

HOW WILL HIV/AIDS TRANSFORM AFRICAN GOVERNANCE?

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ABSTRACT

The HIV/AIDS pandemic in Africa has far-reaching implications for governance and development. In addition to killing millions of individuals and causing serious economic contractions, the pandemic threatens structural transformations in African economies, institutions and governance. Decreased adult life expectancy has important adverse impacts upon savings, capital accumulation, skills acquisition, and institutional functioning. This article examines how the impacts of the pandemic can be envisaged as running processes of demographic transition, economic development and the growth of a bureaucratic state, in reverse. Meanwhile, expanded HIV/AIDS programming is likely to become a major feature of some African countries. The article examines different models for social and political mobilization against the pandemic and sketches a unified framework for understanding its impact.

SLOWLY AND BELATEDLY, WE ARE AWAKENING to the full implications of the HIV/AIDS pandemic in Africa. This is an epidemic like no other. It is quite simply the most important issue, bar none, in sub-Saharan Africa for the coming decade. It has already set in motion processes that will transform the governance and economies of the afflicted countries.

Increasingly, research institutes are positing that the enormous losses entailed by the epidemic will cause governance crises and pose a major threat to peace and security.¹ The United Nations Security Council² and the US National Intelligence Council³ have both identified the pandemic as a threat to international peace. But, other than a handful of highly specific analyses of particular sectors (for example, international peacekeeping and armed

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1. International Crisis Group, *HIV/AIDS as a Security Issue* (ICG, Washington, DC, 19 June 2001).
2. UN Security Council, 'Resolution 1308 (2000)', adopted 17 July 2000.
3. National Intelligence Council, *The Global Infectious Disease Threat and Its Implications for the United States* (US National Intelligence Council, Washington, DC, January 2000). The Bush administration has subsequently reverted to more traditional concepts of 'national security' based on military threats.

forces' readiness⁴), there is remarkably little in the way of a general hypothesis for what the pandemic will mean for governance and democracy in Africa. Models for its economic impact are more advanced. Most writers posit that the pandemic will have a catastrophic impact, simply because it is inconceivable that mortality on the scale that is now inevitable will not have such an impact. But, beyond that, most are reduced to remote historical parallels (e.g. the Black Death) or using dramatic metaphors (e.g. the International Crisis Group comparing the impact of HIV/AIDS in Botswana to a major war). The lack of a coherent theory has led some analysts to rely on statistical correlations between measures of state capacity and indicators of disease, but, however impressive the statistics, these tell us little about causal relationships.⁵

This article tries to sketch what an overall, unifying theory of the governance impact of the pandemic might look like. It does so primarily by the following methodology. First, it examines the major demographic impact of HIV/AIDS, namely, a massive and sustained reduction in adult life expectancy. Second, it examines the extent to which existing models for economic development and rational economic behaviour, democratization and institutional capacity are premised on certain assumptions about adult longevity. Third, by varying the longevity factor that is implicit in these models, it posits some likely impacts.

This approach has several advantages over those in the existing literature. First, it does not need to develop a new model for the relationship between health, development and governance, but simply builds upon the strengths of analytical frameworks that are already widely used by economists and political scientists. Second, as a result of this, we can identify plausible causal links that operate through the complex structural interrelationships of demography, economics and politics. The model that results is framed in terms of processes that are already well studied, but with different trajectories. It concludes that the curtailment of life expectancy that we are witnessing in southern Africa may cause a reversal of historic processes of development.

Such an approach also has practical implications for policy-making. The dominant approach to public policy and HIV/AIDS has focused on medical aspects of the pandemic. HIV/AIDS policies have developed in parallel to, and sometimes in isolation from, broader development frameworks. For example, HIV/AIDS is notably marginal within the New Partnership for

4. Roger Yeager, Craig Hendrix and Stuart Kingma, 'International military Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome policies and programs: strengths and limitations in current practice', *Military Medicine* 165 (2000), pp. 87–92. It is striking that this paper, along with most others, is based on data that are now seven years old or more. The lack of good data is a major impediment to effective public health policies in Africa.

5. For example, Andrew T. Price-Smith, *The Health of Nations: Infectious disease, environmental change, and their effects on national security and development* (MIT Press, Cambridge, MA, 2002).

Africa's Development (NEPAD). For their part, HIV/AIDS activists and policy-makers tend to stress that overcoming the pandemic is a precondition for achieving goals such as poverty reduction, and focus their own energies on public health imperatives. By contrast, a theory that integrates HIV/AIDS and its impacts within existing governance and development frameworks holds out greater potential for effective response.

Infection with HIV is the 'first wave' of the pandemic and AIDS morbidity and mortality form the 'second wave'. In much of sub-Saharan Africa these waves are with us and cannot be stopped: at best they can be slowed, if treatment is made available and is affordable, effective and deliverable. Economic, social and political impact is the 'third wave'.⁶ Unlike the infection and mortality waves, there is nothing inevitable about the impact wave. Even in the face of inescapable demographic realities, the governance impacts of HIV/AIDS can be shaped by political action. This entails an end to the complacency and self-inflicted ignorance that characterized most national and international responses to the pandemic in its first two decades.

Demographic implications

Africa is suffering a pandemic with varied manifestations. The southern African epidemic is worst in terms of high HIV rates, and has developed rapidly. In East Africa, the epidemic unfolded earlier but more slowly, and in central and West Africa the picture is highly varied. In severely affected countries, the HIV/AIDS pandemic entails two demographic changes that are unprecedented in modern history. One is a decrease in adult longevity, of indefinite duration, which in some countries means that today's teenagers can expect half as much adult life as their parents.⁷ The second is a structural imbalance in the gender ratio. The younger average age of infection of women means that there will be an excess of adult men over adult women. There will also be an increase in infant and child mortality.

The fact that HIV/AIDS primarily causes mortality among adults has important methodological implications for the study of its impact. Although the following discussion may appear arcane, it is in fact key to appreciating the unique implications of this pandemic. The most commonly used indicators for the health and life chances of a population are infant mortality and life expectancy at birth (LEB). But there is an important difference between, say, an LEB of 45 in a pre-AIDS population (for example, West African countries in the 1960s) and a similar LEB in an

6. Tony Barnett and Alan Whiteside, *AIDS in the Twenty-First Century: Disease and globalization* (Palgrave Macmillan, Basingstoke, 2002), p. 163.

7. The decrease in adult, especially male, longevity in the former USSR over recent decades is the nearest parallel.

AIDS-impacted population (for example, southern Africa today). In pre-AIDS populations, mortality was largely bimodal: many deaths occurred among infants and young children, and most of the remainder among the elderly. Wars, accidents and maternal mortality contributed to a smaller third mortality peak among young adults, but these deaths were becoming less significant. By far the greatest contribution to increasing LEB in Africa in the last half century, and in industrialized countries over the previous hundred years, has been improved childhood survival. Adult life expectancy has increased, but proportionately by far less.

In fact, it is roughly correct to state that, for more than two hundred years across the globe, the majority of individuals who attained adulthood could expect to live for forty or fifty additional years — roughly to the Biblical threescore years and ten. This presumption of four to five decades of life expectancy on attaining adulthood (LEA) has changed little, and has corresponded roughly to the individual's subjective expectation of longevity (in contrast to LEB, which is a statistical construct with a much weaker relationship to an adult's expected lifespan). In turn, LEA of 40–50 has underpinned a whole range of assumptions made by economists, political scientists, and society at large. For example, it is on this basis that we save for retirement, take out 25-year mortgages, expect to see our children into adulthood and become parents themselves, appreciate the value of specialist training over many years, and plan our professional and commercial careers. It is likely that the whole process of economic development and the growth of complex institutions is premised on assumptions about LEA, which have been so deeply embedded in our expectations that they have never needed to be spelled out.

The AIDS-impacted LEB of 45 in southern Africa implies an LEA of 20–30 years. Although there have been no systematic studies of subjective anticipations of longevity in these countries, it seems fair to assume that this is also much reduced. This is an unprecedented truncation of LEA that compels us to question the assumptions built into our models for governance and development. It provides the main analytical theme of this article.

The 'subjective demography' of anticipated life cries out for anthropological study. The meaning of early mortality through AIDS will be mediated by existing worldviews and experiences. An instructive anecdote comes from Sierra Leone in the early 1990s. Some young Revolutionary United Front fighters justified their highly violent and anti-social behaviour on the grounds that 'we're all going to die of AIDS anyway'.⁸ In fact, at that time, HIV rates in Sierra Leone were negligible, and AIDS was symbolic of the sense of fatalism and worthlessness felt by the country's young men.

8. Paul Richards, 'Hurry, we are all dying of AIDS: Linking cultural and agro-technological responses to the challenge of living with AIDS in Africa' (Unpublished paper, University of Wageningen, 1999).

This reminds us of the way in which HIV/AIDS converges with other pre-existing or concurrent crises in Africa to create remarkably intractable complexes of problems.

The demographic implications of the HIV/AIDS pandemic are likely to be far-reaching. Thus far, predictions have focused largely on the sheer number of deaths and their age and sex distribution. However, losing millions of adults is not simply a reduction in the size of a population, but will inevitably cause far-reaching processes of change in population dynamics. Just as the demographic transition from a high-fertility high-mortality demographic regime to a low-fertility low-mortality one is a process, the demographic shock of massive and sustained decrease in LEA will set in train processes. At present we can only ask questions about these processes.

Demographic history indicates that one population crisis predisposes to another (for example, the 'bang-bang' famines of late nineteenth-century India). What other demographic disasters might HIV/AIDS bring in its train? Is the current southern African food crisis precisely such an event? History also teaches that mortality is often not the major demographic impact of such a crisis, and that outmigration may be numerically more significant. For example, more people emigrated from Ireland as a result of the great famine of the 1840s than died during the famine. Can we expect massive population outflows from the worst-afflicted countries? Or perhaps selective outmigration of the skilled and affluent?

The gender impact is significant. Will the reduced cohort of HIV-negative women of child-bearing age mean that these women are required to be full-time mothers, producing six, seven or eight children simply to maintain population replacement rates? Or, will the scarcity of adult women mean that they become comparatively more powerful? How will the excess of unmarried adult men respond? Will there be a major increase in commercial sex? Will we see men seeking younger and younger women and girls as long-term partners?

One way of analyzing the likely demographic process is to envisage these changes as a variant demographic transition in reverse. The normal demographic transition involves a decrease in mortality, followed by a decrease in fertility. This in turn cuts population growth, reduces the dependency ratio, increases the returns to education, increases women's age at marriage, and liberates women from being full-time mothers for all their adult lives. These changes have far-reaching social and economic implications, favourable to economic development, gender equity and governance.

Clearly, running a demographic transition in reverse will not capture all the specifics of the changes entailed by HIV/AIDS. (For example, it is unlikely that HIV/AIDS will increase overall population growth rates.) But it points to some possible effects. These may include a reduction in the age

of marriage, pro-natalist social and cultural policies, a regression in the status of women to focus on their role as mothers, and therewith structural tendencies towards faster population growth (meaning that the rolling back of the pandemic will see a major 'rebound' in population growth rates). As dependency ratios increase, more children and older people will be required to work. These scenarios are open to challenge on numerous grounds. But they pose questions that cannot be ignored.

A final demographic consideration worthy of note is the extreme global inequality in longevity that is rapidly emerging. While LEB in southern Africa plunges to about 40, in developed countries it has passed 80 and is increasing. With gene therapy, it is quite possible that children born today in Europe and North America will expect to live 100 years or longer. Insofar as they can insulate themselves from HIV, or obtain effective anti-retroviral treatment, Africa's elites will be part of this global long-living class. Never before will the world have witnessed such divergence in life chances.

Economic implications

Economists were the first social scientists to begin to construct models for the impact of the HIV/AIDS epidemic. Most of the probable impacts had already been identified by the mid-1990s.⁹ However, there was a conspicuous lack of consensus at the level of senior policy-makers such as ministers of finance and the World Bank. The phenomenon of denial, so prevalent at the personal level, also afflicted the analysis of economic implications. Major issues remained controversial at the end of the decade, and Africa's major contemporary development initiative, NEPAD, includes scant reference to HIV/AIDS as a public health problem and none at all to its development impact.

Approaches to modelling the economic impact of HIV/AIDS have included two major components. One is the direct costs and other impacts of increased ill-health, including factors such as spending on health care, lower productivity, costs of funerals, etc., and their impact on saving and consumption. The second component is the implications of changed demographic structure, namely, fewer adults and decreased life expectancy. This article will not attempt to summarize the rapidly growing literature on this subject,¹⁰ but rather will outline some of the major assumptions in the most common models.

9. Sholto Cross and Alan Whiteside (eds), *Facing Up to AIDS: The socio-economic impact in southern Africa* (Macmillan, Basingstoke, 1993); John T. Cuddington, 'Modeling the macro-economic effects of AIDS, with an application to Tanzania', *World Bank Economic Review* 7, 2 (1993), pp. 173–89.

10. See Barnett and Whiteside, *AIDS in the Twenty-First Century*.

The earliest attempts to measure the economic impact of HIV/AIDS focused mostly on the direct costs of the pandemic. Summing these changes is the basis for the first comparisons between AIDS and non-AIDS scenarios in different countries. This is essentially an accounting exercise. The second, demographic, component will prove more significant in the long term. The economic distortions due to shortened working lifespan, along with increased dependency ratios, decrease in saving and increase in consumption, and lower returns to training, also need to be factored in. These implications were identified early on¹¹ but theoretically modelling them has proved more difficult. Modelling has since become more sophisticated, but most of it remains essentially linear: these effects are modelled individually and their impacts are summed. Such models are the basis for the widely repeated claim that an HIV prevalence rate of 10 percent implies a reduction in economic growth of 0.4 percent.

Some models have rather modest and optimistic estimates for economic impact. One implication of several highly influential models is that, in a highly affected country, GDP per capita will rise over the long term, because the reduction in population and workforce will be less than the reduction in GDP. This, for example, is the conclusion of the Bureau for Economic Research analysis of the South African economy, which finds that, by 2015, GDP shortfall in the 'with AIDS' scenario compared to the 'no AIDS' scenario is 5.7 percent. This is significantly less than the shortfall in the overall population (18 percent) and labour force (21 percent).¹²

Closer analysis shows that this conclusion depends in part upon the assumption that capacity utilization increases. As skilled labour is lost, it is assumed that companies will increase investment in machinery, equipment and new technologies. However, historically the trigger for increased capital spending has been increased actual demand, rather than a decline in the supply potential. We simply do not know if this outcome works in the other direction, when the driving factor is a decline in the supply potential instead of an increase in actual GDP. The fact that reduced LEA lowers the returns to higher education and training should lead us to suspect that the reverse will occur: capital spending will be reduced. Another factor leading to this counter-intuitive result is increased spending on health care, which, when monetized, contributes to GDP.¹³

This reflects problems with assigning a value to labour in the production function. One of the major econometric puzzles faced by most existing

11. Cuddington, 'Modeling the macroeconomic effects of AIDS'.

12. Bureau of Economic Research, *The Macro-Economic Impact of HIV/AIDS in South Africa* (University of Stellenbosch Bureau for Economic Research, Economic Research Note No. 10. September 2001). This prediction has encouraged complacency among certain ministers of finance.

13. Existing methods for estimating GDP value care for the sick when it is monetized, but not when it is voluntary. This is another methodological curiosity highlighted by the epidemic.

models is that, in standard estimations of the effect of human capital (as measured by average levels of schooling in the population), the human capital term turns out to be statistically insignificant. Thus models trying to infer the macroeconomic growth impact of HIV/AIDS run the risk of arriving at a very strange, albeit technical, result that HIV/AIDS has only a marginal impact on African economies because of 'surplus labour', and that GDP per capita may rise because reductions in economic growth are less than reductions in population growth.¹⁴ The World Bank's estimates for the impact of the pandemic are along these lines.¹⁵

On the other hand, re-evaluations of the value of human capital, implicit in research on the economic costs of disease, can imply economic outcomes that tend towards the other extreme. For example, Jeffrey Sachs's research into the economic costs of disease implies that ill-health has much greater economic implications than hitherto suspected. For example, the economic impediment caused by endemic malaria is estimated at a loss in growth of 1–1.3 percent per annum. Controlling for other factors, countries with endemic malaria have only 33 percent of the GDP per capita of others.¹⁶ Bad though it is, can endemic malaria really have an economic impact 3–4 times greater than that of HIV at 10 percent adult prevalence?

Meanwhile, we have seen the parallel development of costs of illness (COI) modelling. Such models indicate that each 10 percent rise in LEB has an economic value of roughly 30 percent of per capita income — 10 percent due to the longer period of earning power and 20 percent due to longer life independent of earning power.¹⁷ Reversing these calculations, the cuts in LEB indicated for southern Africa would imply cuts in per capita income in the range 60–100 percent. Clearly this is an improbable outcome, but it does indicate the room for re-assessment of both the COI methodology (at least in this context) and the optimistic scenarios of the World Bank. The Commission on Macroeconomics and Health goes further and calculates that the 2.2 million Africans who died of AIDS in 1999 cost the continent 'an astounding 35.1 percent of GNP'.¹⁸ This is, of course, a hypothetical figure, but it should give us pause for thought. It also compels

14. This paragraph owes much to the author's exchanges with Ali Abdel Gadir Ali, who considered current models of the economic impact of AIDS to be sufficiently imprecise that they warranted exclusion from his analysis of the long-term prospects for Africa's development.

15. World Bank, *Confronting AIDS: Public priorities in a global epidemic* (World Bank, Washington, DC, 1999), pp. 32 ff.

16. John Luke Gallup and Jeffrey D. Sachs, 'The economic burden of malaria', Supplement to *The American Journal of Tropical Medicine and Hygiene* 64, 1 (2001), pp. 85–96.

17. G. Becker, T. Philipson and R. Soares, 'Growth and mortality in less developed nations' (Unpublished manuscript, University of Chicago), cited in Jeffrey Sachs *et al.*, *Macroeconomics and Health: Investing in health for economic development*, Report of the Commission on Macroeconomics and Health to the Director-General of the World Health Organization (20 December 2001), p. 42.

18. Sachs *et al.*, *Macroeconomics and Health*.

us to examine some of the methodologies used for such calculations, such as disability-adjusted life years (DALYs).

More recent economic models are growing in complexity, and their predictions fall between the above extremes. For example, Marcus Haacker at the International Monetary Fund concludes that South Africa will suffer a loss of 5.8 percent in GDP per capita in the 'medium term', Zimbabwe 7.3 percent, Botswana 10.2 percent, etc., on the assumption of an open economy.¹⁹ One of the important facets of Haacker's model is the separate modelling of the impacts on 'open' and 'closed' economies. Globalization will undoubtedly have major ramifications for how the pandemic affects economies. Bonnel includes a 'social capital' factor in an attempt to model the impact of the pandemic on institutions.²⁰ Although the methodology has been questioned, the basic insight is valid and the attempt is laudable.

A basic shortcoming of these models is that they focus overwhelmingly on the size of the economy and neglect its structure. An economic contraction of, say, 10 percent does not just imply a smaller economy, but also a structurally changed economy. One element of this (consistently pointed to) is the likely growth in health sector expenditures relative to other economic activities. Another is the selective impact on the skill-intensive productive sectors, following on reduced savings and lower returns to training. The key insight, however, is to envisage the economic consequences of HIV/AIDS as a process, just as economic development itself is a process. For example, endogenous growth theory envisages development as a generalized process of capital accumulation. Capital is broadly defined to include both human and physical capital alongside the better functioning of institutions. The model includes the spill-over effects that result from increasing returns to the generation, dissemination, and use of knowledge. The interactions raise the rate of savings and investment, and thereby the rate of growth in a beneficial spiral.

For some years, Malcolm McPherson has been arguing that such a model can be run in reverse to approximate the economic impact of HIV/AIDS. This 'non-linear' model, applied to Zambia, indicates that a 1 percent loss in LEB implies 0.68 percent loss in GDP growth.²¹ It follows that the 10–20 percent reductions in longevity expected in seriously affected countries (higher in the worst cases), imply much more substantial economic contractions (7–14 percent) than indicated by the standard 'linear' models.

19. Marcus Haacker, *The Economic Consequences of HIV/AIDS in Southern Africa*. IMF Working Paper WP/02/38 (IMF, Washington, DC, February 2002).

20. René Bonnel, 'HIV/AIDS and economic growth: a global perspective', *South African Journal of Economics* 68, 5 (2000), pp. 820–55.

21. Malcolm McPherson, Deborah Hoover and Donald Snodgrass, *The Impact on Economic Growth in Africa of Rising Costs and Labor Productivity Losses Associated with HIV/AIDS* (JFK School of Government, Harvard, Cambridge, MA, August 2000), p. 53.

This is an exercise that needs to be replicated and elaborated (especially by utilizing LEA rather than LEB): such models are the way for the future.

Another systemic approach focuses on the selective class impact of reduced LEA. If it is correct that reduced LEA reduces saving and skills acquisition, then we would expect certain economic classes to be imperilled, as classes. For example, the increased cost of skilled and semi-skilled labour due to higher training costs and greater sickness benefits payments may make certain manufacturing industries uncompetitive. In some cases, current profit margins are so slender that even a relatively low HIV rate, say 5 percent, among semi-skilled workers may drive these businesses into bankruptcy. The skilled working class thereby shrinks and loses power. By contrast, even with a higher rate of HIV, the supply of unskilled casual labour will remain plentiful (or even increase): this sub-class is not threatened, as a class, by the pandemic.

Current patterns of capital accumulation are dependent on well-established processes of lifetime saving, investment and inheritance by the next generation. These in turn are dependent on a long LEA, and will change as LEA is foreshortened. Substantial numbers of adults are stricken by AIDS at precisely the point at which their accumulation of capital is at its height. This refers to both physical capital, in terms of assets such as housing and business capital, and human resources in terms of educational achievement, personal networks and social standing. The illness and death of mature heads of households, and/or the additional burden of orphaned relatives, strike at this crucial stage in the inter-generational accumulation cycle. It is the children of those who acquire skills and physical capital who are able to make best use of educational and business opportunities: some families will be able to sustain this upward path, but many others will not. This is the structural context of the crisis of children orphaned by AIDS.

The impact on the capitalist class now becomes clearer. For entrepreneurs, the informal sector and trade are likely to be more attractive than manufacturing. Businesses will restructure in order to shift as much of the burden of the pandemic as possible to society at large, by subcontracting or employing labour on short-term contracts, and by reducing in-service training and sickness and pension benefits.²² Capital flight is likely to become more attractive, as businesses identify a low HIV prevalence as an important consideration guiding investment decisions. In the agricultural sector, we are already witnessing a decline in cash cropping and a reversion to food crops with lower labour requirements on account of the pressures on households,²³

22. Sydney Rosen and Jonathan Simon, 'Shifting the burden of HIV/AIDs', Boston University Center for International Health, February 2002.

23. Joseph Tumushabe, 'Modalities for mitigation of the effects of HIV/AIDs in agricultural development programmes of eastern and southern Africa' (ISAE, Makerere University, 2002), mimeo.

attributable both to earlier adult mortality and to the diversion of family labour to caring for the sick. On the other hand, the mineral extraction sector is likely to be less impacted, because its products are mostly exported, and because it can purchase skilled labour from abroad while utilizing the still plentiful unskilled labour available locally. The aid-dependent sectors, particularly health provision, are also less vulnerable, because aid flows are likely to continue (and in some cases increase), and because they are partly immune from economic logic. In all cases, we can expect greater inequality. Some individuals, groups and classes will benefit, partly because of their position within the economy and partly because of lower levels of HIV/AIDS. For example, some commercial farmers may be able to buy up land cheaply (notably from families stricken by AIDS), and employ unskilled labour at low rates.

Note that these 'class' impacts are not equivalent to specific levels of HIV infection among specific groups of workers: they are the outcome of the wider economic processes set in train by the pandemic. In short, the selective impact of HIV/AIDS on economic development is akin to development processes run in reverse.

We should not expect certainty at this stage. Economic and demographic historians vigorously debate the relationship between (increasing) income and (increasing) longevity, primarily utilizing European data. The results are anything but clear. Higher survivorship appears to contribute to higher income, but even this linkage varies,²⁴ and it need not maintain the same relationship in reverse. What we can say with certainty is that the implications are complex, structural and far-reaching, and need further study.

Governance implications

The outline discussion of class impacts of reduced LEA should alert us to the ways in which the structure and functioning of government will be changed. We can begin the analysis with two major areas of impact: institutional capacity and political participation.

Complex modern institutions are framed around decades-long working lives. The running of a bureaucracy such as a ministry, a large firm or an army depends on staff who have not only professional skills but also many years of experience and extensive networks of personal contacts. Contrast, for example, the simple institutional structure of a student union, which is necessary because its officers usually serve only one or two years, with the complexity possible in a university, whose staff typically spend careers spanning decades serving in similar institutions, or sometimes the very same one. No training course or rule-book can substitute for the experience,

24. James Riley, *Rising Life Expectancy: A global history* (Cambridge University Press, Cambridge, 2001), pp. 122ff.

contacts and judgement that accrue over a lifetime career. Note that these impacts are potentially just as severe for a patrimonial organization or network (such as a political party) as for a more formal and rational bureaucracy.

The first impact of truncated LEA is loss of human resources, including experience and networks. There are increased demands for recruitment and training, and inefficiencies as posts are left unfilled, senior staff do the jobs of their absent subordinates, or inexperienced juniors are promoted rapidly. Staff absences increase due to illness, attending funerals and caring for the sick, while morale also suffers due to absenteeism and declining institutional effectiveness.

Reduced LEA, coupled with the increased need for immediate medical expenditure, also distorts the structure of incentives and deterrents for opportunistic or corrupt behaviour. Instead of 25 years to build a house to provide for one's dependants, a civil servant may believe he/she has only five or ten years. Those who are living with HIV and AIDS, or who have family members who are, may face demands for spending on drugs or care. Some of these demands can be met only through the diversion of public funds or similar activities. Meanwhile, for those who believe that they are likely to suffer an early death, most sanctions are less meaningful. In this context, it is less significant to focus on the small minority of people who know they are HIV-positive, than on the common expectation of lifespan in a society. The latter will be a social and cultural construct, determined by a society's experience of the pandemic along with a host of other factors to do with outlook on the future.

The longer-term institutional impact follows from the sustained nature of these problems: the losses are not a one-off shock to the system. Institutions will be compelled to face some key questions. Will they adapt by moving towards a simpler, more 'student-union'-like model of organization? Will long-term skills training become less appropriate, to be replaced by shorter, more focused forms of training? Following the model of intermediate technology, is there a need to design the 'intermediate institution' with a stripped-down organizational apparatus?

Africa's governance institutions are not in good shape to face these challenges. In this context, the pandemic is likely to further undermine the effectiveness of bureaucracies and bureaucratic norms. At the minimum, HIV/AIDS will impede the objective of building the 'capable state'. It is possible that the Weberian model of modernity, progressing from traditional or charismatic authority to rational bureaucratic power, may be halted or reversed.

There has been some speculation about whether democracy can survive in the era of HIV/AIDS. Historical pandemics have caused panic and helped bring about resurgences of millennial religion. These comparisons

are provocative but do not lead us very far: HIV/AIDS is unlike the Black Death, and the twenty-first century differs from the Middle Ages. More contemporary analyses of the politics of food and ecological crises may be more instructive, in pointing to questions of how social issues become flashpoints for political mobilization, while simultaneously constraining societies' capacities for mobilization.

To date, the most significant inquiry into the impact of HIV/AIDS on political participation is a study of local government and grass-roots civil society organizations (CSOs) in KwaZulu-Natal.²⁵ This found that HIV/AIDS undermined the capacities of local civil society organizations, through loss of both staff members and volunteers. The fact that CSOs are typically dependent on the personal leadership of one or a handful of energetic and well-networked individuals leaves them highly vulnerable to the loss of such key staff members. In addition, caring for the sick places demands on would-be volunteers, reducing the availability of voluntary labour. By the same token, the pandemic may witness reduced readiness to participate in all forms of public life including elections. There may also be pressure on CSOs to focus on the pressing requirements of AIDS care, so that other important activities — for example, human rights education — are scaled back or abandoned. These findings are consistent with the general model of reduced LEA leading to shortened time horizons and a contracting circle of social activities and obligations.

There is no shortage of theories of the development of the modern state, including Weberian and Marxist. Rather than embroiling ourselves in these controversies, let us identify six contributory components of the modern state, likely to be broadly acceptable to all. These include: the development of a property-owning middle class, the functioning of a governing elite, the state's monopoly on the legitimate use of force, the functioning of a revenue, expenditure and financial system, the provision of public goods including health, education, law and order, and lastly the elimination of demographic catastrophes.

There is a vast literature on the nature of the African state, much of which suggests that it does not fit this model well, for a range of reasons. Many African states have a neo-patrimonial character, while some are frankly criminal. They have a demonstrated capacity to survive, despite failing to deliver public services and economic development, and in the face of popular disillusion and even hostility.²⁶ However, this is not a reason for

25. Ryann Manning, 'Is HIV/AIDS a threat to local-level (grassroots) democracy? An exploration of the impact on civil society and local government in KwaZulu-Natal, South Africa' (University of Natal, Health Economics and AIDS Research Division, 2002), mimeo.

26. For example, Jean-François Bayart, Stephen Ellis and Beatrice Hibou, *The Criminalization of the State in Africa* (James Currey and International African Institute, Oxford, 1999); Nicholas van de Walle, *African Economies and the Politics of Permanent Crisis: 1979–1999* (Cambridge University Press, Cambridge, 2001).

disregarding the institutional impacts of lower LEA. First, most states have maintained core technocratic competencies, notably in macroeconomic management and defence. Neo-patrimonial systems exist side by side with extensive legal-rational bureaucracies. Second, a patrimonial structure itself relies on the networks and expertise of its members: these systems are also vulnerable to the 'hollowing out' caused by adult mortality.

If we model state formation as an interaction between these six elements, then we have an elementary process-based model for the emergence of what the World Bank and NEPAD envisage as 'good governance'. The model allows for the establishment of law and order, of institution-based governance, and the opening of political competition. It moves from personal or family rule, to authoritarian rule based on a bureaucracy, to pluralist democracy with complex institutions. Comparative analysis indicates that the likelihood of pro-poor policies and respect for human rights increases as these governance processes develop.²⁷ Does this model run in reverse? Let us explore this possibility and its implications.

First, the property-owning middle class will be affected by the pandemic. The economic analysis sketched above implies increased asset sales and reduced levels of saving and investment, alongside the de-skilling of substantial parts of society. This implies that the structure of the economy shifts towards greater reliance on mineral extraction (typically based on foreign capital), the informal sector, rent-seeking from holding political office, and international assistance. In turn, this encourages more regressive political systems, because this kind of economy tends towards hosting a 'winner takes all' political system with maximum disincentives for regime change. Such rent-seeking, patrimonial types of political system have a remarkable track record of endurance despite the odds. But they also have a long-term susceptibility to collapse and conflict.

The development of the pandemic affects the stability of the governing elite. All countries are run by a relatively small group of people who dominate government, party, army, business and civil society. In a number of African countries, the size of the ruling elite is further reduced by ethnic exclusivism or at least preferential access for people from certain ethnicities, religions or regions. In other instances, access to the elite is largely limited to members of the armed forces or political parties that have rigorous recruitment methods, whether formal or informal. Commonly, power at the highest levels is based on personal networks with poor institutionalization. One of the challenges facing many African countries is how to ensure a smooth transition from a relatively closed elite, which recruits

27. Mick Moore and James Putzel, *Thinking Strategically about Politics and Poverty*, IDS Working Paper No. 101 (Institute of Development Studies, University of Sussex, Brighton, October 1999).

its members from a limited pool within the population, to a more institutionalized and pluralistic system with wider access. The HIV/AIDS pandemic has several consequences. It erodes the institutionalization of the government and accelerates the need to replenish this elite. As noted, this affects patrimonial structures as well as rational-legal ones. Men and women who have decades of political experience, strong networks and respected judgement, are being lost, and younger cadres are being promoted to fill the posts, but cannot fill the structural gap. Relatively benign patrimonial systems may become more criminalized and violent; long-established political parties may come to resemble their thuggish youth wings. In such an environment of uncertainty and austerity, governments tend to centralize more power. The most probable scenario is that those in power rely more heavily on a smaller circle of loyal comrades, and use more ruthless or corrupt methods to co-opt or buy support.

One of the most immediate problems associated with HIV/AIDS is the preferential access to anti-retroviral (ARV) treatments, and resources to provide for their soon-to-be-bereft families, by those in power. In some African countries, senior members of the government and army are provided with free or subsidized ARVs, housing and other benefits. This provides them with strong reasons for staying in office. Alternatively, other governments give no special provision for senior officials living with HIV and AIDS. In such cases, it is common for public officials to reserve a portion of their monthly budget allocation for their own medical care. Both systems contribute to a disincentive for ill officials and officers to retire from public service, in turn contributing to the paralysis of public institutions. In addition, perceived or actual inequalities in access to ARV treatment may contribute to inter-group tensions,²⁸ and competition between different institutions for control over funds for AIDS programming may create political divisions.

Africa is already beset by problems of regime transition and poor levels of institutionalization. The human resource loss and capacity strains associated with the HIV/AIDS pandemic accentuate these pre-existing problems. Ruling elites can doubtless survive the stresses of the pandemic (and some may even prosper), but at the price of abandoning developmental agendas and democratization.

HIV/AIDS undermines the state's monopoly on violence. Soldiers and policemen are among the occupational categories with the highest prevalence of HIV.²⁹ Typically, HIV levels among the upper-middle ranks are the highest, often in excess of 40 percent. With this level of attrition, the

28. Randy Cheek, 'Playing God with HIV: rationing HIV treatment in Southern Africa', *African Security Review* 10, 4 (2001), pp. 19–28.

29. UNAIDS, 'HIV/AIDS and uniformed services,' www.unaids.org/security/issues/uniform_serv.html.

level of readiness of armies and police forces is reduced. Unit cohesion is undermined as the only way of forming full-strength units is by merging different units.³⁰ This is already contributing to a crisis in international peacekeeping.

Even with more modest rates of HIV prevalence, high-skill complex institutions such as armies become less viable. They are classic cases of long career path organizations, reliant on skilled, specialized and experienced personnel, and the integrity of units that have served together for extended periods. Special units such as air forces may simply cease to be viable as institutions, because it simply becomes too expensive to train two or three candidates for every position that needs to be filled. Police forces are similarly affected. Meanwhile, the pandemic is likely to increase criminal behaviour at all levels, in part because of the multiplying numbers of orphans, many of whom will lack adequate socialization and who may be unemployed.³¹ The state risks losing its monopoly on violence.

As already mentioned, public finances — already in a deplorable state in many African countries — are coming under further strain. The assumptions of NEPAD, that African governments can raise the domestic savings rate by sound economic and corporate governance, are thrown into question by the distortions brought about by the pandemic. Pre-AIDS financial crises and collapses in some African countries provide us with a sombre model of what can easily occur.

Institutions for public service provision are already severely affected by AIDS mortality, as indicated above. Health and education, already under severe pressure, are declining. Important utilities will lose capacity, maintenance will decline and their financial viability will be called into question. The administration of justice systems will suffer too. Agricultural extension services are already in crisis through AIDS losses in many countries. Overall, we can expect to see the de-bureaucratization of state capacity. It is important to repeat that this does not represent a one-off loss of human resources, that can be replenished through additional recruitment and training. The current levels of attrition will be sustained or increased over a prolonged period of time. African state institutions face a long-term challenge of maintaining their viability with more rapid staff turnover and shorter working lives.

AIDS-affected states will be less able to protect against demographic crises, including famines and epidemics of other communicable diseases. The combination of smaller economies, weakened institutional capacities, and a reverse demographic transition will render countries more susceptible

30. Lindy Heineken, 'HIV/AIDS, the military and the impact on national and international security', *Society in Transition* 32, 1 (2001), pp. 120–47.

31. Martin Schönsteich, 'AIDS and age: SA's crime time bomb', *AIDS Analysis Africa* 10, 2 (1999).

to these crises, and less able to recover from them once they have struck. We may see an epidemiological transition in reverse: a regression to the dominance of epidemic infectious diseases as determinants of mortality.

Unfortunately, many African countries are already highly vulnerable to these structural reverses, and some have already experienced them in one form or another. HIV/AIDS only heightens that susceptibility. It also inhibits countries' ability to recover from these shocks. African countries have shown remarkable resilience in recovering from state collapse. Chad, Uganda and Mozambique are fine examples, and even in Somalia the economy has prospered in the absence of a state. This resilience held out the hope that even the worst governed African states could be set on the road to recovery: under even the most adverse conditions there has been an underlying impetus towards property ownership, consolidation of military authority, service delivery and financial rehabilitation. Under HIV/AIDS, we must question whether that impetus can continue.

Reversing the elementary model of governance development outlined above entails at worst a regression from democratic pluralism to authoritarianism to personal rule, and even to civil war and state collapse. At the minimum it means a failure to progress from today's chronic vulnerability to economic and political crises. It implies institutional deterioration and the decline and collapse of service provision. This is the 'AIDS-related national crisis'.³²

Current models for HIV/AIDS programming and their implications

The final way in which the HIV/AIDS pandemic promises to transform African governance is through the demands of mounting programmes for HIV prevention and AIDS treatment and care, alongside upgrading other public health provision. According to the Commission on Macroeconomics and Health, the level of resources required for these kinds of interventions is very high, at minimum \$10–20 billion per annum.³³ This implies approximately a tenfold increase in existing total health budgets, and in turn a truly enormous increase in the numbers of trained health personnel and the facilities they use. Can this be achieved? Even if the money is made available, the capacity to spend it is in question. The current trajectory of AIDS-impacted institutions, including health departments, is not encouraging. Not only are nurses and doctors dying more rapidly than they can be replaced by newly-trained professionals, but Africa is also exporting large numbers of health workers to the developed countries. The required

32. See Alex de Waal, *AIDS-related National Crises*. Justice Africa, AIDS and Governance Discussion Paper No. 1. (Justice Africa, London, September 2001).

33. Sachs *et al.*, *Macroeconomics and Health*.

expansion of health programming is a considerably larger challenge than in the pre-AIDS era.

Health programming on the scale envisaged, especially for a sexually transmitted infection such as HIV, involves the extension of monitoring, planning and administration into more and more intimate areas of individuals' lives. Historically, any such extension of state control has been strongly resisted by Africans, even when it comes in relatively 'benign' forms such as environmental or public health programmes.³⁴ At the minimum such interventions have been co-opted, and have ended up performing different roles from those anticipated by their architects. There is a rich anthropological literature on the subversion and failure of well-intentioned top-down programmes.³⁵ It is possible that we shall see popular resistance to HIV/AIDS programmes, expressed in idioms drawn from popular religion and innovations in customary belief, and the proliferation of magical or otherworldly 'cures'.

Unfortunately, while a case can be made for pluralist heterodoxy in grass-roots community development programmes, public health programmes demand a certain rigour if they are to succeed: 'empowerment' must go with a robust attention to the medical and epidemiological bottom line. Obtaining full patient compliance for relatively simple and short-term treatment regimens, such as once-daily pills for leprosy over an 18-month period leading to complete recovery, have proved difficult enough in Africa. The complexities of lifelong multi-drug therapies for people living with HIV and AIDS are far greater. ARV-resistant strains of HIV are already widespread, and poor administration and monitoring of treatment programmes increase the likelihood of further mutation of HIV, and the emergence of strains that are no longer susceptible to any existing treatments. The toxicity of certain anti-retrovirals is already a politically charged issue, partly because they are indeed toxic (especially to an individual who is not well-nourished) and partly on account of the personal views of Thabo Mbeki. If some ARVs are widely believed to be poisonous, expensive, and ineffective, then this creates obvious obstacles to their widespread use. Hugely expanded ARV treatment is both morally and practically essential, but the challenges to implementing it are unprecedented.

At present, there is little chance of centralized, state-imposed programmes of HIV/AIDS control in Africa. State capacity to do this does not exist, and international donors would not countenance such an approach. The HIV/AIDS pandemic has unfolded at a time when the dominant approach to social action in Africa has been an NGO model. Over the last

34. Megan Vaughan, *Curing their Ills: Colonial power and African illness* (Stanford, Stanford University Press, 1991).

35. See, for example, Steven Feierman, *Peasant Intellectuals: Anthropology and history in Tanzania* (University of Wisconsin Press, Madison, WI, 1990).

two decades, public action led by the state has not been fashionable, at least among the Bretton Woods institutions and leading bilateral donors. In the last few years, this consensus has been revised in favour of the 'capable state', but in the meantime much damage has been done to the principle and practice of public health.

In this context, the response to HIV/AIDS has largely been led by the NGO sector. A wide range of NGOs, African and international, has innovated grassroots and community-based programmes for education, prevention and care. This has meant that principles of voluntarism and respect for gender equality and human rights have tended to guide AIDS projects. For example, compulsory HIV testing is extremely rare outside elite army units. Many such NGO programmes have been effective — and indeed the diversity of approaches has been important to what successes have been registered — but inevitably these have limited impact. One of the more discouraging lessons has been the exceptional difficulty of encouraging significant behavioural change even with a 'gold standard' project.³⁶

There is widespread recognition of the need for 'scaling up' and 'mainstreaming' HIV/AIDS programming, by which is usually implied NGO-type programming on a larger scale. Does this mean that African governments should model themselves on AIDS NGOs? Apart from the political obstacles this would entail, there are serious doubts as to whether larger-scale NGO-type programming is feasible, given its reliance on scarce qualities such as energetic voluntary leadership and intensive use of skills and material resources.

As the cost of drugs falls, treatment will become more widely available, and questions of rationing, treatment availability and patient compliance will become prominent. If these issues are not addressed in a transparent manner, they will be dealt with along ad hoc lines, giving rise to many suspicions and allegations. Rationing is already occurring. High-ranking individuals in government, the military and the private sector are already obtaining treatment for themselves. Some private sector companies in South Africa are already providing ARVs to their employees and their families, recognizing that it is more efficient to treat infected employees than to train replacements. The absence of such treatment provision to public sector employees is certain to generate grievances. In the case of soldiers, the potential for strife is obvious. In other cases, the selective availability of treatment within an institution, with triage formally or informally dictated by ethnicity, position, rank or favour, can also cause internal friction.

Scaling up HIV/AIDS programmes will involve major inflows of new resources into African countries. It is widely accepted that responding to

36. Catherine Campbell, *Letting Them Die: Why HIV/AIDS programmes often fail* (James Currey and International African Institute, Oxford, 2003).

HIV/AIDS requires a comprehensive approach and not one located solely in ministries of health, and beyond the capacity of existing NGOs. Thus we are likely to see struggles to control these resources between different government departments, and between different interest groups. It is also possible that policy differences and turf battles between donor agencies will provoke or worsen such conflicts. For example, while USAID is by far the leading donor funding HIV/AIDS programming, its internal regulations are a major impediment to its adopting the co-operative donor best practices envisaged by NEPAD.

Political mobilization for overcoming HIV/AIDS

Another major call among AIDS activists is for 'leadership' to overcome HIV/AIDS. This was the theme of the December 2000 African Development Forum, at which a succession of African heads of state and heads of international agencies vowed to put their governments and organizations 'on a war footing' to 'fight' AIDS.³⁷ The commonly used military metaphor draws attention to the scale and urgency of the HIV/AIDS crisis, but in other respects is misleading: mobilization to repel a foreign invasion is a simpler task, and one better suited to government institutions, than mobilization to overcome HIV/AIDS. Militarism embraces characteristically 'masculine' values of command, obedience, secrecy and decisive action, all of which are unhelpful in changing sexual and social behaviour that carries a high risk of HIV. For a more appropriate model for political mobilization we must look elsewhere.

Today, a generation of young Africans is growing up watching their peers fall sick and die, while the governing institutions do little or nothing. A generation's political passions are largely forged by the time they reach 25 years of age. The generation gap between Africa's largely gerontocratic leaders and its overwhelmingly youthful citizenry is more clearly manifest on the issue of HIV/AIDS than on any other. In due course, this situation will incubate a new political consciousness, and in a few decades, political leaders will emerge whose worldview has been forged by their generation's experience of AIDS. In the meantime, this situation may lead either to a social agenda marshalled by a progressive government, or to a political upheaval. It may contribute to millenarian movements or to neo-fundamentalism. Already, there are signs that HIV/AIDS is emerging as a rallying point for social mobilization at a local level. In time it will become a national political issue.³⁸

37. ECA, *Popular Report: African Development Forum 2000: Leadership at all levels to overcome HIV/AIDS* (Economic Commission for Africa, Addis Ababa, 2001).

38. See Alan Whiteside, Robert Mattes, Samantha Willan and Ryann Manning, *Examining HIV/AIDS in Southern Africa through the Eyes of Ordinary Southern Africans*, CSSB Working Paper No. 11. (Centre for Social Science Research, Cape Town, 2002).

It is a simple truth that governments act when they perceive real threats to their power. This is a lesson from government famine prevention strategies: the political impulse is primary.³⁹ It is also predictable that they will respond very late, when the costs of inaction have become extremely high. To date, few African governments have recognized the political threat posed by the HIV/AIDS pandemic. One reason is that this crisis has no name: it is not 'famine' or 'epidemic' or 'civil war', though it may have elements of all of them. Rather, like the effect of HIV on the human body, an 'AIDS-related national crisis' will consist of a range of pre-existing social and political pathologies, rendered more common and more severe by the underlying vulnerability caused by human resource losses due to AIDS. As this new kind of political crisis is studied and given a name, governments will begin to respond.

Governments are expected to do many things, but experience indicates that a government can only do one or, at most, two things with real energy and enthusiasm. For sub-Saharan African countries in the coming decade, overcoming HIV/AIDS will have to be one of those two priorities. Spurring a government to act in this way is not easy. It requires the perception of a real threat to its power. Famously, President Museveni of Uganda responded to the AIDS crisis in his country when he discovered that the officer corps of his army was suffering very high rates of HIV. The Ethiopian army responded in similar circumstances in 1996, and instituted a relatively successful HIV/AIDS control programme,⁴⁰ although this was not replicated elsewhere in the government.

The Ugandan example also illustrates the way in which the national effort against AIDS was linked to another social agenda, which had more powerful social and political resonance. In this particular case it was the democratization and reconstruction of local government. The attendant rebuilding of social cohesion has been recognized as an important factor influencing Uganda's relatively successful AIDS policies.⁴¹ The two agendas operated in tandem, reinforcing each other. The case also underlines the role of energetic political institutions. It seems probable that the revolutionary energies of Museveni's National Resistance Army, combined with the deeply imbued ethos of comradeship and respect for its leadership, were critical in providing momentum to the AIDS campaign. Similarly in Ethiopia, unique institutions within the military such as the

39. Alex de Waal, *Famine Crimes: Politics and the disaster relief industry in Africa* (James Currey and International African Institute, Oxford, 1997).

40. Tsadkan Gebre Tinsae, 'HIV/AIDS in the Ethiopian military: Perceptions, strategies, impacts' (Addis Ababa, 2002), mimeo.

41. Tony Barnett and Alan Whiteside, 'HIV/AIDS and development: Case studies and a conceptual framework', *European Journal of Development Research* 11, 2 (1999), pp. 200–34; Justin Parkhurst, 'The crisis of AIDS and the politics of response: the case of Uganda', *International Relations* 15 (2001), pp. 69–87.

quasi-democratic 'council of commanders', a legacy of the army's roots as a revolutionary guerrilla army, allowed the institution to develop and implement its own distinctive AIDS programme.⁴² These are the oldest lessons from social development programmes in Africa: national 'ownership' is a crucial ingredient.

These cases are, unfortunately, exceptional. Governments are simply not set up to deal with HIV/AIDS. There is a conspicuous reluctance by institutions, both African and donor, to develop institutional mechanisms for dealing with the challenge. There is a tendency for HIV/AIDS to become an add-on to other 'more urgent' demands. There is also a well-demonstrated tendency to discount apocalyptic predictions, especially in view of the fact that other disasters (notably famines) have repeatedly failed to kill the huge numbers of people predicted by the media and some relief agencies. This author repeatedly criticized exaggerated estimates of famine mortality throughout the 1980s and 1990s and mocked the relief agencies that predicted millions of famine deaths in Somalia, Zaire and elsewhere.⁴³ HIV/AIDS is different: the figures are real, and there cannot be the rapid 'bounce back' to a version of normalcy quickly afterwards.

The HIV/AIDS pandemic compels us to refocus our priorities. The impact of AIDS on human resources and institutional capacity means that it will be necessary for African governments and their development partners to prioritize ruthlessly. Initiatives such as NEPAD need to focus their energies on doing just two or three things, each of them relevant to combating the pandemic, rather than trying to do everything from industrial development to judicial reform. This is not a blueprint for abandoning social development in favour of HIV/AIDS programming. On the contrary, the political energies required for overcoming the pandemic can be drawn from these other, longer-established social agendas. A symbiosis between long-standing demands such as education, food security or local democracy and HIV/AIDS will enable both aims to be met. This will require political courage, and the sacrifice of some other ideals and aspirations.

Conclusions

Much of what is outlined as the probable economic, institutional and governance impact of the HIV/AIDS pandemic describes conditions that already exist in much of sub-Saharan Africa. This wider malaise may obscure the effects of the pandemic, which is an amplifier of existing social, political and economic pathologies. But, very soon, the impacts of the

42. Tsadkan, 'HIV/AIDS in the Ethiopian military'.

43. See: Alex de Waal, *Famine that Kills, Darfur, Sudan, 1984-1985* (Clarendon Press, Oxford, 1989); de Waal, *Famine Crimes*.

pandemic will become so visible that they can no longer be ignored or explained away. It is possible that, in retrospect, economic historians will explain Africa's perplexing failure to develop from the late 1990s onwards as due primarily to the as yet unrecognized influence of HIV/AIDS.

This article has identified three major possible regressive processes, demographic, economic and governance, as the outcome of the HIV/AIDS pandemic. They reverse the 'normal' processes of the demographic transition, economic development and the establishment of functioning states. In theory, an African country could succumb to a combination of these regressive processes, feeding off each other to produce the limiting case of a non-linear regression: complete social collapse. This scenario of an AIDS-related national crisis cannot be ruled out and it is sufficiently disturbing to need to be taken seriously. Milder kinds of breakdown — more local, more specific — are also quite possible and may already be occurring.

More widely, the scenario is of AIDS-impacted populations, economies and governments simply failing to progress, and being caught for the foreseeable future in a structural impasse, in which development becomes simply impossible. This will happen if nothing is done to prevent it. But the third (impact) wave of the pandemic differs from the first two waves in that, even in the worst-hit countries, it is not inevitable. Impact can be shaped by political action.

The analysis sketched in this article underlines how little is known about the governance implications of the HIV/AIDS pandemic in Africa. There is a host of unknowns and very little research. But we can be grimly confident that HIV/AIDS and its impact are Africa's biggest problem. It is unfortunate that, twenty years into the pandemic, we should be at this position.