

Shifting the Burden of HIV/AIDS
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Abstract

As the economic burden of HIV/AIDS increases in sub-Saharan Africa, the allocation of the burden among levels and sectors of societies is changing. The private sector has greater scope than government, households, or NGOs to avoid the economic burden of AIDS, and a systematic shifting of the burden away from the private sector is underway. Common practices that shift the AIDS burden from businesses to households and government include pre-employment screening, reduced employee benefits, restructured employment contracts, outsourcing of less skilled jobs, selective retrenchments, and changes in production technologies. In South Africa, more than two thirds of large employers have reduced health care benefits or required larger contributions by employees. Most firms have replaced defined benefit retirement funds, which expose the firm to large annual costs but provide long-term support for families, with defined contribution funds, which eliminate firm risk but provide little to families of younger workers who die of AIDS. Contracting out of previously permanent jobs also shields firms from costs while leaving households and government to care for affected workers and their families. Many of these changes are responses to globalization and would have occurred in the absence of AIDS, but they are devastating for employees with HIV/AIDS. This paper argues that the shifting of the economic burden of AIDS is a predictable response by business to which a thoughtful public policy response is needed. Countries should make explicit decisions about each sector's responsibilities if a socially desirable allocation is to be achieved.

Keywords HIV/AIDS, economic burden, business response, employee benefits, South Africa.

Introduction

Over the course of 2001, a number of prominent multinational corporations announced a renewed commitment to fighting the worldwide HIV/AIDS epidemic. These included some of the largest employers in sub-Saharan Africa, such as Coca Cola, and some of the most visible businesses globally, such as AOL Time Warner(1). The public pledges of these important and influential companies are a welcome and promising sign and could become an important component of the global response to the epidemic. But the rush to launch “action plans against AIDS” among a handful of major multinationals has tended to overshadow another important trend, familiar to many business analysts but not, so far, a focus of those fighting the HIV/AIDS epidemic: the shifting of the economic burden of AIDS from the private sector to governments and households.

The transfer of the AIDS burden from the private sector to others manifests itself in pre-employment screening to exclude those with HIV from the workforce, reduced employee benefits, restructured employment contracts, outsourcing of less skilled jobs, selective retrenchments, and changes in production technologies that substitute capital for labor. Each of these practices reduces the share of the economic cost of HIV-positive individuals that is borne by private sector employers. Many of the changes would have come about in the absence of AIDS, in response to globalization and other changes in the economic or social environment. As a result of the epidemic, however, changes in working conditions that might otherwise have had a mix of negative and positive consequences for employees are becoming truly devastating.

The costs to business arising from HIV/AIDS in the workforce have been documented elsewhere (2). For some firms, they are substantial, increasing labor costs by more than 10 percent. There is wide variation among firms in both the absolute magnitude of the costs and the relative importance of direct (out of pocket) and indirect (productivity) costs and, in particular, in the costs associated with retirement, death, and disability benefits(3).

Companies that decide to manage these costs have three basic strategy options. First, they can invest in HIV prevention programs designed to reduce the incidence of the disease in their workforces. Second, they can provide treatment, care, and social support to employees with HIV illness or AIDS, with the objective of keeping these employees in the workforce and delaying or avoiding the costs of AIDS. And finally, firms can alter their benefits policies, contracts structures, and hiring practices to reduce their exposure to AIDS-related costs.

This last strategy, which we (4) and others (5) have called the “burden shift,” is the one we begin to document in this paper. Our focus is not on the absolute *magnitude* of the AIDS burden, but on its *allocation* among various levels and sectors of society. We hypothesize that the systematic shifting of the burden of AIDS is an important social and economic phenomenon to which a thoughtful and deliberate public policy response is needed.

In the next section, we describe and analyze burden-shifting practices. Our data come primarily from South Africa, the region’s largest economy and the one in which the private sector accounts for the largest share of employment (6). After presenting anecdotal and survey evidence and a

firm-level analysis of burden-shifting practices, the paper concludes in Section 3 with a discussion of the implications of the burden shift for businesses, governments, and households.

Evidence of the Burden Shift

The efforts of individual firms to reduce or avoid the costs of AIDS among employees typically focus on those that are easiest to project and manage: retirement, death, and disability benefits and health insurance or medical care. Other practices that contribute to the burden shift are aimed at reducing AIDS-related productivity losses by minimizing the company's obligations to keep sick employees in the workforce.

Anecdotal and survey evidence

Anecdotal evidence of burden-shifting practices abounds. In Zimbabwe in 1997, there was widespread evidence of illegal pre-employment testing of job applicants and screening of applicants to avoid hiring those with risky lifestyles (7). Recent interviews with several manufacturing firms in Nigeria turned up a number of practices aimed at protecting the firms from AIDS, including covert pre-employment and in-service testing and exclusion of HIV/AIDS-related conditions from medical benefits (8).^{*} A company in Botswana reduced the number of days of sick leave that employees are allowed to accrue and adopted a policy requiring anyone with a negative sick leave balance to accept medical retirement. 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 per family (9).^{†‡}

More rigorous data that would allow us to quantify the burden shift are harder to come by, but a handful of surveys are available. In 1999, Old Mutual, a large South African financial services firm, asked 15 large, defined contribution retirement funds if and how they were responding to the rising cost of death and disability insurance. Almost half the funds reported that they are taking steps to limit the company's share of the AIDS burden, such as decreasing death and disability benefits (40 percent), capping contributions (48 percent), or requiring employees to pay a larger share of premiums for the same benefits (48 percent) (10).

Shifting employees from defined benefit to defined contribution retirement funds has been one of the most common and most effective ways for firms to avoid the costs of HIV/AIDS (11,12). Defined benefit pension funds provide a fixed lifetime annuity to the spouse left behind by an employee who died of AIDS, regardless of how many years the employee has worked at the company or the employee's age at death. Defined contribution provident funds make a one-time payment of the sum of the employee's contributions and employer contributions up to the last

^{*} One firm reported that it classifies HIV as a "self-inflicted condition" and therefore refuses to cover it. A text ile firm explained that it routinely tests workers for tuberculosis as part of its occupational safety program, and it has recently used the opportunity to carry out HIV tests as well, though without the workers' knowledge. Those who test positive for HIV are dismissed but not told of their infection status.

[†] The Center for International Health is carrying out research on the impact of HIV/AIDS on firms in southern Africa. As part of this research, the authors have collected detailed data from firms in the region and interviewed their managers and medical personnel. Initial quantitative results of this work can be found in Center for International Health (9) The names of the firms must be kept confidential, however.

[‡] The exchange rate was R4.9/\$1(US) in 1997 and R6.2/\$1 in 1999.

day of employment. The beneficiaries of younger employees with AIDS thus receive only a small single payment. A 2000 survey of approximately 800 retirement funds carried out by Sanlam, another South African financial services firm, found that 71 percent of the funds were defined contribution, compared to just 26 percent in 1992 (13,14).

For medical benefits, two similar data sets are available. Old Mutual surveyed a random sample of 56 large South African employers, stratified by size and location, in 1999. Of the firms surveyed, fully 78 percent reported having restructured their health care benefits in the past two years, mainly by shifting more of the cost onto the employees, capping company contributions, and/or reducing benefit levels. An average of 36 percent of employees with access to company-sponsored medical aid schemes had opted out, primarily because of cost (15). Another survey, carried out by the Johannesburg Chamber of Commerce and Industry of 1,500 of its members, found that 40 percent of responding firms had moved to lower-premium medical aid schemes that provided fewer benefits, and the number of staff participating in medical aid schemes had fallen at 53 percent of companies (16).

Firm-level analysis

While none of the surveys summarized above was of a nationally representative sample, all attest to a pervasive decrease in the level of retirement, death, disability, and medical benefits being provided to employees. Beyond this, South African firms are increasingly outsourcing their non-core service jobs and even some core production jobs to independent companies whose function it is to provide workers to fill these jobs. The mining and agribusiness sectors, among the country's most important exporters, are very large contractors of independent laborers, who provide the services of full time employees but receive few of the benefits.

To put some harder numbers on these trends, we analyzed the benefits policies and employment contract structures of two large companies in KwaZulu Natal, the province of South Africa that has been hardest hit by the AIDS epidemic. Table 1 is a snapshot of conditions for four classes of less skilled workers: permanent employees, fixed-term contractors, casual (day) laborers, and employees of an outsourcing firm that provides cleaning services to other companies.

Table 1. Comparison of benefits provided to less skilled employees at two firms in KwaZulu Natal, South Africa

Note: Company 1 is an agribusiness firm with approximately 5,000 permanent employees and 2,500 fixed term contract workers. Company 2 is a retail firm with approximately 500 permanent employees, 100 casual (day) workers, and an unknown number of cleaners provided by an outsourcing firm. Data were collected in July 2001, when the exchange rate was approximately R8.1/\$1.

Benefit*	Company 1— permanent less skilled employees	Company 1—fixed- term contract workers	Company 2— permanent less skilled employees	Company 2— casual workers	Company 2— outsourced cleaners
Employment term	Permanent.	10-month contract, renewable year to year.	Permanent.	Daily.	Daily for duration of client company's contract with outsourcing company.
Composition of workforce	95% male	97% male	89% male	88% male	80% female
Average salary or wage	R85/day.	R71/day.	R150/day.	R70/day.	R54/day (legal minimum wage)
Retirement benefits (payable upon normal retirement, death, or medical retirement)	Defined contribution provident fund; company contributes 7% of salary.	None.	Defined contribution provident fund; company contributes 8.5% of salary.	None.	Defined contribution provident fund; outsourcing company contributes 4% of salary.
Disability benefits (medical retirement)	Lump sum payment of 2 x annual salary.	None.	75% of annual salary until normal retirement age or death.	None.	None.
Death benefits	Lump sum payment of 2 x annual salary.	None.	Lump sum payment of 3 x annual salary.	None.	None.
Funeral benefits	None.	R1,800 for coffin and transport.	R5,000 plus R600 for funeral transport.	None.	None.
Health insurance (medical aid)	Company contributes 60% of premium (remaining 40% = 31% of salary for family of 4; almost no less skilled workers join).	None.	Company contributes 50% of premium (remaining 50% = 19% of salary for family of 4; few less skilled workers join).	None.	None.
Primary medical care	Free to worker and dependents at company clinic; referral to public hospital.	Free to worker at company clinic; referral to public hospital. [?]	Free to worker at company clinic; referral to public hospital.	Free to worker at company clinic; referral to public hospital.	Free to worker at client company clinic; referral to public hospital.
Paid sick leave	12 days/year (plus extensions at management discretion)	12 days/ contract	10 days/year (plus 3 months prior to medical retirement).	None.	12 days/year.

*Housing and car allowances, long service bonuses, and some other benefits are not included in this list.

[?] Most contract workers are migrants whose dependents live too far away to use the company clinic.

Source: Center for International Health (9)

In general, the retirement, death, and disability benefits provided to permanent employees exceed those offered to non-permanent workers several times over. Salaries are also considerably higher for permanent employees. For workers with AIDS, this translates into permanent employees having much larger, though usually still inadequate, financial resources for their own care and their families' future welfare than do non-permanent workers. If a less skilled permanent employee of Company 2, for example, dies in service, his beneficiaries receives death benefits of about R120,000 plus the amount accrued in the employee's provident fund; the beneficiaries of a casual worker at the same company receive nothing.

None of the types of employees included in Table 1 has ready access to medical care beyond that provided by on-site adult first-level care clinics and the public medical system. The non-permanent workers are not offered medical aid coverage at all. Permanent employees can opt for medical aid, and both firms contribute a substantial share of the premiums. The employee co-payment remains high enough, however, to preclude most low paid staff from joining.

Conclusions

Where will the burden go?

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, rely on services provided by the government, religious organizations, or other nongovernmental organizations (NGOs), or forgo treatment. When an employer reduces its death or retirement benefits or hires non-permanent workers who are not eligible for such benefits, the families left behind by those who die of AIDS must find other sources of support, such as social insurance for the few who have access to it, or fall back on their own resources. (To some extent, all households—even those without an AIDS death—will bear a greater burden, because AIDS-related claims will drain the resources from retirement funds and reduce the benefits available to everyone (12).)

Governments and NGOs will meet some of the demand for services created by the epidemic, but in the end, it is households and extended families who will bear the brunt of the costs.

Government and NGO health care facilities have already been overwhelmed by HIV/AIDS patients, who accounted for 54 percent of adult hospital inpatients and 62.5 percent of child hospital inpatients at a major hospital in Durban, South Africa in 2001, for example (17,18).

While in some cases government facilities are accepting the burden of AIDS, in others the government itself is shifting the burden onto households or back onto the private sector. In Nigeria, the National Health Insurance Scheme specifically excludes HIV/AIDS, on the basis that the cost of AIDS treatment would bankrupt the scheme (19). The recently enacted Medical Schemes Act will force South African firms to pay for medical care for a larger proportion of workers than they ever have before (20). Facing many of the same financial constraints as businesses, governments are likely to pursue some of the same strategies, including outright avoidance of the AIDS burden.

Is AIDS the reason for the observed trends?

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 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.

The coincidence of the epidemic and changes in the social and economic environment makes it difficult to ascertain the true cause of many business decisions. One very large South African company, for example, dissolved its shipping department and established its truck drivers as independent “owner-drivers,” on the stated premise of supporting the formation of a black entrepreneurial class. Creating independent black-owned businesses is indeed a priority of the South African government and is regarded as a “social investment.” On the other hand, the company is thus no longer responsible for providing any benefits to drivers, although its business will suffer if its distribution network is disrupted by high morbidity and mortality among drivers (9). The shift from defined benefit to defined contribution pension funds also took place largely in response to social forces other than HIV/AIDS, in this case pressure from labor unions in the years before the AIDS epidemic, based on unions’ perceptions at the time that defined contribution funds were in their members’ interest (5).

In these cases and others, the changes that caused the burden of AIDS to shift elsewhere would probably have been undertaken even in the absence of AIDS. The pressures of a global economy are forcing businesses to become ever leaner and ever meaner. In a world without AIDS, the changes to employment conditions would, like other aspects of globalization, have had both positive and negative consequences for businesses and workers. When the AIDS epidemic is added to the mix, the unintended impact on workers and their families may become devastating.

Should we be surprised?

The costs that businesses are avoiding through the types of practices described above are substantial. The Metropolitan AIDS Research Unit, representing one of the largest insurance companies in South Africa, has repeatedly warned, for example, that without active intervention, AIDS will cause the average cost of employee benefits to double by 2005 and treble by 2010, adding 15 percent to the average wage bill (21). Whether their own costs have started to rise or not, businesses have reason to be worried.

Capping the costs borne by the firm, and thereby transferring them 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, and to some

extent governments, will avoid costs because they can; households will bear those costs because, in most cases, they cannot avoid them (4).[§]

Governments around the world can and do constrain the actions of private companies through regulations. If governments demand too much of the private sector, however, companies might fail, relocate to lower-cost countries, or hasten the transition to capital-intensive technologies that require fewer unskilled employees. Private sector bankruptcies, relocations, and retrenchments are an undesirable outcome for everyone: governments lose tax revenue, employees lose jobs, and communities lose investment and commercial activity. At a lesser extreme, policies that force medical aid schemes and retirement funds into deficit will diminish the welfare of vast numbers of employees and their families who rely on these benefits.

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

What should be done?

Policy makers in sub-Saharan Africa are confronted with a tricky optimization problem. They must do everything in their power to foster economic growth and retain and create jobs, which their populations urgently need. At the same time, they must induce the private sector to do as much as it can to fight the AIDS epidemic and care for those affected by it. If government pushes too hard on the latter, it risks losing ground on the former as businesses respond to the higher cost of labor by substituting technology for labor, outsourcing jobs, or relocating.

Given the importance of developing realistic national strategies for managing the epidemic and the discrepancy between public pledges of action against AIDS and private measures that shift the burden of AIDS, we see a need for action at three levels.

First, each country must decide how it wants the burden of HIV/AIDS to be allocated. The burden is huge, and in the end the largest share of it will almost inevitably fall on individuals and households. The private sector has a clear incentive, and some ability, to shift the burden unless governments take action to prevent it. Deliberate social policy decisions must be made if the ultimate allocation of the burden is to be socially desirable. These decisions will reflect each country's solution to the optimization problem defined above, that of balancing economic growth and employment with business investment in the fight against AIDS.

Second, researchers and international organizations should begin to develop a set of strategies and tools that help countries achieve the balance they desire. This effort can draw upon extensive experience in other fields in regulating business practices and balancing private sector interests with the public good.

[§] Note that this applies only to some of the costs of HIV/AIDS. It is not the case for the market impacts of the epidemic, such as increasing wage rates and falling demand for companies' products.

Finally, the trend we have described in this paper should be monitored and analyzed. We have presented it as a hypothesis, with some preliminary supporting evidence drawn largely from a single country in the region. Before policy makers can develop response strategies, they need a better understanding of baseline conditions. Systematic data collection and ongoing monitoring of benefits levels, hiring practices, and employment structures are needed to understand the nature and magnitude of the trend, determine where and for what types of industries or employers it is most important, and evaluate the impacts of policy changes. Using experience from other fields and other countries and the information generated by better monitoring and analysis, we can encourage both governments and businesses to recognize and bear their fair share of the burden...and do their best to support the households, who will bear the rest.

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References

1. Top businesses pledge to act on HIV/AIDS. New York, Global Business Council, June 26, 2001.
2. Center for International Health. Analyzing the "AIDS Tax" on Businesses. In: Brookings Institution Conference Report No 9. Washington, Brookings Institution, 2001.
3. AIDSCAP Project. African Workplace Profiles. Washington, Family Health International, 1995.
4. Simon JL, Rosen S, Whiteside A, Vincent JR, Thea D. The response of African businesses to HIV/AIDS. In: Commonwealth Secretariat, eds. HIV/AIDS in the Commonwealth 2000/01. London, Kensington Publications, 2000.
5. Van den Heever A. HIV/AIDS and employee benefits. *AIDS Analysis Africa*, 1998, 9: 3-4.
6. Blunch N et al. The Informal Sector Revisited: Policy Challenges for Poverty Reduction. Washington, The World Bank, 2001.
7. Collins J. Leveraging private sector support for HIV/AIDS prevention: opportunities and obstacles. A report on Zimbabwe and Brazil. Washington, Family Health International, 1997.
8. Center for International Health. The implications of HIV/AIDS for Nigerian manufacturing firms. Results of the HIV/AIDS component of the RPED Nigeria survey, March-April 2001, World Bank Africa Region. Boston, Boston University School of Public Health, 2001.
9. Center for International Health. Reports on the economic impact of HIV/AIDS on firms in southern Africa. Boston, Boston University School of Public Health, 2001.
10. Will your retirement fund survive AIDS? Johannesburg, Old Mutual Trustee Times, Feb. 2000.
11. Sidley P. Middle-aged workforce to carry rising AIDS costs. Johannesburg, Business Day, April 14, 1999.
12. Death and disability: funds face critical issues. Johannesburg, Old Mutual Trustee Times, February 2002.
13. Sanlam's new system targets retirement funds. Johannesburg, Business Day, March 22, 2001.
14. Trends in the retirement industry. Johannesburg, Business Times, Oct 18, 1998.
15. The 1999 Old Mutual Healthcare Survey. Johannesburg, Old Mutual, 1999.
16. Shevel A. Profits suffering from medical aid costs. Johannesburg, Business Report, June 15, 2000.
17. Colvin M et al. Prevalence of HIV and HIV-related diseases in the adult medical wards of a tertiary hospital in Durban, South Africa. *International Journal of STD & AIDS*, 2001, 12: 386-389.
18. Williams BG et al. Patterns of infections: using age prevalence data to understand the epidemic of HIV in South Africa. *South African Journal of Science*, 2000, 96: 305-312.
19. Okonkwo A. Nigeria set to launch health insurance scheme. *Lancet*, 2001, 358: 131.
20. Gill S. Medical aid revolution. Johannesburg, Daily Mail & Guardian, Feb. 1, 2000.
21. Van Niekerk M. AIDS could add 15% to salary bill. Johannesburg, Business Day, Sept. 21, 2000.