

# Foreword

HIV/AIDS, through its demographic effects and its social and economic consequences, has evolved into a major threat to economic development in many countries around the world. In sub-Saharan Africa, where most of the worst-affected countries are found, the Joint United Nations Program on HIV/AIDS (UNAIDS, 2004) estimates that 7.5 percent of the population aged 15–49 were infected as of the end of 2003, with HIV prevalence rates for this age group ranging from about 1 percent (in The Gambia and Senegal) to almost 40 percent (in Botswana and Swaziland). Indeed, HIV/AIDS has become one of the leading causes of death in the region. According to the World Health Organization's *World Health Report 2004*, the HIV/AIDS epidemic now accounts for about 20 percent of all deaths in sub-Saharan Africa and more than half of the deaths in some countries. Even in countries where infection rates are lower, such as Cambodia and Haiti, HIV/AIDS accounts for about one-half of the deaths of individuals aged 15–49. Low national infection rates often mask serious regional epidemics, as is the case in countries such as China and India. (India has the largest number of people living with HIV outside South Africa.)

The economic and social consequences of the increased mortality and morbidity associated with HIV/AIDS are serious and manifold. The following are only a few of them. Average life expectancy has declined by more than 20 years in some of the worst-affected countries. In addition to the trauma of losing family members, households affected by HIV/AIDS may experience a precipitous decline in living standards because of loss of income and the high cost of caring for the sick. Given that HIV/AIDS typically strikes people of childbearing and childrearing age, the number of orphans is rising. In some countries, 20 percent of the population aged 17 and under have lost one or both parents, the majority to HIV/AIDS (see UNAIDS, UNICEF, and U.S. Agency for International Development, 2004). Increasing production costs, as skilled workers succumb to AIDS-related illnesses, erode competitiveness and—together with a deteriorating economic outlook—may deter investment. Economic growth slows for many reasons, most directly because the working-age population expands

more slowly or contracts, but there is considerable uncertainty regarding the size of this effect, especially in the longer run. The most visible fiscal consequences of HIV/AIDS include increased spending on prevention, care, and treatment, but the fiscal implications go far beyond this. As economic growth declines, the domestic tax base weakens and domestic revenues fall. At the same time, HIV/AIDS erodes public services as mortality rates for civil servants rise, and it drives up government spending even in areas not directly related to combating HIV/AIDS. For example, personnel costs rise as staff lost to AIDS must be replaced and new staff trained, as do social expenditures on survivors' pensions and other benefits for individuals and households affected by HIV/AIDS.

As the above sketch of the situation makes clear, policymakers and analysts simply cannot address the economic issues facing severely affected countries without taking into account the numerous social, economic, and fiscal effects of the epidemic. This, of course, is not a new insight; indeed, the impact of, and the response to, the HIV/AIDS epidemic have become central issues in economic development. Evidence of this is the fact that the contributors to *The Macroeconomics of HIV/AIDS* represent not only international organizations that are key players in the fight against HIV/AIDS (such as UNAIDS and the World Bank) but also other organizations that have added HIV/AIDS to their work agendas, primarily because of its social and economic repercussions (such as the Center for Global Development, the International Labor Organization, and the IMF). The book grew out of the authors' experience in providing economic analysis and policy advice in countries severely affected by the epidemic.

By bringing together studies by authors with diverse backgrounds and from different organizations and institutions, this book aims to provide a comprehensive resource on the social, economic, and fiscal effects of HIV/AIDS. It seeks to strengthen efforts by public policymakers to formulate and implement strategies to fight the epidemic and mitigate those effects, and to do so along two lines. First, a good understanding of the economic consequences of the epidemic can help in formulating policies and allocating scarce resources. Second, well-crafted programs designed to fight the epidemic and mitigate its impact can offset or reduce some of the serious social and economic consequences of HIV/AIDS. Thus a successful strategy will have a positive impact on the economic and fiscal outlook, which, in turn, means that more funds can be mobilized to support longer-term health strategies. In this sense, HIV/AIDS strategies are a form of economic policy. The book highlights the epidemic's fiscal consequences—direct (HIV/AIDS-related expenditures) as well as indirect (the impact of HIV/AIDS on the domestic tax base and some expenditure categories

affected by the epidemic)—and links the response to HIV/AIDS to a macroeconomic framework. It also formulates a framework for assessing the various impacts of HIV/AIDS on developing economies.

*The Macroeconomics of HIV/AIDS* is intended to fill in the gap in the literature between studies of specific sectors—especially public health and education—and bird’s-eye assessments of the broader social and economic consequences of HIV/AIDS. In contrast with most other macroeconomic studies on the subject, *The Macroeconomics of HIV/AIDS* emphasizes how HIV/AIDS affects society and the economy through its microeconomic impacts and also how the social and economic impact, combined with the increase in mortality rates, affects the welfare of individuals and households. The book has thus been written for a broad readership, which could include, for example, officials in a finance ministry assessing the impact of HIV/AIDS on the fiscal balance and outlook of their country. It could include representatives of an international financial organization and their counterparts in an AIDS-ravaged developing country, meeting to discuss the economic outlook or negotiate a policy program. The book is also likely to be of interest to members of the media and other policy observers in countries affected by HIV/AIDS, as well as to the representatives of non-governmental organizations advocating an expanded response to HIV/AIDS in their home countries or worldwide. Last but not least, as policies to fight the epidemic attain increasing macroeconomic and fiscal relevance, this book’s readership could include those officials in international organizations, donor agencies, implementing agencies, and country governments who formulate and carry out such policies.

The studies that make up the book explore several separate strands of inquiry, which can be grouped under three general headings: the demographic impact, the macroeconomic consequences, and the effect on government finance and public services. Because most of the effects of HIV/AIDS arise directly from increased morbidity and mortality, the book begins, in Chapter 1, by focusing on the demographic impact, providing a basis for the analysis in the chapters that follow.

Chapters 2 through 6 discuss the macroeconomic effects of HIV/AIDS, addressing three topics in particular. The first is the relationship between the microeconomic effects of HIV/AIDS—for example, at the household or company level—and those at the macroeconomic level. This theme is taken up in Chapter 2 in a general fashion, while Chapter 3 builds its macroeconomic analysis around a household-level model. The second topic is the impact of HIV/AIDS on economic growth. Chapter 2 introduces this theme by describing the most common approaches used in accounting for growth in the context of an HIV/AIDS epidemic, while

Chapters 3 and 4 focus on the impact of HIV/AIDS on education and the accumulation of human capital. The third topic is the effect of HIV/AIDS on welfare. Because the impact of HIV/AIDS is spread unevenly across individuals and households, standard estimates of aggregate macroeconomic changes contain very little information on welfare effects. Chapter 5 therefore discusses the impact of HIV/AIDS on poverty and inequality, and Chapter 6 estimates the broader welfare effects of HIV/AIDS stemming from increased mortality rates.

Chapters 7 through 10 deal with the impact of HIV/AIDS on the public sector. First, they provide a framework for assessing the effect of HIV/AIDS on the public sector itself. Second, although most issues in the formulation of a broad HIV/AIDS strategy—particularly the choice between different interventions—are beyond the scope of this book, these chapters seek to support this work by improving the understanding of the macroeconomic and fiscal context in which such strategies will be implemented, providing policymakers and donors with tools for assessing and evaluating HIV/AIDS strategies from a broader development perspective. In this context, Chapter 7 assesses the impacts of HIV/AIDS on public services (for example, through the erosion of capacities) and on government finance. One area where HIV/AIDS can have a substantial impact is social security—pension funds in particular—and this is taken up in Chapter 8. Chapter 9 describes and assesses Botswana’s National Strategic Framework on HIV/AIDS, illustrating the potential of a comprehensive national HIV/AIDS strategy to reverse the macroeconomic damage associated with the epidemic. Finally, Chapter 10 focuses on the impact of HIV/AIDS on the health sector and the challenges facing countries that set out to substantially expand access to HIV/AIDS treatment.

The book represents the efforts of many individuals from different backgrounds. The authors are drawn from a wide range of institutions, specifically (in alphabetical order), the Center for Global Development, the International Labor Organization, the International Monetary Fund, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the London School of Economics, the University of California Los Angeles, the University of Heidelberg, and the World Bank. The book received material support in particular from the African, External Relations, and Fiscal Affairs Departments at the International Monetary Fund, and the AIDS Campaign Team for Africa at the World Bank. The views expressed in this book are those of the individual authors and do not necessarily reflect the opinion or policy of any of the organizations with which they are affiliated.

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The authors hope that their work will prove useful to all who deal with or are interested in the social, economic, and fiscal effects of HIV/AIDS, but we are also well aware that the mission—even in its analytical dimension, to say nothing of its execution—is as yet by no means accomplished. A lack of available data often means that the economic analyst, rather than providing compelling answers, can only formulate questions and hypotheses, supported by assorted observations pulled together from different countries. For various reasons, this constraint applies in particular to the impact of HIV/AIDS over time, to the macroeconomic consequences, and to the fiscal effects of HIV/AIDS, as they go far beyond specific HIV/AIDS-related expenditures. Thus, where this book cannot provide full answers, it is hoped that it may at least stimulate further research that can help us better understand the economic and fiscal consequences of the epidemic and that can complement and support efforts to fight this scourge.

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