that many villages may not be able to adopt community financing. Villages can be full of internal struggles and divisions by clan, family, ethnicity, religion, and economic status. Any joint community effort would be impossible.

B. Equity

Since financing directly affects the distribution of the cost of health care, the most obvious question is who bears the financial burden. Since how the funds are used directly affects the distribution of health care, the obvious question is who receives the benefits. The criteria used for assessing the distribution of burden and benefit is equity. Equity itself has several dimensions. *Vertical equity* refers to the distribution of burden between the rich and the poor. *Horizontal equity* refers to fairness among those at the same income level, including those living in different regions. *Intergeneration equity* refers to the distribution of the financial burden and the benefits between age cohorts. It is a particular concern for pay-as-you social insurance programs.

Doorslaer, Wagstaff and Ruttan (1993) has conducted extensive studies of the incidence of financial burden and benefits for most OECD countries. Recently Wagstaff (1999) has extended his analysis to the low and middle-income countries. These studies tends to find that for a majority of countries, general revenue financing is most progressive, social insurance contributions are modestly regressive, private insurance is regressive and out-of-pocket payment is most regressive.

Recently, Hammer and Pritchet (1999) conducted a study in the distribution of health benefits in developing nations. They found a majority of low and middle-income countries where studies have been conducted, the incidence of benefits tends to be regressive, favoring the high and middle income groups. On the other hand, the studies for OECD countries found that the distribution of benefits in most Western European countries are progressive. The United States stands out as being regressive in both the incidence of financial burden and benefits.

C. Economic Effects

When the government compels a firm or individual to pay taxes on a particular activity such as wages earned, the firm or individual may alter their decisions as how much to work and earn. Do the various financing options have differential impact in deterring or encouraging investment, employment opportunities, and labor supply, thereby influencing economic activity in the short and long run? What are the various financing modalities' implications for *macroeconomic growth and efficiency*? We, of course, want to limit the negative macroeconomic impacts.

The potential economic impacts of taxes are extensively studies and well known. Taxation could produce excess burden, affect labor demand and supply, reduce savings and investments, and demand for goods. We will not attempt to summarize the theory and empirical findings here. However, it is interesting to note that when some economists argue for taxes that lead to the least distortion in outputs. This turns out to imply higher taxes on goods where customers care so much, that they continue to buy nearly the same amount, even as prices rise. Ironically, such goods are also often the ones that people purchase because they very important to them – like medical care and basic food. Taxing goods whose demand is unelastic is thus likely to violate our concern with vertical equity.

As far as social insurance is concerned, economic theory and observation both lead us to believe that over the medium run of a few years, workers will pay for the largest share of health insurance premiums (either directly or in the form of lower wages), even in instances where employers nominally contribute a share on their own. Employers have a certain willingness-to-pay for various kinds of workers. On some level, they may not care whether this is in the form of wages or fringe benefits. When the employer's payment of premiums results in lower wages, economists say that the premium cost is being shifted backward—to the workers. The ability of employers to shift the cost to workers rather than to higher prices for consumers depends on labor market conditions, including the strength of labor unions.

The question is: what does this do to economic growth? If total labor costs are really not affected by premium changes, then the answer should be—not much. The real impact is hard to assess because real labor markets are full of all kinds of rigidities and imperfections. In a situation where 2/3 of employers' premium payment is passed back to the workers, 1/3 will ultimately be paid by customers via higher prices. This could injure a nation's capacity to compete.

An argument for private insurance relies on competition to improve efficiency. The claim is that competitive insurance markets will lower health care costs. Insurers who are eager for customers will cut prices, and to make money at such rates, they will effectively pressure providers to cut what they charge. Providers faced with lower revenues will have every incentive to reorganize their work in order to reduce cost. The collapse of communism, the prestige of market ideology, the crusading advocacy of

some well-funded believers of free market, have all reinforced the trend toward promarket perspectives.

D. Efficiency in Raising Funds

Raising funds requires spending money to create records, accounting and auditing systems, administrative agencies, etc. If the scheme relies on the private sector and competitive market, money will also be spent for marketing, sales, and profits. Thus, an important question is how much do the various modalities spend on administrative expenses and profits? Which ones are more efficient in that larger portions of the revenues raised by them are spent on health care? This concern is, of course, related to the *net* amount that could be spent for health care.

Tax collectability is the major practical concern that leads countries with weak administrative systems to use those taxes that are easiest to collect (e.g., import duties and value-added tax) even if they are not desirable revenue sources on other grounds. Consumption taxes are often easier to collect than income taxes as there are fewer businesses from which to collect for consumption taxes, and many more households from which to collect income taxes. The former also tend to have better records. Also, income from "black" or "gray" sources can be taxed when it is spent, but is not likely to be reported to income tax collectors.

Both payroll and consumption taxes can be difficult to administer when, as is the case in many poor countries, there are many small sellers in the "informal" sector. The reach of any system will depend greatly on the attitudes of the public towards government in general, and towards payment of taxes in particular. Levels of voluntary compliance vary enormously both inter- and intra-nationally, and schemes that the population sees as legitimate are much more likely to be successful.

A serious objection raised about private insurance concerns its administrative cost. Competitive insurance systems significantly increase transaction costs. In the U.S. experience, insurance companies themselves often spend 15% to 20% of total revenue on expenses other than patient care (e.g., sales, administration, and profit). Furthermore, private insurance companies impose additional cost on providers (doctors and hospitals) by requiring them to file complicated claim forms, obtain advance approval for certain treatments, and keep extensive records. As a result, the U.S. providers have substantially higher administrative cost than those overseas. Studies suggest that the most advanced American hospitals average two full-time administrative employees for each occupied bed while average one-tenth of a full-time administrative employee per occupied bed in Japanese tertiary hospitals. The right regulation (e.g., specifying uniform claim forms to be used by all insurance companies) can somewhat lessen this burden. Nonetheless, it remains substantial. All of this goes to say that private health insurance markets are very complicated systems. Nations who go this route, therefore, best be prepared to develop substantial capacity to monitor, analyze, and regulate these markets, if they are going to achieve certain kinds of social objectives.

V. A Coherent Financing Strategy

The framework for deciding financing strategy consists of four parts. We have argued that financing is a policy instrument to achieve societal goals. Thus the goals have to be clear for establishing rational financing strategy, especially in deciding how much should be spend for health. The goals also provide the parameters for judging the trade-offs such as between level of health status and its equitable distribution. Next, we pointed out that health financing decision must consider the context in which a nation is placed, include its socioeconomic development and how its resource is allocated now. Then, we used a set of parameters to assess the strengths and weaknesses of the five modalities. This evaluative information can be useful in deciding the financing strategy. The final part consists of a process where the findings from the first three parts will be used for developing strategic options. Of course, the political feasibility and implementability must be considered in choosing a financing strategy.

Following the approach presented above, we illustrate what a coherent financing strategy might be for low-income countries. We make three assumptions based on the stylized facts. First, the typical low-income country has a small tax base and limited ability to collect general taxes, the demand for general revenue from various government programs is in an equilibrium state politically. Thus the potential to increase general revenue financing for health is very limited. Second, we assume the urban high and middle-income households have captured a large, and disproportional share of the general revenue financed health services. Third, people are not using the full capacity of under-funded government health posts, clinics and sub-district health centers because of physician "no-shows", low quality of services, lack of drugs and supplies or being user unfriendly. Instead, many people, rich and poor, pay out-of-pocket for outpatient services, drugs and supplies from the indigenous medicine, private sector practitioners, pharmacists and laboratories. Under these circumstances, how does a nation mobilize more money for health if the nation wishes to improve the equity and level of the three final outcomes?

In thinking about financing options, we note that general revenue and out-of-pocket payments are feasible modalities to fund all groups. However, social insurance is possible only for the workers employed by the larger employers in the formal sector. Private insurance is only affordable by the affluent households and community financing is most likely to be feasible only for the closely knit rural communities. In Table 7, we show in yellow color for the groups where social insurance can be used, in light blue color for those where private insurance might be feasible, and red for the poor households.

Using the assumed conditions given, an obvious approach to improve equity and allocative efficiency is shifting general revenues to subsidize the poor and low income and finance their primary care and insuring them against large medical expenses. However, we have to take into account of the political economy that has been created

by the current allocation of public resources where most of the general-revenuefinanced health care has been captured by the urban middle and affluent groups.

We might think of a strategy that involves a process of substitution, reallocation of general revenue to create incentives for people to prepay their health care, and the use of prepayment to reorganize primary care at the community level to improve efficiency and quality. Perhaps social insurance can be introduced to insure the workers and families who are employed by the large firms. The social insurance funds would substitute the general revenue funds. The general revenue funds being released can be used to subsidize the rural households for them to organize community funds. The subsidy would provide the incentive for the rural households to contribute if the government specifies that any household's contribution would be matched by general revenue. The subsidy for the poor could be larger. The households use a portion of what they would have paid out-of-pocket for outpatient services and drugs² to prepay a portion of the cost of services and drugs. The prepaid benefit package is a "mix and match" plan that combines insurance and direct out-of-pocket payments by patients. Some services are excluded from coverage. Thus their risk will be pooled. The degree of risk pooling, of course depends on what services can be covered by the contributions from the households and the government. Hopefully, the community fund can improve the efficiency and quality of these services by having a management role over the primary care. The efficiency gains would reduce the cost of services and drugs. The better quality would improve the health status and public satisfaction.

Private insurance can be used to raise additional funds from the affluent households. This change has to be coupled with a change in the class of services provided by the public facilities. The private insurance can pay for the full average cost (or even more than the full cost) of first class services. Then the public facilities can earn a profit and use it to subsidize the services for the poor.

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² National Health Accounts (NHA) studies do show that there may be substantial willingness to spend, and ability to spend, on outpatient care, even among relatively poor people, in relatively poor countries – especially when we include "informal" payments.

Table 7. Percentage of families by income group and main source of income, Philippines, 1994.

Income group Employment Category	High	Middle	Low
Employees			
Formal Sector			
Firms ≥ 10 employees	1.3	8.0	22.2
Firms < 10 employees	0.6	3.6	9.8
Informal Sector	0.2	0.9	1.2
Self Employed			
Professionals	0.6		
Domestics & Vendors	0.5	1.7	7.2
Farmers	0.1	1.1	23.3
Unemployed (on public relief), pensioners, and other	1.2	4.4	12.3

Besides rational and technical consideration in deciding on financing strategy, we have to consider its political feasibility and implementability. They are discussed briefly below.

A. Political Feasibility

(to be completed)

B. Implementability

Another aspect of judging any financing option has to do with whether or not the scheme can be effectively put into practice in a particular national context. This, in turn, depends on several features of the local situation. The government's capacity to coerce citizens is, in fact, quite limited. Obligations that governments impose work best if citizens exhibit high levels of voluntary compliance. For financing schemes, does the government have the organizations, management skills, human resources and information systems to ensure most of those who have to pay comply, or will they cheat?

Implementability is often one of the great attractions of social insurance schemes. In many industrial economies, large enterprises employ a significant share of the workforce, and even small businesses have reasonable records. Moreover, the "social contract" can increase worker and management willingness to pay, because a dedicated fund, with distinct administration, may be more trusted than a non-dedicated payroll tax to deliver something of value to members. Citizens think, "At least those dishonest politicians cannot get their hands on "my" money."

The private insurance option does not get the government out of the business of operating the system of health care financing. Rather, it poses a complex set of regulatory and management issues to government that may be quite new and different from those it would confront if it relied on general tax financing. Private insurance markets lead to significant and subtle new responsibilities for governments, which they may not be well equipped to undertake. Does it know enough about the dynamics of competitive insurance markets (e.g., when companies try to attract only good risk)—a phenomenon which may be new to the country—to create and control such markets effectively? Can it recognize and regulate "cream skimming" behavior?

Summary of the Framework

We presented a framework with four parts for deciding a financing strategy. These four parts form our framework in deciding how to raise funds for health from domestic sources. This framework shows that for choosing a combination of modality to raise funds, a nation has to consider its social goals (particularly equity) and the context in which the country is placed. Then the modalities should be assessed by five parameters: fiscal capacity, incidence of financial burden and benefits, potential adverse economic effects, and efficiency in fundraising. Lastly, the findings from the first three parts are used to find a combination of modalities that would mobilize the "optimal" amount for health. Once strategic options are developed, their political feasibility and implementibility have to be a concern.

Conclusions

Our review of financing strategy and the choice among the five financing modalities leads us to a few painful conclusions. The first is that there is no single perfect financing strategy for all nations. However, some financing strategy are better than others in terms of equity, risk pooling and efficiency in raising the funds. The second is that the optimal choice for a country may well depend on exactly where that country is with regard to a set of fact and value issues. For instance, how important is vertical equity—and therefore redistributive financing? How much administrative capacity is there in the ministry of finance? How cynical and evasion-inclined are citizens when it comes to meeting tax obligations? Nations that want to mobilize a significant percentage of GDP for health care will have to find a combination of modalities to utilize broad-based revenue sources (insurance or taxes). But the capacity of those modalities depends on a particular context of that nation.

The third conclusion is that a nation must have a coherent financing strategy that consider all population groups, and use appropriate modality for each group, combine and integrate the financing modalities together to optimize the amount can be mobilized and use the funds efficiently. To accomplish that, we suggest an approach to decompose the population into income and employment groups. Potential financing modalities for each group are examined. The strategy is to hold the general revenue fund, the most flexible and most equitable source of fund, as the reserve. It would be used and targeted for three major purposes: provide public goods, promote equity, and offer incentive for peasants and workers in informal sector to prepay for health care. A coherent integration in financing for various groups could increase resources, pool risks, improve equity, and obtain efficiency and quality gains.

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