
Higher Education Finance and Accessibility: Tuition Fees and Student Loans in Sub-Saharan Africa*

D. Bruce Johnstone**

Abstract

“Revenue supplementation” in higher education refers to shifting higher education costs away from relying mainly (sometimes virtually exclusively) on government, or the taxpayer, and toward parents, students, philanthropists, businesses, and other sources. “Cost-sharing” refers more specifically to requiring that parents and students pay all or most of tuition, lodging, and food costs, and other fees, as well as lessening the value of grants or raising the effective interest rate on student loans. This article identifies some of the historic resistance to cost sharing as well as its rationales—the most compelling of which is the sheer need for revenue, coupled with the increasing unlikelihood that African governments can raise enough revenue by taxation to meet currently underfunded social needs and simultaneously provide substantially more to meet the rising costs of higher education. The article identifies some limitations to the “dual-track” tuition policies in East Africa and some reasons for the many failures African countries have experienced with student loan programs. It cautions against the prevailing fascination with income-contingent loans and makes recommendations, drawn both from theory and from the few empirical examples of “things that work.”

Résumé

Dans le domaine de l’enseignement supérieur, le concept d’« augmentation de revenu » consiste à ne plus dépendre principalement (parfois exclusivement) du gouvernement ou du contribuable pour ce qui est des dépenses d’éducation, et à

* An earlier version of this paper was presented to a conference, “Improving Tertiary Education in Sub-Saharan Africa: Things that Work!” sponsored by the Association of African Universities and the World Bank, in Accra, Ghana, September 23–25, 2003.

** D. Bruce Johnstone is University Professor of Higher and Comparative Education, Director of the Center for Comparative and Global Studies in Education at the State University of New York at Buffalo, and also Director of the International Comparative Higher Education Finance and Accessibility Project. Email: DBJ@buffalo.edu

faire supporter ces coûts vers les parents, les étudiants, les philanthropes, les entreprises et autres. La « participation aux coûts » renvoie plus spécifiquement au fait que les parents et étudiants s'acquittent de l'intégralité ou d'une grande partie des droits d'inscription, des frais de logement ; la « participation aux coûts » renvoie également à la diminution du montant des bourses ou à la hausse du taux d'intérêt appliqué sur les prêts étudiants. Cet article identifie certaines résistances à la pratique du partage des coûts, ainsi que les arguments sur lesquels repose ce système (dont le plus incontestable demeure l'énorme besoin de sources de revenus, ainsi que la non-probabilité que les gouvernements africains génèrent suffisamment de revenus à travers l'imposition, et qu'ils parviennent à combler les besoins sociaux actuellement sous-financés, et que ces gouvernements parviennent en même temps à accorder davantage de financements pour subventionner les besoins croissants de l'enseignement supérieur). Cet article identifie les limites des politiques de droits d'inscription « à double système » appliquées en Afrique de l'Est, et avance quelques raisons à l'échec de certains pays africains dans la mise en place des programmes de prêts étudiants. Il met en garde contre cette fascination pour les prêts basés sur les revenus, et fait des recommandations tirées à la fois de la théorie et d'un certain nombre d'exemples empiriques de « modèles réussis ».

Introduction

Higher education at the beginning of the 21st century has never been in greater demand, both from individual students and their families, for the occupational and social status and greater earnings it is presumed to convey, as well as from governments for the public benefits it is presumed to bring to the social, cultural, political, and economic well-being of countries. Nowhere is this demand more compelling—or indicators of success more elusive—than in the countries of sub-Saharan Africa, beset with fragile economies and tentative democracies that are struggling to maintain higher educational quality amid conditions of financial austerity and a relentlessly increasing tide of student demand.

The fundamental financial problems faced by institutions of higher education are worldwide and stem from two nearly universal forces. The first of these is the high and increasing unit, or per-student, cost of higher education. This problem can be attributed to a historically entrenched, tertiary education production function that is both capital and labor intensive and that has proven throughout the world to be especially resistant to labor-saving technology.¹ The second force greatly exacerbating the financial problems of tertiary educational institutions and ministries in many countries is the pressure for increasing enrollments, particularly where high birth rates are coupled with rapidly increasing proportions of youth finishing secondary school with legitimate aspirations for some tertiary education. And again, nowhere in the

world are these exacerbating, or magnifying, conditions more prevalent than in sub-Saharan Africa.

Tertiary education in most countries, at least in the last century, has been largely dependent on governments, or taxpayers, for the revenue to meet these high and rising costs. However, the source of taxation in the countries of sub-Saharan Africa for much of the last century depended heavily on exports and imports, state-owned monopolies, and multinational enterprises. The worsening terms of trade and the privatization of state-owned enterprises toward the end of the century forced governments to turn to much more problematic sources of taxation such as individual incomes, retail sales, and property—taxes that are more expensive to collect and easier to evade. International lending agencies have made dependence on deficit financing and the printing of money a less viable alternative than taxation. Moreover, rampant corruption and political instability have lessened foreign investment as a source of economic activity and, thus, of tax revenues. Finally, competing public needs—many of which, such as public health, public infrastructure, elementary and secondary education, and internal security—may be far more socially and/or politically compelling, particularly on their respective margins, than the claims of higher education. Such competing needs have plunged tertiary educational institutions and ministries in most countries (even those that are industrialized and wealthy) into serious and steadily worsening financial austerity.

When these cost pressures of tertiary education are not met with commensurately increasing revenues—which is increasingly the case everywhere in the world and especially in the countries of sub-Saharan Africa—the result is less apt to be increased efficiency and productivity and more apt to be some combination of: (a) diminished quality of the output (i.e., of teaching, scholarship, and service); (b) diminished working and living conditions for professors, staff, and students alike; and/or (c) constrained capacity and the consequent extreme rationing of places—and thus the denial of opportunities to students who may be qualified but who lack the secondary school academic preparation or the financial means to “buy into” an available place.

In most of Africa, the combination of flat or even declining economies (brought on in part by the worsening terms of trade for the less-industrialized world), burgeoning populations (especially those seeking tertiary educational experiences), political and social instability and conflict, and oppressive debts have all contributed to the extreme financial austerity of, as well as diminishing access to, African tertiary education. The reform agenda for African tertiary education thus includes the need for expanding other-than-government, or tax-generated, revenue as well as measures to lessen the current financial barriers to tertiary education participation for children of the poor, of those in rural or

Table 1: Forms and Stages of Cost-Sharing (in Approximate Order of Increasing Political Resistance to Implementation)

Type of Cost-sharing	African Country Example[s]	Other Country Example[s]	Potential Revenue Impact	Potential Political Acceptability
1. Small earmarked fees (e.g. registration, examination, or “caution”—but not yet tuition)	Most African countries (e.g., Nigeria)	India, Egypt	Generally small	Quite acceptable
2. Freezing (lessening the “real” value) of student grants	Most African countries	U.S. (Pell grants), Russia, other post-Communist countries	Generally small but continuous	Relatively acceptable
3. Reducing or eliminating some student support grants	Most African countries	U.K. (eliminated mandatory grants)	Small to large	Unpopular (protest in Ghana, 1991; also in Kenya and Tanzania).
4. Encouraging and even providing revenue to support the tuition-dependent private sector	Kenya, Tanzania, Uganda, Ghana, and other countries	Pervasive (especially the Philippines, Japan, Korea, Brazil, Russia, etc.)	Significant over time but requires tuition fees	Quite acceptable
5. Introducing fees for lodging and food	Most African countries	Most OECD countries, China, Vietnam, Mongolia	Can be large	Unpopular, but can be done gradually and has precedent.

- | | | | | |
|--|--|---|---|---|
| 6. Introducing tuition only for students not given a free slot (dual or parallel track) | Uganda, Kenya, Ethiopia, Tanzania | Russia and other countries of the former Soviet Union and most countries of post-Communist cultural and Eastern Europe. | Can be large | Acceptable: provides opportunities to students who had none. |
| 7. Introducing tuition only for certain public institutions or programs | Nigeria (tuition for state, but not federal, institutions) | Mexico (state and federal universities other than National Autonomous University of Mexico). | Medium to large | Relatively acceptable |
| 8. Introducing tuition mainly in the form of deferred contributions. | Reportedly under consideration in Ethiopia | Australia, New Zealand, Scotland, Wales, proposed for U.K. | Government-held loan notes essentially unsalable in private capital market; all revenue impact in future. | Relatively acceptable |
| 9. Introducing up-front tuition fees at all public institutions | South Africa, Mozambique | Britain, Netherlands, Austria, China, Mongolia, Vietnam | Large | Unpopular |
| 10. Enhancing recovery on student loans | South Africa (successful); Kenya and Ghana (attempting). | U.S. | Potentially significant, but extremely difficult to effect. | Relatively acceptable |
| 11. Large increases (beyond the rate of unit cost increases) in tuition: increase in % of costs recovered. | | U.S. | In response to state cuts, so no net revenue impact. | Angers politicians and press; moderately unpopular with public. |

remote areas, or of ethnic or linguistic minorities (Sawyer, 2002; Task Force, 2002). Accordingly, this paper will address first the familiar concept of cost-sharing, or shifting some of the costs of higher education from governments or taxpayers to an arrangement in which these costs are shared by parents (or extended families) and students. I will then address the related policy prescription of student loans, or the deferral of some of these student-borne costs to a future when the student borrower will presumably be more productive, enjoy a higher income, thus be able to repay the loan as a sound personal investment.²

Cost Sharing in Africa

Cost-sharing is generally thought of as the introduction of, or especially sharp increases in, tuition fees to cover part of the costs of instruction or of user charges to cover more of the costs of lodging, food, and other expenses of student living that may have hitherto been born substantially by governments (taxpayers) or institutions (Johnstone, 1986, 2002, 2003a). However, there are many other possible forms, or what may usefully be thought of as stages, of cost sharing. Some of these, as shown in Table 1, are likely to be early and relatively easy, with less fiscal consequence but with more possibility of being politically acceptable. Such measures could include the introduction of small, noninstructional fees, the freezing or diminution of student support grants (especially in an inflationary economy), the channeling (sometimes with some government resources) of more students into a tuition-dependent private sector or, in the few countries that have introduced significant loan programs, an improvement in recovery rates (i.e., a lessening of needed public subsidies) by means of increasing the rate of interest or improving collections.

Other forms or stages of cost-sharing have potentially greater fiscal impact but may still be more politically acceptable than the introduction of across-the-board, up-front tuition fees for all students. The so-called dual track, or “parallel” tuition fees (as in Kenya), provides that students who are not academically accepted into the small and selective pool of students whose education is fully state-supported may still be admitted for a fee. The existence of this track maintains a kind of fiction of free higher education, although most young people, even if academically qualified, will never enjoy it. Still another form, the income-contingent loan, was developed and popularized by Australia and adopted by New Zealand and Scotland. In 2003, it was “on the table” for the rest of the United Kingdom, according to the government’s 2003 white paper, (Department of Education and Skills, 2003) and is evidently to be implemented in Ethiopia in 2004. This scheme is a tuition fee that is deferrable for all or most students as an income-contingent loan to be repaid only after the student borrower is employed and earning a salary.³

Finally, cost-sharing's most direct and financially remunerative forms—but also more politically contested—include the introduction of tuition fees where they did not heretofore exist, a sharp increase in tuition (i.e., in excess of the rate of increase of the underlying per-student costs of instruction) where they have already been established, and the introduction of full user charges, or fees, on what may have hitherto been heavily subsidized lodging and food. Table 1 shows some of these forms or stages in approximate order both of increasing fiscal impact and of the likely increasing political resistance, and therefore in the approximate order of their likely introduction in countries attempting to move in the direction of greater cost-sharing. Most African countries are at about levels 5 and 6.

The rationale for cost-sharing has been the subject of a large and well-accepted (even if politically and ideologically contested) body of economic and public finance theory (Johnstone 2002, 2003a; Woodhall, 1992, 2002). It is sufficient to note here that the most compelling case for cost-sharing in developing countries may not rely primarily on the familiar neo-liberal economist's presumptions of theoretically superior efficiency and equity, as valid as these presumptions may be. Rather, they rest more on the much simpler to grasp and much less controversial fact of the sheer need for alternative (i.e., nongovernment) revenue. This need, in turn, emerges from the marked scarcity of tax revenues as well as the long and compelling queue of competing public needs discussed in the preceding section. Simply put, the economic, political, and social imperatives for a great expansion in the capacity of tertiary education systems—especially in low-income countries that currently have very small portions of young adults enrolling in any sort of post-compulsory studies—is so far in excess of any conceivable additional public revenue likely to be devoted to higher education that alternative, nongovernmental revenue sources *must* be found. And by most policy calculations, a substantial portion of this nongovernment revenue must come from parents and students in the form either of tuition or of user fees for some of the currently free or heavily subsidized student housing and food—or both.

Most of the countries of sub-Saharan Africa have resisted up-front tuition fees, which is the most direct and fiscally significant form of higher educational cost-sharing. This resistance may stem from two, mainly historical, features of sub-Saharan Africa. The first is the European colonial legacy and the fact that the continent of Europe—on which most of Africa's classical universities are modeled—still remains the world's last bastion of free higher education. Even though this European tradition is under tremendous pressure and has been slowly giving way to encroaching tuition fees (as in the United Kingdom and to a lesser extent in the Netherlands, Portugal, and most recently Austria), the

Table 2: Cost-Sharing in Sub-Saharan Africa, Selected Countries

	Cost-Sharing Policies	Student Loan Policies/Programs
East Africa		
Ethiopia	Cost-sharing open policy goal, but only pocket money eliminated to date. Dual-track tuition: tuition, lodging and food covered for regular (not evening or summer) students.	Government considering (2003) a loan program modeled after the Australian HESC in spite of likely problems with multiple and unreported sources of income and minimization of parental contributions.
Kenya	Tuition and user fees for lodging and food introduced in 1992, but tuition fee rolled back due to student opposition. Dual-track or parallel Module II tuition begun 1998, University of Nairobi.	Comprehensive loan program introduced in 1970s but failed with virtually no cost recovery. Program reinitiated in 1995 as Higher Education Loans Board, with mandate for “near self-sufficiency.”
Tanzania	Cost-sharing officially begun 1992 but at slow pace. Maintenance grants and lodging/food subsidies reduced in mid-1990s. Only dual-track tuition, but comprehensive tuition intended in future.	A “loan” scheme implemented in 1993–1994 as part of Phase II of cost-sharing to cover part of lodging and food costs. As of 2003, no interest rate stipulated, no collection machinery, and no recovery.
Uganda	Makerere University famous for aggressive and financially successful dual-track tuition, with more than 75% of students paying fees. University reaps considerable financial benefits.	Under discussion: no operational student loan program as of 2003.
Southern Africa		
Botswana	Limited cost-sharing measures reportedly introduced in 2002–2003 with efforts to improve collection of loans.	Under discussion: no operational student loan program as of 2003.

Mozambique Tuition ranges from \$70-80 to \$500+. Cost sharing seems to have been reluctantly accepted.

South Africa Tradition of tuition fees and cost-sharing generally, although still resisted. Complicated by issues of redress and planned institutional closures. Tuition in range of \$1,000-\$3,500.

Under discussion: no operational student loan program as of 2003.

Successful means-tested income contingent loan program collected by employers. Reaches about 20% of student population. Interest is 2% real; repayment is 3-8% of income over threshold.

West Africa

Ghana Cost-sharing limited to small fees and user fees for lodging and food; no tuition fees.

Nigeria Government expects 10% of costs to be from nongovernment revenues, but cost-sharing is controversial, with nominal fees for lodging and food, and tuition at state, but not federal, universities.

After collapse of 1970s plans, a new scheme in 1988 was linked to social security national insurance trust, contributions to which guaranteed repayments. High subsidies and collection difficulties persisted.

As in Ghana, the 1972 Nigerian Student Loan Board failed to collect and was suspended in 1992. A new Education Bank is constructing measures to increase collections and interest rates.

Francophone

Burkina Faso In spite of francophone no-fee tradition, Burkina Faso began to cut grants and charge modest tuition in 1990s. An increase from ca. \$12 to \$24 in fall 2003 brought fierce student opposition.

Comprehensive program of small, means-tested loans, "Prets FONER," begun 1994. Second and third cycle students receive subsidized and income-contingent loans at 1/6 of salary; little or no recovery to date.

Source: The University at Buffalo Center for Comparative and Global Studies in Education International Higher Education Finance and Accessibility Project. Webpage: <http://www.gse.buffalo.edu/org/IntHigherEdFinance>.

European political and cultural resistance to tuition fees is powerful. Thus, to African politicians and powerful student unions faced with prospect of charging or paying for something that may once have been free (at least for a few fortunate families and students), the fact that most European governments, with far wealthier families and far better employment prospects for students, continue to resist tuition gives credence to the belief (or hope) that higher education can somehow continue to be free.

The other historic root of this resistance to fees has been the legacy in much of sub-Saharan Africa of Marxist ideologies, and the corresponding view that governments have—or at least ought to have—the financial wherewithal to provide free all levels of education, as well as all of health care, pensions, and most other social services. Politicians and students who are wedded to notions of entitlements and who view all education as essentially a public good (and who are encouraged in this observation when they view other government expenditures that seem blatantly wasteful or corrupt) are not easily dissuaded. What many in the industrialized West view as insurmountable resistance to taxation and serious constraints upon deficit financing continue to be viewed by those of a more Marxist persuasion as mere political decisions to not tax and therefore as an untenable decision to deny to the poor the benefits of what should be (and once was) free to all.

However, the collapse of state-owned and centrally planned economies throughout the one-time Socialist/Communist world, almost regardless of ideology or of individual views of what is properly “public,” has so devastated the taxing ability of these governments that China, Vietnam, and Mongolia, for example, have abandoned all pretense to “free” higher education. They now declare the new ideological correctness of cost-sharing and of substantial, up-front tuition fees. Russia, other former Soviet republics, and the countries of Eastern and Central Europe, while still politically constrained to support some higher education that is “free,” have also adopted cost-sharing measures such as freezing and otherwise diminishing student maintenance grants, imposing user fees, and implementing various forms of dual track tuition.

As shown in Table 2, cost-sharing is also being embraced by more and more governments throughout sub-Saharan Africa, although slowly and cautiously. Such cost-sharing measures are usually limited to their easier and more politically acceptable forms, such as levels 1–5 and perhaps levels 5 and 7 from Table 1. At the institutional level, small fees are being introduced, food services are required to be self-supporting, fees are being charged for evening or summer or other “special” courses and programs, and facilities and equipment must be rented. At the governmental or ministerial level, where the problem is less institutional austerity than sheer lack of capacity, private, tuition-supported

alternatives are being allowed, encouraged, and even in some cases partially subsidized. For example, students are eligible for loans at private institutions.

Tuition fees continue to be resisted, particularly by politically powerful student groups and by politicians who cater to them. However, four East African countries—Uganda, Kenya, and to a lesser extent Tanzania and Ethiopia—have adopted the dual-track tuition-fee policy. This means that they open their doors to students whose examination scores fall below the cut-off point for the highly selective free slots but who are still able to do university-level work and whose parents can and will gladly pay.⁴ In this way, like Russia, other former Soviet republics, and most of the formerly Communist countries of Eastern and Central Europe, these sub-Saharan African countries can introduce tuition fees while nominally maintaining the principle of free tuition—at least for the small number of secondary school graduates who receive one of the free, government-sponsored spaces, for which, naturally, the competition is keenest.

The University of Nairobi began searching for alternatives to government revenue in the mid-1990s. Realizing that its comparative advantage in a market-oriented economy had to continue to be knowledge-driven activities, and forced to contend with a precipitous decline in revenue from the government (taxpayers), the university in 1998 initiated dual-track tuition policies, called Module II, or Parallel, Programmes. These were academic programs in which enrollment demand was strong and for which there were significantly more academically admissible applicants than government-funded places. Thus, additional fee-paying students could be added, thus benefiting the students themselves, the teaching faculty and their departments, the university as a whole, and the country. The first such program at the University of Nairobi was an MBA in the faculty of commerce, quickly followed by Module II programs in the faculties of law, education, medicine, pharmacy, dental sciences, engineering, commerce, and the institute of computer science. By 2002–2003 academic year, enrollments in the Module II Programs stood at nearly 15,000, slightly exceeding enrollments in the traditional, government-supported programs (Kiamba, 2003). Total revenue from Module II programs in 2002–2003 was some 1.2 billion Kenyan shillings (nearly US\$16 million), about one-third of all university income (Kiamba, 2003; Oketch, 2003).

The financial beneficiaries of Module II, along with other smaller, revenue-generating activities have been faculty and staff salaries (about 45%), academic equipment and materials (about 28%), utilities and other university-wide expenses (about 17%), and capital projects (about 10%). The conclusion of Crispus Kiamba, Vice Chancellor of the University of Nairobi, is that these programs have “gone a long way to make the university attract, motivate, and

train competent staff and stave off the hitherto spiraling brain drain.” He also stated that these programs had “led to the improvement of the quality of the teaching and research” and largely checked “the physical deterioration of the University estate” (Kiamba, 2003, p. 11).

An even more aggressive dual-track tuition policy—and arguably the most striking single example of institutional cost-sharing in sub-Saharan Africa—is the policy adopted at Uganda’s Makerere University. As reported by Ssebuwufu (2002), Sawyer (2004), and Court (1999), more than 70% of Makerere’s students are fee paying. Thus, the government and university can still claim that Uganda and Makerere provide free higher education (to the very fortunate 20-30%) while the revenue from fees has significantly improved Makerere’s budget, capacity, and educational quality. According to the World Bank and UNESCO (Task Force, 2002), Makerere “moved from the brink of collapse to the point where it aspires to become one of East Africa’s preeminent intellectual and capacity-building resources, as it was in the 1960s” (p. 54).

Thus, by most measures of success, including increased wages, better faculty retention, and much needed improvements to infrastructure and technology, these dual-track policies have been successful. More importantly, they are almost certainly the most politically expedient way to introduce tuition into a country in which the prevailing political ideology remains fiercely anti-tuition. Clearly, a policy that seems to deny the appropriateness of tuition fees faces challenges when free places are extremely limited and when, not surprisingly, most of these places go to the children of the more privileged classes who are the best prepared academically and the most ambitious. The distinction is a fine one between, on the one hand, a policy that provides additional capacity for those who are “admissible” and can pay a tuition fee and, on the other, a policy that fully acknowledges the appropriateness of tuition fees, but which goes on to provide full-tuition scholarships to the academically best-prepared.

At the same time, at least in theory, such policies have the following limitations:

1. They tend to reinforce (or at least fail to provide any forthright alternative to) the underlying ideology of entitlement that continues to reject the very notion of cost-sharing—even though significant policymakers in most of these countries know that many parents are, in fact, already paying large sums through the fee-paying tracks or even higher fees to the growing numbers of private institutions.
2. They are, at least arguably, inequitable in that the students most likely to attend “free”—that is, at taxpayer expense—are the children of the most advantaged, many of whom could and would pay a modest tuition. Musisi

and Muwanga (2003) write: “An oft-cited danger of the introduction of fees at Makerere is an increase in the gap between the ‘haves’ and the ‘have-nots’ in access to higher education. Large numbers have been admitted, but access has not broadened” (p. 51).⁵

3. The differences in actual academic abilities and academic potentials between the lowest-scoring winners (those who barely achieve one of the limited fee-free slots) and the highest-scoring losers (those who score just below the cut-off point and who therefore can attend only by paying fees) is probably slight and possibly immaterial. In other words, there will almost certainly be considerable overlap at this admission margin, with the best of the fee-payers inevitably outperforming academically the worst of those attending tuition-free.
4. Finally, depending on the validity and integrity of the selection system for the limited fee-free places, the very considerable stakes involved in getting one of those places introduces the possibility (indeed, almost the inevitability) of corruption somewhere in the process.

In short, higher educational policies in more and more sub-Saharan African countries are on a clear, even if slow, trajectory toward sharing more of higher education costs with parents and students. Despite continuing political and ideological barriers to such policies, especially where governments are apprehensive about student strikes, the more formidable constraints to a more aggressive adoption of cost-sharing policies may be increasingly technical. These constraints are specifically related to two difficulties arising from efforts to combine a greater reliance on contributions from parents and students with maintaining and enhancing higher educational accessibility. First is the difficulty of fairly and cost-effectively assessing parental (or family) means, or its converse—the financial need remaining after all family and other resources (including savings and available current income) have been gathered to send a student to the university. In the United States and most of the Organization for Economic Cooperation and Development (OECD) countries, both earned income (from wages and salaries) and unearned income (interest, dividends, and rents) are generally known and voluntarily reported, making financial means relatively easy to verify, generally from income tax returns. In developing countries, however, income or earnings may be from multiple sources, often erratic, frequently not reported or even recorded, commonly noncash, and sometimes involving large extended families. In such cases, proxies for income or earnings must be found that are not disguisable, transferable, or contestable. Examples are such easily observable characteristics as the occupation of principal wage earner, the educational level of mother and/or father, the number

of cattle owned, indoor plumbing in the home, etc. (McMahon, 1988; Tekleselassie & Johnstone, 2004, in this issue; Wolanin, 2002). This serious problem deserves much more attention from academics and policy analysts that it has thus far received.

The second of the essentially technical problems is the challenge of establishing a student loan program that both promotes accessibility and expanded participation and at the same time results in real cost recovery. Most loan programs in Africa (as in much of Latin America and elsewhere in the developing world) simply do not recover payments (Johnstone, 2000; Ziderman, 2002; Ziderman & Albrecht, 1995). It is to this problem that I now turn.

Cost-Sharing and Student Loans in Africa

Student loans, or any other sort of deferred payment plans (including all forms of income contingent and graduate tax schemes, regardless of what they may be called,⁶ as well as more conventional, scheduled repayment forms), have been on the agenda of higher educational policy reforms for decades, including those directed at the countries of sub-Saharan Africa (Woodhall, 1988, 1990, 1992; World Bank, 1994, 2002; Ziderman & Albrecht, 1995). In theory, a student loan program combines the financial imperative of taxpayer revenue supplementation with the social and political imperative of expanding higher educational accessibility. At the core of the student loan concept is the belief that it is reasonable to expect students who will benefit so markedly from the privilege of higher education to make a modest contribution toward its considerable costs. Student loans contribute toward equity by insulating this contribution from both the affluence and the attitudes of their parents. Adrian Ziderman (2002) claims that government-sponsored student loan schemes are or have been in place in some 50 countries around the world. These schemes serve a combination of objectives including: (a) revenue diversification or income generation; (b) university system expansion; (c) equity, or the targeted enhancement of participation by the poor; (d) specialized manpower needs; and (b) the financial benefit of students generally, expressing their greater time preference for present money.

At the same time, student loans programs around the world have compiled a dismal record of failures (Ziderman & Albrecht, 1995), including notable African examples in Ghana, Kenya, and Nigeria. Several newer and lesser-known programs, such as those in Tanzania and Burkina Faso, also look like failures when measured by the criterion of cost recovery. At present, only the South African loan program appears to be successful—with success defined as (a) expanding accessibility by putting critical funds into the hands of students, and (b) generating a cost recovery that shifts some of the costs of this financial

assistance to the students themselves. Revitalized and supposedly reformed loans programs in Ghana and Kenya are promising, although still somewhat less than successful as of this writing in the summer of 2003.

Excessive Subsidization

The essential failure of these student loan programs (and there are many more failures in Asia and Latin America) can generally be attributed to one or both of two factors: excessive built-in subsidization, and insufficient and/or overly costly collection. Student loan programs, whatever they may be called, are frequently doomed to fiscal failure by a built-in taxpayer subsidy that would fail to generate a sufficient cost recovery (measured by the present discounted value of the reasonably anticipated stream of future repayments) regardless of the successful execution (e.g., low defaults) of the loan plan. These interest subsidies may be in the form of a zero rate of interest during the in-school years, the so-called grace period before the first payments are even expected, or an interest rate that is far below the cost of money to the lender (generally the government). Such a built-in interest subsidy is especially stark in cases where the contractual rate of interest is both low and fixed, and where the country's economy is experiencing considerable inflation. Taken together, these factors considerably erode the present value of all future payments. However, there is even a substantial built-in subsidy in the increasingly popular student loan programs (Australia, New Zealand, Sweden, the United Kingdom) that allow the interest rate to vary annually according to the prevailing rate of inflation, effectively recovering (assuming no defaults or other losses) exactly what was lent or borrowed in real, or inflation-adjusted, terms (i.e., a zero real rate of interest).

Indeed, insofar as cost recovery was a major goal of early student loans programs (and there is reason to believe that it was not), Kenya's former University Students Loan Scheme (1974–1975 to 1994–1995) at 2% interest or the current “reformed” Higher Education Loans program (1995–1996 to the present) at 4% (Oketch, 2003), or Ghana's current (summer 2003) SSNIT Student Loan Scheme limiting the borrower's rate to 3% (Ghana Website; Norty, 2002), had no chance of complete or near-complete cost recovery even with no defaults. Depending on the prevailing rates of inflation—quite high in both countries in many of these years—these interest rates represent considerable public subsidies, especially when loans are extensively disbursed.

The cost-effectiveness of this sort of built-in loan subsidy depends not just on the spread between the cost of money and the ultimate recovery rate, but on the degree to which a particular level of subsidy is necessary to get the desired level of student participation. Arguably, some subsidy is always necessary, or at least politically expedient; there are virtually no examples of generally

available student loan programs in any country where there is no governmental subsidy whatsoever. However, there is clearly a fiscal trade-off among (a) outright grants or bursaries, (b) the effective grants represented by the loan subsidies, and (c) the tuition itself. Moreover, there should, at least in theory, be some combination of levels that is most cost-effective for the aims of the government.⁷

The most interesting African case concerning purposefully built-in subsidies is the South African loan bursary feature that forgives up to 40% of the final accumulated loan indebtedness if the student successfully passes 100% of his or her courses. Clearly, this repayment forgiveness seriously cuts down the stream of repayments and requires increased injections of new government loan capital into the program than would be otherwise necessary. At the same time, such forgiveness is less a built-in feature of the loan program itself than a planned form of academic performance bursary, with its own goals, that just happens to be attached to the loan program for convenience. Whether this is a cost-effective expenditure of the South African Rand may be debated; its proponents in South Africa believe that it is (Jackson, 2002). In any rate, it is a deliberate expenditure by way of forgiving student loan repayments and, as such, should not be interpreted as detracting from the fiscal success of the South African student loan program itself.

A particular disadvantage of highly subsidized loans in developing countries is the consequent need to ration the loans (that is, to ration the subsidies) by a means test—which returns us to the first of the so-called technical problems that must be addressed in implementing cost-sharing in higher education. Because of the difficulties already mentioned in situations in which family incomes are not likely to be known or easily verified, a minimally subsidized student loan is not only less costly to the government or taxpayer (allowing other higher-priority public expenditures to be made) but also requires less costly verification of the loan's entitlement.⁸

The Failure to Collect

The second reason for the many student loan program failures is poor execution, especially the failure to collect repayments. Student loans are difficult to recover in the best of circumstances, even from guarantors or cosignatories. Students frequently—and especially in sub-Saharan Africa—face prolonged unemployment after graduating from the university in spite of all the talk and all the theory about high private returns from higher education. They move around, return to studies, and often leave the country for long periods. They may not understand the need to maintain a good credit rating; indeed the very notion of credit may be foreign to them. They may well not have truly understood

that the money they received was to be repaid and that nonrepayment would carry with it some adverse consequences.

Another and perhaps more serious problem, but also one which is more easily remedied, is that African governments have frequently colluded in this failure to take repayment obligations seriously. Records of borrowers have been lost or possibly not kept at all. There is little evidence of conscientiously counseling students about the implications and responsibilities of their loans, either before the borrowing, during the university years, or just before departure when the repayment obligation should begin. Indeed, some governments seem to have engaged in virtually the opposite behavior: deliberately downplaying repayment obligations, presumably out of a fear of student violence and political destabilization. Thus, the new (1988) Ghana student loans that were to have been secured in event of nonrepayment by the future pensions of the borrowers were instead billed as a loan in which “*the student pays nothing out of pocket while studying nor does the graduate suffer any reduction during his/her working life*” (Norty 2002, p. 214; emphasis mine). Such a construction doomed the plan’s financial viability, which was financed by the social security national insurance trust (SSNCT), by severely diminishing the repayment revenue stream that was the basis of the value of the student loan notes, now held as assets to cover the future pension liabilities of the trust. Moreover, even if the pension scheme had remained financially viable, such a construction would have meant that many student borrowers would have found themselves with no pensions at retirement.

Finally, student loans with the best of lending practices are expensive to collect, partly because of the need to maintain current records and “chase down” the borrowers, but also because the amounts are generally small to begin with, making the administrative and servicing costs, even if done professionally and with good technology, expensive on a per-dollar-of-loan basis. When these conditions are considered in a sub-Saharan Africa context—with little culture of credit, uneven postal and telephone services, generally inefficient government bureaucracies, and unevenly enforced official machinery for keeping track of people (such as requiring taxpayer or pension contribution numbers of all employees)—it is little wonder that regular repayments are the exception and that borrowers are frequently lost altogether to the systems.

A possible solution to this problem is to have the loan repayments collected by the employer at the point of wage or salary payment—just as employers are expected to collect pension contributions or withhold income taxes. Such mandatory employer collection does not have to be associated with income-contingent loans, in which the repayment due is defined as a percentage of earnings and is withheld (collected) by the employer along with mandatory income tax withholding and pension contributions. In fact, fully income-

continent loans may be problematic in much of sub-Saharan Africa, where earning streams may be multiple, frequently informal, often unreported, and essentially untraceable (Johnstone, 2003b). But if the repayment due is on a fixed schedule, or if the income-contingent repayment is independently calculated (i.e., on some basis other than a single wage or salary stream), an employer (who need not be the sole employer) can still remove the loan repayment automatically, inexpensively, and in a way that is difficult to evade.

Thus, for example, the South African National Student Financial Aid Scheme, which in 2001 lent ZAR657 million (US\$158.5 million) to some 93,400 students (99% of whom were Black), has authority to compel employers to withhold student loan repayments from employees whose payments are in serious arrears, regardless of whether the repayment has been calculated on an income-contingent basis or on some other basis (Jackson, 2002). Similarly, the restarted and reformed Kenyan Higher Education Loans Board can instruct any employer to deduct from wages an amount due on a student loan—including student loans dating as far back as the 1950s that were essentially forgotten, both by the borrowers and by the government (Kenya Loan Website).

Tuition Fees, Student Loans, and Parent/Student Shares

A form of higher educational finance that combines the concept of a tuition fee, or a payment for a portion of the costs of instruction, with a student loan, or the deferral of the student's share of higher educational expenses to the future, is Australia's Higher Education Contribution Scheme, or HECS (Chapman, 2002; Chapman & Ryan, 2002). This model imposes a tuition fee, but allows it to be paid in the future as a percentage of the student's earnings. The Australian HECS, which has been urged as a model even for some developing countries (Chapman, 1999), is more than a way for the student borrower to manage his or her indebtedness. Rather, it is being promoted as an alternative to, or a replacement for, what has commonly been thought to be the parent's share of higher educational costs. Thus, the applicability or inapplicability of an Australian HECS-type income-contingent loan as an alternative to up-front fees does not rest merely on the government's ability to know and verify all borrowers' incomes for most of their earning lifetimes to assure the scheme's financial viability. Rather the model's applicability depends in a very fundamental way on the respective roles assigned to parents and students in the underlying concept of cost-sharing.

Cost-sharing is frequently advanced as though the student's and the parent's (or family's) shares were theoretically and practically indistinguishable. However, the theoretical rationales underlying the expectation of a parent's (or perhaps an extended family's) share and a student's share are quite different. A

parent's contribution is based on the principle that the student is still, at least through his or her first degree (assuming no significant time lapse between the completion of secondary and the beginning of tertiary education), a financially dependent child and that parents have an obligation to contribute financially to the expenses associated with their children's higher educations, at least to the limit of their financial ability. Additionally, it is assumed that the parents derive considerable satisfaction from their children's higher education and derive more satisfaction (and even some status) from being able to place their children in the "best" university they can afford and for which their children qualify.

The theory behind the appropriateness of a student contribution, on the other hand, is based almost entirely on the assumption of substantial personal and private benefits from the higher education. These presumed benefits may be manifested in higher lifetime earnings, greater status and influence, more "life options," or simply the personal satisfaction that comes (to most people) from being better educated. This theoretical appropriateness of a student contribution is buttressed by the fact that higher education in almost all countries (including developing and transitional countries) tends to be partaken of disproportionately by an intellectual and social elite—further supporting the concept that students should contribute something toward the costs of their higher education. It is this principle—quite apart from those undergirding parental contributions—that calls for student loan programs so that students can defer this contribution until they are financially able to do so.

The appropriateness of the income-contingent loan concept as a way for students to more easily handle their repayment obligations depends in substantial part on the degree to which incomes and earnings can be accurately and verifiably tapped to generate the payments to recover the loans. In this respect, the multiple, informal, unreported, and essentially untraceable forms of income that are characteristic of developing countries are going to make the cost recovery problematic at best, as reported above. But equally problematic—perhaps more so—to the large goal of revenue diversification is the implication within the Australian HECS model that the parental contribution is no longer central to cost-sharing. For sub-Saharan Africa, the extreme need for nongovernment revenue for higher education, the problematic cost recovery of any student loan program, and the demonstrable willingness and ability of a significant number of parents in all African countries to contribute to the higher education of their children suggest together that a parental contribution is not a potential source of revenue that can be foregone.

Conclusions on Tuition Fees and Student Loans

Although there is great variation within the higher educational financing schemes in sub-Saharan Africa, and although even descriptive (not to mention genuinely analytical and evaluative) information is uneven at best,⁹ I offer the following conjectures about the search toward workable solutions to the many problems in financing higher education in sub-Saharan Africa.

1. Sub-Saharan African universities and other tertiary level institutions need to supplement their limited government (taxpayer) revenues with revenues from parents and students.
2. These revenues should take the form both of user charges for governmentally or institutionally provided lodging and food and of tuition fees to cover a portion (say, one-quarter) of institutional costs of instruction.
3. Given the inevitable political resistance to cost-sharing, a multi-year progression of stages should be presented, with further shifts of costs to parents and students clearly supplemental to government funding, and tied as much as possible to: (a) improvements in the quality of higher education, (b) expansion of opportunities and enrollments, and (c) extension of participation and accessibility to hitherto underserved populations.
4. Universities must actively and transparently continue to seek efficiencies (even at some disaccommodation and pain) that minimize the per-student costs of instruction without jeopardizing quality.
5. The imposition of a tuition fee should be accompanied by a program of means-tested grants, drawing on clearly identifiable and verifiable characteristics (i.e., proxies for income) such as parental occupation and educational levels, type of housing, ownership of car or access to a driver, children's schooling (specifically, whether tuition fees are being paid for secondary education), and the like.
6. A single-track, up-front tuition fee (albeit one that can vary by institution and/or by program) is preferable to a dual-track system that rations a small number of tuition-free places according to measured academic preparedness—and thus inevitably rations according to the social class of the aspiring students. However, a dual-track tuition fee is preferable to no fee at all and should be implemented if it is politically and/or constitutionally impossible to collect tuition fees from all.
7. Politically acceptable language and euphemisms for tuition fees such as “deferred contributions” may be necessary but should not have the effect of substituting a larger (albeit deferred) contribution from students for an up-front contribution (a tuition fee) expected from parents to the limit of

their financial ability to pay. Similarly, an expected student contribution through a student loan program (income-contingent or otherwise) is probably a good step, and it may be a way to accommodate an up-front tuition for some students. But it should not be adopted as a wholesale substitute for an up-front tuition to be collected wherever possible from parents or extended families.

8. Setting tuition fees should be depoliticized as much as possible. Countries should consider an independent but politically accountable board, buffered from both the government and the universities and other tertiary institutions, to establish the base year tuition fee(s) and annual increases.
9. A student loan program should be designed to collect something reasonably close to the amounts lent, according to the present value of the reasonably expected repayments discounted at the government's borrowing rate, not counting losses from defaults and other purposefully designed subsidies or repayment forgiveness features.
10. Student loan programs must be equipped with the legal authority to collect, with the technology to maintain accurate records, with collectors who can track borrowers and verify financial conditions, with advisors and repayment counselors in the universities, and with the ability to enlist both the government's tax-collecting authority and employers in the collection of repayments.
11. An income-contingent repayment mode should not be employed unless incomes can be reasonably verified. If income contingency is politically necessary, it should not be the "default" repayment obligation, but rather an optional means of payment that requires borrowers to demonstrate that they can discharge the repayments by paying a percentage of earnings from a single employer who represents the dominant earnings stream.
12. Mechanisms need to be added to the repayment process, especially if the repayment mode is a conventional, fixed schedule one, to accommodate borrowers whose earnings are low, either temporarily or permanently. In short, a conventional loan needs the same kind of genuine low earnings protection that presumably follows by definition from an income-contingent form of repayment obligation.
13. A loan program needs to have a collection agency that is viewed as professional, incorruptible, and technically expert. Universities and other eligible tertiary level institutions must be enlisted as partners in the program, especially in impressing upon the student recipients that loans are legally enforceable obligations that must not be taken lightly or used in excess, and

in keeping track of the borrower's whereabouts, at least during the in-school years.

African universities continue to experience severe financial austerity to the detriment of both institutions (and their faculty, staff, physical plants, and most of all their students) and the countries as a whole (due to the constraints on participation or accessibility). However, throughout sub-Saharan Africa are university leaders, faculty, and ministers who are imaginative, courageous, and visionary, and there are indeed *things that work*, giving hope to a continent that needs and deserves both strong higher educational institutions and accessibility to them.

Notes

- 1 Where technology is introduced into tertiary education, it tends to add costs—and arguably to add quality, and thus possibly to add efficiency—but rarely to diminish unit costs.
- 2 Time and space do not allow a discussion here of those elements of the tertiary education financial reform agenda that are essentially cost-side—that is, efforts to increase productivity or efficiency. Cost-side measures remain important in spite of the fact that the lowest-hanging fruits of productivity enhancements have in most instances been harvested long ago. However, placing all of the hoped-for solutions on the revenue side—and primarily on variations of cost-sharing—is almost certainly politically untenable. Thus, revenue-side solutions, especially those that entail shifting of higher education expenses to parents and/or students, must in most instances be accompanied by a continuing effort to find additional solutions on the cost side—probably causing additional pain and altered behavior on the part of faculty, staff, university management, and government bureaucracies.
- 3 The two principal issues in such a plan, especially in its applicability to developing and/or transitional countries, are (a) the degree to which earnings and other forms of incomes are likely to be known and verifiable and thus to be reported and “taxed” for the purpose of repaying the student loan debt, and (b) the degree to which such a deferred tuition has the effect of transferring what might have been a parent-borne expense (i.e., the up-front tuition fee) to an additional student-borne burden, which is likely to be unevenly collected at best (Johnstone, 2003b).
- 4 Nigeria has adopted a slightly different kind of dual track fee policy. Its politically visible and volatile national universities have been kept tuition-free, while the regional state universities have been allowed to charge tuitions (Odebiyi & Aina, 1999, cited in Ishengoma, 2002).
- 5 Such fees, in accord with what is called “high tuition-high aid” in the United States, could in theory have the opposite effect and actually broaden access by

increasing the availability of grants or bursaries for the less fortunate. Probably Makerere and other African universities have been in such dire financial straits that the expansion of accessibility has been a lesser priority, but governments could steer them in this directions with appropriate rules and incentives.

- 6 Policymakers throughout much of the world, politically apprehensive about requiring students to bear some costs for their higher education, are increasingly turning to euphemisms for both tuition and loans, referring to “post-graduate contribution schemes”—for example, Australia’s Higher Education Contribution Scheme (HECS) or Scotland’s mandatory “contributions” to the Scottish University Endowment Fund.
- 7 Similarly, there are trade-offs among the various kinds of built-in student loan subsidies, including (a) total subsidization of interest during in-school years and grace period versus either substantial or minimal subsidization of interest during the repayment years; and/or (b) subsidization for all students, versus subsidization only for students whose parents were poor at the time of the initial borrowing, versus subsidization of borrowers who themselves experience low incomes during their repayment years (which is the essence of the so-called income-contingent loan plans).
- 8 Expressed another way, a minimally subsidized loan reduces both needless lending and also the effective opportunity cost of whatever unnecessary lending might remain.
- 9 The Association of African Universities has publicly but carefully endorsed cost-sharing, among other elements of reform (Sawyer, 2002). A 10-nation conference (predominantly Eastern and Southern Africa) in 2001, sponsored by the University of Dar es Salaam and the University of Buffalo’s International Comparative Higher Education Finance and Accessibility Project, endorsed cost-sharing and provided information from most of the countries (Mwamila et al., 2003). A larger conference sponsored by the Association of African Universities and the World Bank in September 2003, for which this paper and others were first written, also suggested that the concept of cost-sharing is widely accepted, although the execution is still uneven and unevenly described.

References

- Chapman, B. (1999, June). *Reform of Ethiopian higher education financing: Conceptual and policy issues world bank*. Paper written for the Economics of Education Thematic Group.
- Chapman, B. (2002, July). A submission on financing issues to the Department of Education, Science, and Training. Inquiry into Higher Education Reform.
- Chapman, B., & Ryan, C. (2002). Income contingent financing of student charges for higher education: Assessing the Australian innovation. In M. Woodhall (Ed.), *Paying for learning: The debate on student fees, grants and loans in interna-*

- tional perspective* (pp. 64-81). Special international issue of *The Welsh Journal of Education*, 11(1).
- Court, D. (1999). *Financing higher education in Africa. Makerere: The quiet revolution*. Washington DC: The World Bank. http://www.worldbank.org/afr/findings/english/find_143.htm.
- Department of Education and Skills [U.K.]. (2003). *The future of higher education*. London: Her Majesty's Stationary Office.
- Ghana. Social Security National Investment Trust Webpage. <http://www.ssnit.com/>
- Ishengoma, J. (2002). Financing higher education in the Federal Republic of Nigeria: Developments and Trends. University at Buffalo Center for Comparative and Global Studies in Education. Available on the Website of the International Comparative Higher Education Finance and Accessibility Project Website, <http://www.gse.buffalo.edu/org/IntHigherEdFinance/>.
- Jackson, R. (2002). The national student financial aid scheme of South Africa (NAFAS): How and why it works. In M. Woodhall (Ed.), *Paying for learning: The debate on student fees, grants and loans in international perspective* (pp. 82-94). Special international issue of *The Welsh Journal of Education*, 11(1).
- Johnstone, D. B. (1986). *Sharing the costs of higher education: Student financial assistance in the United Kingdom, the Federal Republic of Germany, France, Sweden, and the United States*. New York: College Entrance Examination Board.
- Johnstone, D. B. (2000). *Student loans in international comparative perspective: Promises and failures, myths and partial truths*. Buffalo, NY: University at Buffalo Center for Comparative and Global Studies in Education. Available on the Website of the International Comparative Higher Education Finance and Accessibility Project Website, <http://www.gse.buffalo.edu/org/IntHigherEdFinance/>.
- Johnstone, D. B. (2002). Challenges of financial austerity: Imperatives and limitations of revenue diversification. In M. Woodhall (Ed.), *Paying for learning: The debate on student fees, grants and loans in international perspective* (pp. 18-36). Special international issue of *The Welsh Journal of Education*, 11(1).
- Johnstone, D. B. (2003a, June). Cost-sharing in higher education: Tuition, financial assistance, and accessibility. *Czech Sociological Review*, 39(3), 351-374.
- Johnstone, D. B. (2003b, November). Income-contingent loans and graduate taxes: Can they work in developing and transitional countries? Paper delivered at the annual meeting of the Association for the Study of Higher Education, Portland Maine, November 2003. Available on the Website of the International Comparative Higher Education Finance and Accessibility Project Website, <http://www.gse.buffalo.edu/org/IntHigherEdFinance/>.
- Kenya. (2003, July 1). Higher Education Loans Board Webpage. <http://www.helb.co.ke/Helb/index.jsp>.

- Kiamba, C. (2003). *The experience of the privately sponsored studentship and other income-generating activities at the University of Nairobi*. Paper presented at a regional training conference sponsored by the Association of African Universities and the World Bank, September 2003, Accra, Ghana. Published in this issue.
- McMahon, W. (1988). Potential resource recovery in higher education in the developing countries and the parents' expected contribution. *Economics of Education Review*, 7(1).
- Masisi, N. B., & Muwanga, N. (2003). *Makerere University in transition, 1993-2000*. Oxford: James Curry/Kampala: Fountain Publishers.
- Mwamila, B. L. M., Omari, I., & Mbuya, E. (Eds.). (2002). *Financing of higher education in Eastern and Southern Africa: Diversifying revenue and expanding accessibility*. Proceedings of a Conference on the Financing of Higher Education, March 24-26, 2001, Dar es Salaam. Dar es Salaam: University of Dar es Salaam.
- Norty, V. O. (2002). Student loan scheme: The Ghana experience. In B. L. M. Mwamila, I. Omari, & E. Mbuya (Eds.), *Financing of higher education in Eastern and Southern Africa: Diversifying revenue and expanding accessibility* (pp. 222-226). Dar es Salaam: University of Dar es Salaam.
- OKetch, M. O. (2003). Privatization and diversification of resources in Kenya's higher education system. Unpublished paper, Peabody College, Vanderbilt University, Nashville, Tennessee.
- Ssebuwufu, J. P. M. (2002). University financing and management reforms: The experience of Makerere University. In B. L. M. Mwamila, I. Omari, & E. Mbuya (Eds.), *Financing of higher education in Eastern and Southern Africa: Diversifying revenue and expanding accessibility* (pp. 85-95). Dar es Salaam: University of Dar es Salaam.
- Sawyer, A. (2004). *Challenges facing African universities: Selected issues*. Accra, Ghana: Association of African Universities.
- South Africa. (2003, July 1). National Student Financial Aid Scheme Webpage. https://www.nsfas.org.za/nsfas_main.htm.
- Task Force on Higher Education and Society. (2002). *Higher education in developing countries: Peril and promise*. Washington, DC: World Bank and UNESCO.
- Tekleselassie, A. A. (2002). *Targeting subsidies to higher education: Means testing in comparative perspective*. Paper written for the Center for Comparative and Global Studies in Education, State University of New York at Buffalo. Available on the Website of the International Comparative Higher Education Finance and Accessibility Project Website, <http://www.gse.buffalo.edu/org/IntHigherEdFinance/>. Also published this issue.

- Tekleslassie, A. A., & Johnstone, D. B. (2004). Means testing: The dilemma of targeting subsidies in African higher education. *Journal of Higher Education in Africa*, 2(1): this issue.
- Woodhall, M. (1988). Designing a student loan programme for a developing country: The relevance of international experience. *Economics of Education Review*, 7(1), 153-161.
- Woodhall, M. (1990). *Student loans in higher education [in] English-Speaking Africa*. Paris: International Institute for Educational Planning.
- Woodhall, M. (1992). Changing sources and patterns of finance for higher education: A review of international trends. *Higher Education in Europe*, 17(1), 141-149.
- Woodhall, M. (Ed.). (2002). *Paying for learning: The debate on student fees, grants and loans in international perspective*. Special international issue of *The Welsh Journal of Education*, 11(1).
- Wolanin, T. (2002, Summer). Means testing in developing countries. *International Higher Education*, No. 28, pp. 9-11.
- World Bank. (1994). *Higher education: Lessons of experience*. Washington, DC: The World Bank.
- World Bank. (2002). *Constructing knowledge societies: New challenges for tertiary education*. Washington, DC: The World Bank.
- Ziderman, A. (2002). Alternative objectives of national student loan schemes. In M. Woodhall (Ed.), *Paying for learning: The debate on student fees, grants and loans in international perspective* (pp. 37-47). Special international issue of *The Welsh Journal of Education*, 11(1).
- Ziderman, A., & Albrecht, D. (1995). *Financing universities in developing countries*. Washington, DC: Falmer Press.