CHAPTER

1 Introduction and Guide to the Primer

A. The Need for a Guide for Macroeconomists

Whether working on a low-income country or an advanced economy, it is important that macroeconomists be aware of issues in health economics and health policy. Health care has gained prominent recognition in development. The United Nations (UN) Millennium Development Goals (MDGs) set 10 specific targets to be achieved by 2015, of which three explicitly pertain to health. Research studies document that millions of households in developing nations are impoverished each year by health expenditures, retarding poverty alleviation efforts, and an emerging body of research shows that investments in health can have a significant effect on economic development (Bloom and Canning, 2000; Fogel, 2004; and Bloom, Canning, and Sevilla, 2004). HIV/AIDS has undermined the development prospects of a number of African countries and threatens to weaken the growth momentum of several important Asian economies. For middle-income economies, transition economies, and industrial countries, the challenge posed by the health sector for macroeconomists differs, but is no less daunting. Increasingly, pressures emerging from the health sector—in part owing to the aging of populations and in part due to the rapid pace of technological change in the medical sector—are affecting fiscal sustainability, inflation, and possibly even the current account of the balance of payments.

For those working in the health sector, it is also obvious that macroeconomic policies can have a measurable impact on health care. Macroeconomic guidelines relating to public expenditure targets, inflation control, tax policy, and exchange rates will affect the provision of health care and ultimately the health status of the population (see Glied and Remler, 2002). Because a large share of health funding comes from the government, fiscal targets will constrain how much a government can spend on health. Tax policies relating to tobacco, alcohol, and firearms will influence people's demand for these products and ultimately their health (see Jha and Chaloupka, 1999). And the exchange rate will be a factor in the cost of vaccines and drugs. Macroeconomists concerned with the fiscal balance will also influence

decisions on the respective roles to be played by government and private markets in the health sector. Such decisions will influence the pace of health cost inflation, the efficiency and quality of health care, and the degree of equity associated with its financing.

This primer represents an effort to bridge the divide, enabling particularly macroeconomists (such as those who work at the IMF) to obtain at least a basic understanding of the key health policy and health system issues that may arise, which are integral to their understanding of the macroeconomy. For those macroeconomists with limited time who want to have only the most basic grasp of health economics and health policy, the major points of this primer are briefly summarized in this introductory chapter. Section B describes the unique characteristics of health and the health sector that have implications for policy. Section C follows with a discussion of the major challenges facing the health sector. Section D characterizes some key empirical research findings with important policy implications. Finally, Section E provides a road map to the different chapters of the primer for those who wish to go further. The primer recognizes that the key health policy issues of concern to policymakers or macroeconomists in low-income countries will not be the same as those faced by their counterparts working on advanced, middle-income, or transition economies.

B. Unique Characteristics of Health and the Health System

Put simply, there are a few important facts that are fundamental to an understanding of the role of health and the functioning of the health system.

- *Good health, broadly shared, is intrinsically valued in all societies.* The concept of equity in health and equal access to health care is based on an ethical notion of fairness. Inequities are intrinsically repugnant; disproportionate illness and suffering by selected groups of people offend our innate sense of justice. From this perspective, we can infer that, at the minimum, every individual should have access to basic services and medicines to relieve pain and suffering and to avoid untimely death. The most ambitious goal would be for every individual to be able to attain his or her full health potential regardless of age, gender, or socioeconomic status.

- *Health care as a good differs from other essential goods and services, such as nutrition, education, and housing.* The likelihood of illness or the incurring of health expenses is subject to uncertainty. Individual households face only a small probability of having a major accident or illness. But most households would have difficulty affording the cost of treatment for a major illness. As Kenneth Arrow (1963) and John Nyman (2006) show, providing health insurance increases a society's welfare. Insurance, however, causes moral hazard and results in a loss in economic efficiency.

- *Serious market failures exist in the health sector.* The supply side dominates the demand side in the health services market. Professional dominance prevails because of the asymmetry of information between physicians and patients. If left unchecked, the medical profession can exercise its monopolistic power to induce demand and set high prices, leading to rapid health cost inflation and a deterioration in the quality of services. Insurance markets also experience serious market failures. Adverse selection poses a serious problem for voluntary health insurance and deters the pooling of risks between the healthy and less healthy. On the supply side, private insurance companies select the healthy and younger people to insure and leave the less healthy and poor uninsured. Thus, the good risks are not pooled with the bad, and government is left with a serious social problem and a large fiscal burden if it must provide for the uninsured.
- *The cost of serious illness can be a major factor causing poverty for households in many low-income countries.* The cost of modern medicine (for example, diagnostic tests, surgery, and hospitalization) is simply not affordable for most low-income-country households. For example, the average cost of a hospitalization typically exceeds the annual median household income. Studies have found that for several low-income countries, each year 20–30 percent of households have had to borrow or sell assets in order to pay for medical expenses (Liu and others, 1995; Gu and Tang, 1995; Russell, 1996; and Sauerborn, Adams, and Hien, 1996). Households need either medical insurance or access to subsidized health services to prevent financial bankruptcy.

C. Challenges and Issues

Across the world, one can identify the following key challenges facing the health sector.

- *Spending on health care strains both household and government budgets throughout the world.* In many countries, health expenditure per capita has risen faster than the rise in GDP per capita. Consequently, health care costs have taken an ever-increasing share of government, employer, and household budgets and put pressure on those financing the burden of health care (through taxes or insurance contributions). Looking ahead, there are concerns in many industrial countries that an ever-increasing share of the government budget spent on health care (OECD, 2006) will crowd out resources for other important public goods and publicly provided services.
- *The aging of populations is a development now confronting both advanced economies and a number of emerging market countries* (notably China, Korea, Thailand, and Singapore) (see Bryant and others, 2005; Australia Productivity

Commission, 2005; OECD, 2006; and Economic Policy Committee and the European Commission, 2006). Illness and health expenses increase with age. The rapidly aging populations in advanced economies will further exacerbate the pressures associated with a high health expenditure inflation rate.[1] China in particular will, within the next few decades, face an increasing share of its population becoming elderly. Yet few countries have a coherent policy strategy to deal with the fiscal problems arising from an aging population.

- *A "double disease burden" and equity issues face middle-income countries.* The epidemiological transition confronts most middle-income countries. Such countries have to fund and deliver services to address not only the communicable diseases affecting the poor but also the chronic diseases facing middle- and upper-income groups (see Reddy and others, 2005). This will inevitably force these countries to reform their health care financing and delivery systems. Equity in health also gains greater attention politically as a middle-income country becomes more affluent. Typically, only the rising number of upper-income households can obtain and afford to pay for expensive sophisticated health care, whereas others go without. Such disparity creates social and political tensions that governments recognize the need to confront. But they may not have the knowledge or resources to do so.

- *Low-income countries challenged by human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) are now the beneficiaries of a rising tide of donor assistance for prevention and treatment.* But many countries are having difficulty absorbing this assistance and most confront a severe shortage of human resources. HIV/AIDS has weakened the economies of several low-income countries and strained their health care and social service capacity. Most simply lack the absorptive capacity—health care infrastructure and human resources—to prevent HIV/AIDS and treat patients. Perversely, the large inflows of donor assistance targeted to these diseases (through so-called vertical disease programs) have weakened the infrastructure and drained the human resources required for preventing and treating common diseases (such as diarrhea and upper respiratory infections) that may kill many more people. Furthermore, multiple donors, each with their own priorities, bureaucratic requirements, and supervisory structures, have created waste and confusion within recipient nations. Last, an important concern is the sustainability of these vertical programs, because donors' funds may not prove stable or long lasting. For recipient countries, these inflows have created difficult challenges in the management of the health sector.

[1]The term "health expenditure inflation rate" refers to the real rate of increase in health expenditure per capita.

D. General Findings and Policy Actions

Sound public policy should be based on scientific information, evidence, and solid analysis. Economic policymakers can glean several major lessons from research and from countries' varied experiences in organizing and financing health care. This accumulated knowledge has taught us which policies are sound and which are not. The following general findings and actions can be applied in most countries to improve health care.[2]

- *The good health of a population significantly contributes to human capital development and economic productivity*. Numerous micro studies have found that a child's health has a large impact on his or her ability to learn and retain knowledge (Novello and others, 1992; Jackson, 1993; and Kramer, Allen, and Gergen, 1995). Adult health status affects the size of the labor force, worker absenteeism, and worker efficiency (Mushkin, 1962). Recent macro studies have found that the health of a population can significantly influence a country's rate of economic growth (Bloom and Canning, 2000; Fogel, 2004; and World Bank, 2004).
- *Health resources should be allocated to achieve three objectives*: (1) an optimal level of health status distributed equitably; (2) an adequate degree of risk protection for all; and (3) the highest possible level of public satisfaction for the entire population. Achieving these objectives will require making difficult decisions about trade-offs, especially between equity and efficiency.
- *One size does not fit all*. Nations are at different stages of socioeconomic development and have different epidemiological patterns. They differ in their resource capacity, knowledge base, human resources, and institutions. What works in the United Kingdom would not likely work in Kenya. Few general health policy guidelines can apply to all nations, and a universal performance standard does not exist.
- *Governments should establish institutions to finance health care and pool risk, rather than relying only on the free market*. However, the way in which the market and government can work efficiently and appropriately varies by function, for example, financing versus the provision of health care. Although many countries have tried regulatory remedies to correct the market failures in the voluntary private insurance market, no country has succeeded. On the other hand, international experience shows that government-managed "free" public health services tend to be inefficient

[2]A useful collection of papers in Musgrove (2003) covers many policy issues relating to health economics.

and nonresponsive to patients' needs. Market mechanisms can provide services that are more efficient and higher in quality than government-managed free services.

- *Because market competition is capable of addressing only the efficiency issue, the government has to be responsible for the equitable financing and distribution of essential health goods.* At a minimum, the government should (1) finance and provide public and merit goods—for example, health education, immunizations, and maternal and child health services; (2) target and subsidize primary care and hospital services for the poor; (3) establish national or regional health risk-pooling (for example, insurance) mechanisms for formal sector workers and their families; (4) establish regulations to remedy market failures and monitor market performance; and (5) educate the public to be informed consumers of health services. In carrying out these responsibilities, the government may have to increase its health budget, build its institutional capabilities, and strengthen its human resources.

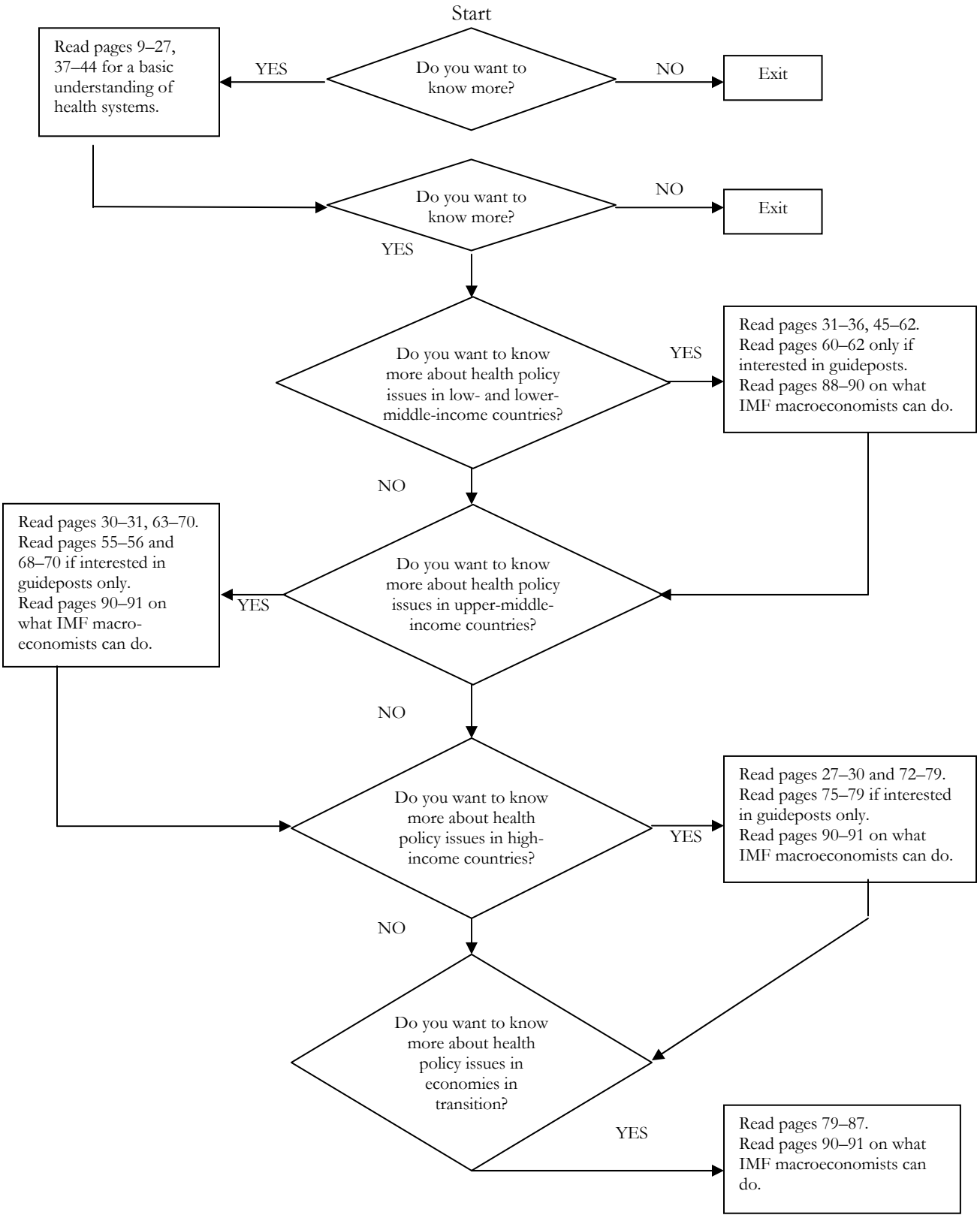
- Because publicly financed health benefits in developing economies usually favor higher-income households, *governments should shift their resource allocations to target their subsidies to the poor and to those in the greatest need.*

- Costly technology used by advanced economies to provide sophisticated medical treatments as well as clean water and sanitation is often unaffordable for low-income countries. Yet the potential for developing affordable technology is not exploited by industrial country researchers or pharmaceutical firms because it is not glamorous or profitable. *To increase social benefits for the poor, international organizations should promote the use of affordable technologies and support investment in international public goods, such as the development of vaccines for malaria and HIV/AIDS.*

E. Road Map to the Primer

This primer aims to provide macroeconomists with the essential information they need to understand the economics of the health sector. They need to know which health policies may improve the equity and efficiency of health care, as well as which policies will improve the level of health status, reduce poverty, and enhance social and political stability. As a primer, it does not provide in-depth information or complete evidence for the arguments made, but offers an extensive bibliography for those who desire further information. It also highlights situations in which macroeconomists should engage health sector specialists in policy formulation exercises.

Figure 1. A Road Map for Reading the Primer



In particular, subsequent chapters address six basic questions. Chapter 2 examines why it is critical for macroeconomists to understand health policy issues. Chapter 3 discusses the basic facts (and myths) that macroeconomists should know about the health system and the financing of the health care market. Chapter 4 examines both the common health policy challenges confronting all countries as well as the challenges particular to countries at different stages of development. Chapter 5 explores what analytical framework should be used to assess the health care system.

Chapter 6 provides ideas on guideposts that can be used in considering health policy options for countries at different stages of development. This particular chapter is lengthy because health issues and their economic considerations vary significantly across countries, and to be relevant, it is necessary to discuss the health issues and policy separately for each stage of development (see Figure 1). Finally, Chapter 7 offers concluding thoughts on what specific advice macroeconomists can provide, given their typically peripheral role in health policy, to ensure that health policy issues are taken into account.