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### **The Response of African Businesses to HIV/AIDS**

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## Introduction

At the onset of the twenty-first century, sub-Saharan Africa faces daunting economic and social challenges. Although a few countries posted economic gains and carried out multi-party elections, the 1990s were in general a period of economic stagnation or decline and slow political progress for the entire sub-Saharan region. The twentieth century left Africa as the world's poorest continent, stricken with internal and transborder violence, high unemployment, crumbling education and health systems, and little investment (Fisher et al. 2000).

Ironically, the same decade that brought so little progress to Africa saw the global economy surge ahead. Most economists and political leaders, regardless of their political orientation, have come to accept that countries that do not participate in the global economy will not grow. Being able to compete in the global market for goods and services is thus vital to a country's economic and social development.

Nowhere is this truer than in sub-Saharan Africa. Despite their political and economic problems, as the twenty-first century opens, African nations have an opportunity to rejoin the world economy. The demise of apartheid in South Africa, the return to electoral democracy in Nigeria, and the removal of governments philosophically committed to central planning and the protection of domestic industries creates an opportunity for African nations to concentrate on competing effectively in global markets for the first time in many decades.

If Africa is to take advantage of this opportunity, its private, formal-sector companies must cut costs, raise productivity, and improve quality control. Sadly, one of the many consequences of the HIV/AIDS epidemic that is devastating parts of the continent is an increase in the costs of production for African businesses. These HIV/AIDS-related costs stem from both internal and external effects. The internal effects, such as increasing absenteeism, higher pension payouts, and breakdowns in worker discipline and morale, will require responses from within firms. The external effects, which are those caused by changes in external markets such as increases in wages, decreases in demand for companies' products, and rising costs associated with breakdowns in institutions, will be extremely hard for firms to manage or control.

The purpose of this paper is to summarize what is known about the internal costs of HIV/AIDS to companies in Commonwealth countries in sub-Saharan Africa.<sup>1</sup> Even without considering external (market) factors, it is possible to identify a dozen different types of workforce costs that HIV/AIDS will impose on African companies in the coming years. After briefly reviewing existing estimates of the costs of HIV/AIDS to business, we present a model for assessing these costs and describe some of the strategies companies are adopting to reduce the costs. Although the evidence is still largely anecdotal, it is clear that companies, while bearing some of the costs of AIDS prevention and care internally, will be able to shift many of the internal costs

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<sup>1</sup> The focus of this paper is on the formal private sector and in particular on large companies. A great deal of Africa's domestic commerce takes place in the informal private sector, but there are no data on the effects of HIV/AIDS on it. The paper incorporates data from a number of Commonwealth countries with a focus primarily on southern Africa, where information about private sector impacts and responses to the epidemic is most readily available.

HIV/AIDS onto governments and households. Doing so may make sound business sense and even be necessary for their survival.

### **Assessing the Costs of Workforce HIV/AIDS—Evidence and Models**

The impact HIV/AIDS is having on African businesses is unlike anything seen before. In contrast to malaria, diarrhoeal diseases, and other common infectious diseases, where mortality is concentrated among infants, children, the elderly, and the infirm, AIDS kills primarily young and middle-aged adults during their most productive years. Also unlike other common diseases, HIV is not fundamentally a disease of poverty. In many countries, HIV prevalence during the early stages of the epidemic has been greatest among people with relatively high incomes or education levels, such as managers and technical workers (Ryder 1990; Melbye 1986). In this section, we review very briefly the results of some previous research on the costs of HIV/AIDS to businesses and present two models for assessing these costs.

#### *Review of previous cost estimates*

Despite the potentially ruinous impact of HIV/AIDS on African businesses, few attempts have been made to quantify the effect of the disease on companies' productivity and profitability. Rigorous, quantified estimates of costs borne by businesses—ranging from direct expenses like health care and training to indirect effects on workforce productivity—are rare in the published literature. Most accounts of the impact of HIV/AIDS on businesses are anecdotal. A handful of quantitative assessments have been published, however.

Before reviewing the results of these assessments, a number of limitations should be noted. First, all of them reflect the situation in Africa in the early- to mid-1990s, a time when HIV infection rates were climbing rapidly but there was still relatively little AIDS-related morbidity or mortality. Second, each study defines or reports costs in a different way—e.g. as a percentage of the wage bill or a percentage of profits—making comparison across companies and countries difficult. Finally, the published studies rely on national HIV prevalence data—most often collected from pregnant women at antenatal clinics—to project the prevalence in largely-male workforces. Few companies have conducted HIV seroprevalence surveys of their workforces, and none has allowed the results to be published.

The most widely-cited of the published assessments are six case studies in Kenya and Botswana conducted by the AIDSCAP project in 1994. They report costs ranging from a low of less than 1 percent of profits to a high of nearly 9 percent, with most costs resulting from employee absenteeism (FHI 1995). A more recent analysis of a sugar mill in South Africa estimated a cost of approximately \$1,600 per infected employee per year during the last two years of the employee's life, including two extra months of absenteeism over this period (Morris and Cheevers 2000). In contrast, Smith and Whiteside (1995) found that costs were low for three companies in Zambia, although there was a marked increase in absenteeism and mortality. A detailed study of a large tea estate in Malawi in 1996 (Jones 1996) came to similar conclusions, observing that the company was able to cap costs in the short run by adjusting its employees' contracts and benefits. A five-company study in Botswana found that HIV costs were still relatively low as late as 1997: an average of 0.7 percent of the total wage bill (Greener 1997). In

these studies, the share of costs attributable to absenteeism, medical care, pensions, training, etc. varied widely, as did the impact on the companies' profitability. The inconsistent methodologies and scarcity of hard data make their conclusions difficult to interpret.

#### *Models for assessing costs to business*

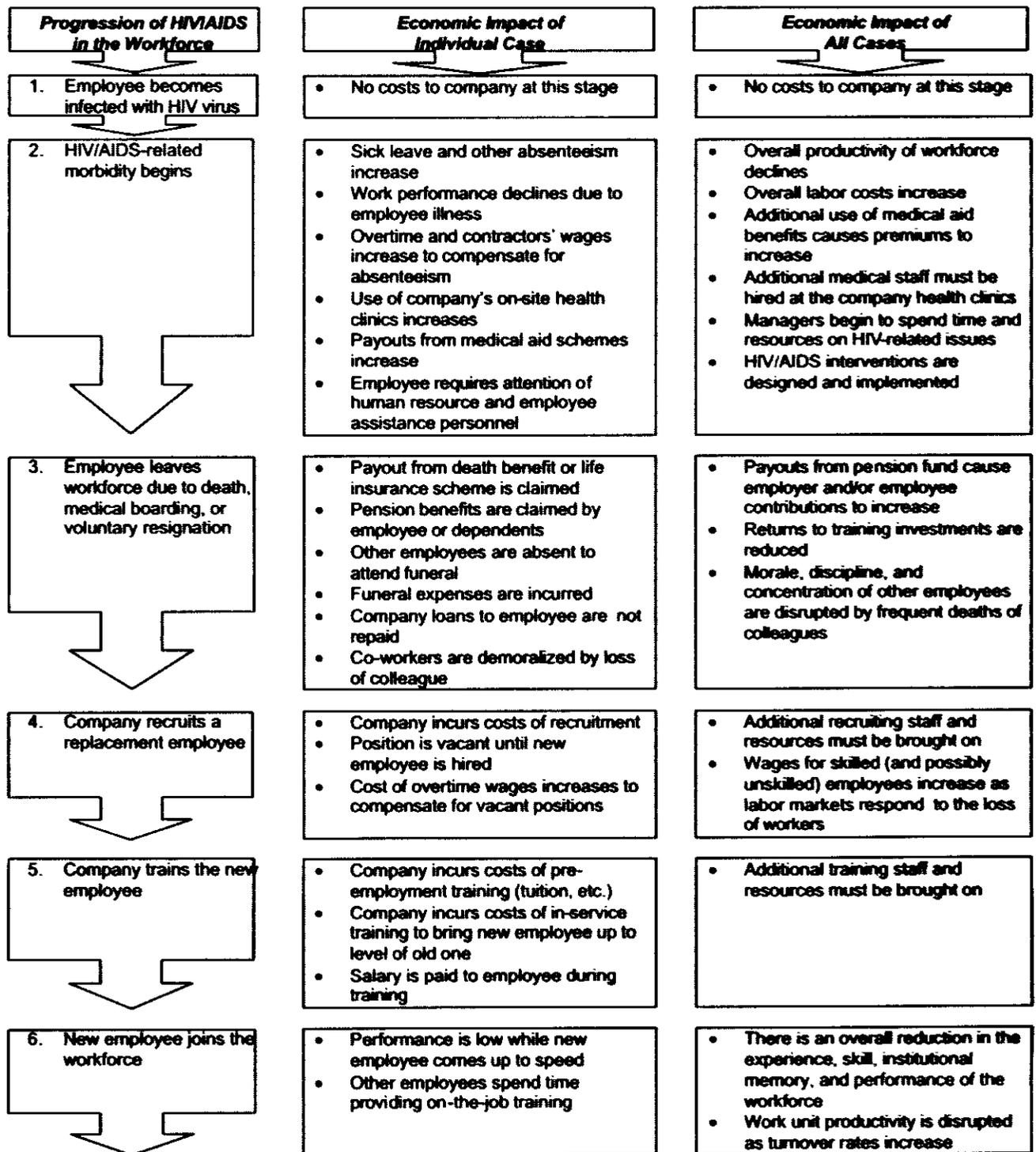
This brief review reveals that there is a great need for careful quantitative assessments of the costs of workforce HIV/AIDS to businesses in various sectors in a wide range of countries and settings.<sup>2</sup> While these assessments are not conceptually complicated, they do require a large amount of data, which can only be obtained from the companies themselves, and a significant investment in the analysis. In this section, we present two cost models to identify the types of internal costs businesses will bear. The models build on the work described above, especially the AIDSCAP methodology, and incorporate the effects of workforce absenteeism and morbidity on productivity.

The first, depicted in Figure 1, is a chronological model designed to demonstrate to business managers how HIV/AIDS among employees is likely to affect a company's expenses and labor productivity. The aggregate impact of all the costs described in Figure 1 is an increase in labor costs and a decline in labor productivity, making it more expensive for a company to produce a given quantity of its product. If the company cannot reduce its costs in other ways, it will then have either to raise prices or, if it faces a competitive market and cannot raise prices without losing market share, accept a reduction in profits. If the increase in HIV/AIDS-related costs is large enough, the company will go out of business, causing all of its employees to lose their jobs and incomes.

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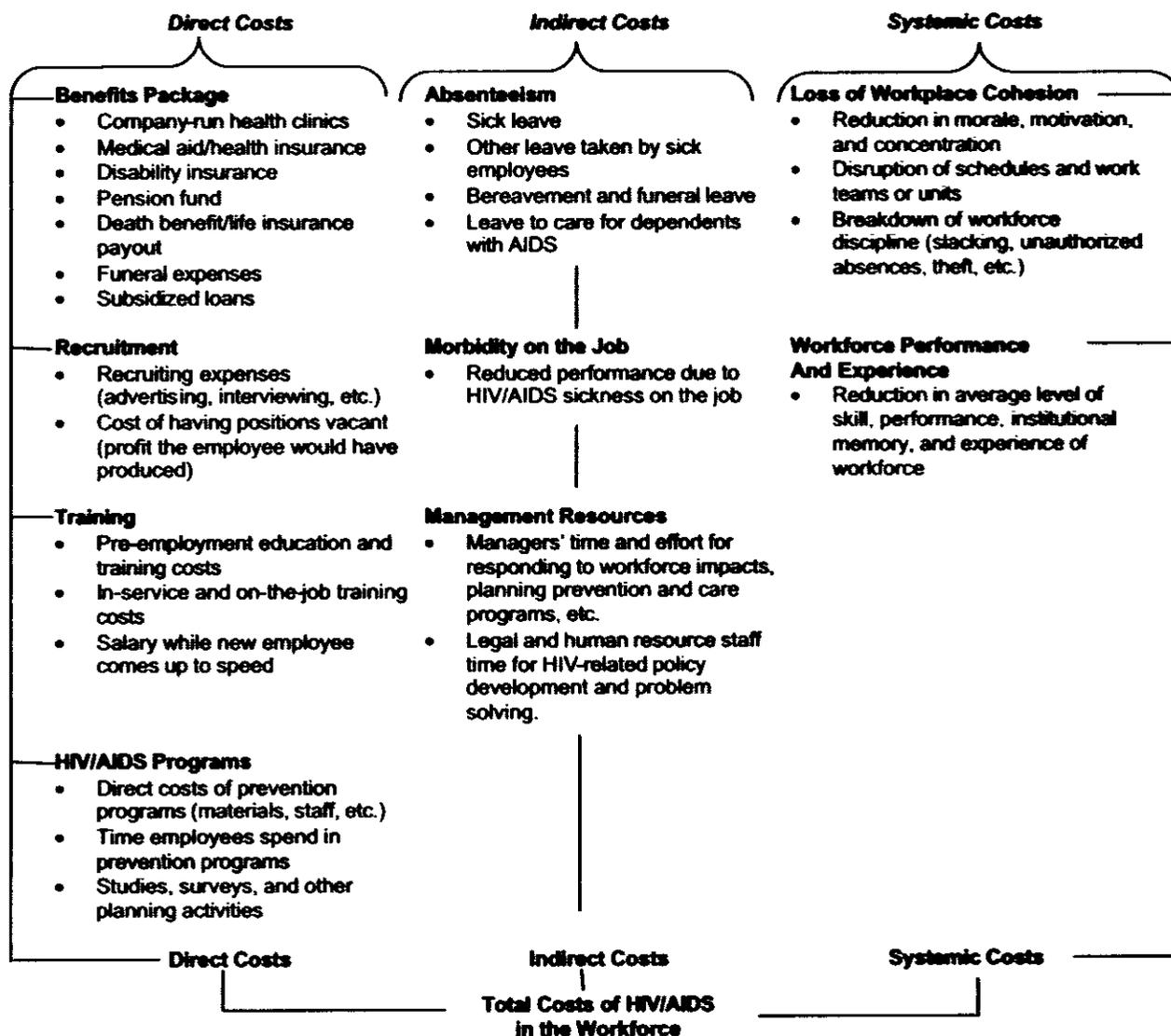
<sup>2</sup> For a longer discussion of this issue, see Michael (1999).

**Figure 1: Progression of Cases and Costs of Workforce HIV/AIDS (internal effects only)**



For purposes of data collection and analysis, the costs identified in Figure 1 can be re-configured into a second model, depicted in Figure 2. Figure 2 includes three types of costs. "Direct costs" refer to impacts that involve increased financial outlays by the company. "Indirect costs" reflect reduced workforce productivity (less output for a given level of expenditure on labor). These include reduced productivity by both the infected employee and by other employees who are diverted from their normal responsibilities. Finally, "systemic costs" refer to costs that result from the cumulative impact of multiple HIV/AIDS cases.

**Figure 2: Economic Impact of Workforce HIV/AIDS (internal effects only)**



Most direct costs can be readily measured using human resources and financial data that large companies routinely collect.<sup>3</sup> Indirect costs are much more difficult to measure. Some, such as the costs of absenteeism and morbidity, are measurable in theory; the difficulty lies in generating relevant data. For on-the-job morbidity, for example, estimates are needed of the percentage loss of productivity experienced by the sick worker and the duration of the productivity loss. Estimating the opportunity cost of management time devoted to HIV/AIDS-related issues is even more difficult.

<sup>3</sup> An exception is the cost of on-the-job training, which is likely to include varying amounts of informal training by other employees.

Systemic costs are the most difficult to measure, especially in the short run and for individual companies. They include the toll that illness and death among co-workers take on employee morale and motivation, increases in such behaviors as slacking and theft, and the overall loss of experience and skills in the workforce. The practical impossibility of measuring these costs in most cases should not be taken as a sign that they are not significant or can be omitted from companies' strategies for coping with the epidemic. On the contrary, these costs are surely important and could in the long run pose the most serious threat to companies' profitability.<sup>4</sup>

Estimating aggregate costs in all three categories (as opposed to the costs of an individual infection) requires three other critical pieces of information. First, HIV/AIDS prevalence, morbidity, and mortality must be either measured (through voluntary, anonymous testing) or modeled. Second, because HIV infection rates tend to vary with age, sex, race, geographic location within a country, and job level, a detailed demographic profile of the current and future workforce is critical to the analysis. Finally, because certain positions and skills are vital to a company's core processes, the ability to provide the product or service will cease or be slowed if the critical positions are vacant. These critical positions and skills must be identified.

The kind of analysis described above will provide business managers, researchers, and policy makers with a better understanding of the impact of HIV/AIDS on different units within a company. Whether or not they carry out such a cost analysis, however, companies faced with HIV-related morbidity and mortality in their workforces have no choice but to respond, passively or actively, to the epidemic. The next section reviews very briefly the range of responses seen among African companies to date.

### **Companies' Responses to the Epidemic**

In the Commonwealth countries of Africa, as in most regions of the world, most companies have been slow to recognize the threat to profits posed by HIV/AIDS. Companies that have acknowledged the threat can pursue two basic strategies for mitigating near-term and long-term consequences. They can (1) try to prevent new infections; and (2) avoid and/or reduce costs associated with existing and probable infections. Many companies pursue both strategies simultaneously.<sup>5</sup>

#### *Strategy 1—HIV Prevention Interventions*

The initial response of many companies is to implement HIV prevention programs. These usually include AIDS education among employees, employees' families, and, where appropriate, commercial sex workers associated with their workforces, as well as distribution of condoms and treatment of STDs. Some of these interventions appear to be having some success in reducing new infections, but reliable information is scarce. The growing body of published and gray literature dealing with workplace HIV interventions tends to describe only the more successful

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<sup>4</sup> Recall that Figure 2 represents only the internal costs of HIV/AIDS; external effects are not included. A partial exception to this is rising insurance premiums, which are likely to result from both added demand for health care from employees and market price increases.

<sup>5</sup> A third set of responses, which we will not address here, involves caring for infected employees and creating a work environment in which they can remain productive for as long as possible.

experiences and, when it quantifies impacts at all, looks only at intermediate results (outreach materials disseminated, condoms distributed, STDs treated, etc.). Unfortunately, there have been almost no well-designed controlled trials to measure the effectiveness of workplace interventions in preventing new infections.<sup>6</sup> A great deal more evaluation research is needed to gauge and interpret their real impact.

Companies with data on the full costs of a new infection might conclude that HIV/AIDS prevention activities can be justified on financial grounds, as well as on moral and social grounds. Many companies will find that the net present value of a new HIV infection among skilled technical and managerial employees is far higher than the cost of intervention programs to prevent new infections. Similarly, they might conclude that it is cost-effective to provide life-extending antiretroviral therapy to critical employees. Unfortunately, these economically sound arguments are a two-edged sword, because for employees who are less skilled or easier to replace, the value to the company of preventing a new infection or prolonging a life might not exceed the cost of doing so. Companies will find decisions about how much to invest in prevention and/or treatment, and for whom, to be fraught with ethical and practical difficulties.

### *Strategy 2—Cost Avoidance*

The second strategy companies have adopted is cost reduction and cost avoidance. This strategy has largely been neglected in the published literature. Companies might reduce the benefits available to infected workers, avoid hiring new employees who are infected or are thought to be in high risk groups, outsource production activities with workers in high risk groups, or shift from labor-intensive to capital-intensive production technologies. In Zimbabwe, for example, there is widespread anecdotal evidence of illegal pre-employment testing of job applicants and screening of applicants to avoid hiring ones with risky lifestyles (Collins 1997). Similarly, between 1997 and 1999, the in-house health insurance provider of one large South African employer reduced its ceiling for HIV-related claims from R100,000 per family to R15,000.<sup>7</sup>

Many African companies might have undertaken parts of the cost avoidance strategy even in the absence of HIV/AIDS, particularly in South Africa. The second half of the 1990s brought to South Africa a difficult combination of rising labor costs resulting from new labor legislation, affirmative action goals leading to unusually high rates of employee turnover, high inflation in health care costs, and exposure, for the first time, to competitive global markets. All of these factors are encouraging companies to restructure their workforces, reduce production costs, limit employee benefits, and shift to more capital-intensive production technologies—the same strategy suggested by the HIV/AIDS crisis. One very large South African company, for example, dissolved its shipping department and established its truck drivers as independent contractors, at least in part to support the formation of a black entrepreneurial class. The company is thus no longer responsible for providing any benefits to drivers with HIV/AIDS, although its business will suffer if its distribution network is disrupted by high mortality among

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<sup>6</sup> The one exception to this appears to be the ZAPP study in Zimbabwe, which concluded that peer education in combination with other prevention activities reduced HIV incidence in 40 Harare factories by 34 percent (Loewenson et al. 1999). Community-based interventions have also been evaluated somewhat more rigorously. For a review of these, see NRC (1996).

<sup>7</sup> Authors' research.

drivers. Another large company is eliminating the unskilled cadre of its workforce entirely, because it can obtain the same services at lower cost from outside contractors. While the outside contractors might hire the same unskilled employees, they are not likely to receive equivalent health and pension benefits.<sup>8</sup>

The coincidence of the epidemic and changes in the economic environment makes it difficult to ascertain the cause of such business decisions. For employees infected with HIV, however, the effect is the same.

### **Conclusion—Shifting the Burden to Governments and Households**

The cost avoidance strategy described above has a consequence that is not yet acknowledged in the rhetoric or programming of international development agencies or African governments. By reducing their own costs associated with HIV/AIDS, companies effectively shift these costs and the care burden onto households and governments. When an employer-subsidized health insurance plan caps benefits for HIV disease at far less than the costs of the treatment needed, employees with HIV must either pay for their own treatment, forgo treatment, or rely on publicly-provided services. In the end, it is likely that households and extended families will bear the brunt of the costs. Government and NGO health care facilities have already been overwhelmed by HIV/AIDS patients, who occupy 70 percent of hospital beds in parts of Malawi (ABCNews.com 1999) and Kenya (Rachier 1999) and 55 percent in Ndola, Zambia (Musonda 1999). Given limited government and NGO resources, individuals with HIV/AIDS have no option but to turn to their own households for support and care.

Transferring costs to government, to households, and to a lesser extent to other companies is a rational response by profit-maximizing businesses, and it should be expected. Of all those who are affected by the epidemic, private firms have the greatest flexibility in containing and avoiding its costs. Companies will avoid costs because they can; governments and households will bear those costs because, in most cases, they cannot avoid them.<sup>9</sup>

Governments in the Commonwealth countries of Africa can and do constrain the actions of private companies through regulations. In South Africa, for example, new legislation requires health insurance plans to pay for HIV-related claims (Metlife 1999). If governments demand too much of the private sector, however, companies are likely to fail or, if they can, relocate to lower-cost countries. Private sector bankruptcies and relocations are an undesirable outcome for everyone: governments lose tax revenue, employees lose jobs, and communities lose investment and commercial activity. Because of this threat and the importance of a successful private sector to achieving economic growth in Africa, the moral argument that businesses should bear all the costs of HIV/AIDS among employees is a risky one.

The private sector clearly has an important responsibility for preventing HIV infections among employees and caring for those who are infected, but it appears inevitable that primary

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<sup>8</sup> Authors' research.

<sup>9</sup> Note that this applies only to the internal effects of HIV/AIDS. It is not the case for the external effects of the epidemic, such as increasing wage rates and falling demand for companies' products; neither companies, government, nor households will be able to avoid the external costs.

responsibility for prevention of HIV and care of those infected will continue to fall on governments and households. The potential contribution of the private sector should not be neglected, but it should not be overestimated either. Recent statements from development organizations implying that the private sector is the solution to the HIV/AIDS epidemic in Africa should thus be viewed with caution. Private sector action is only one of the many solutions that will be needed to sustain social and economic development in the face of this crisis.

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