

Draft for Discussion

**Making Student Loans Work
in Low- and Middle-Income Countries:
Enhancing Asset Values and Tapping Private Capital**

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Making Student Loans Work in Low- and Middle-Income Countries: Enhancing Asset Values and Tapping Private Capital

D. Bruce Johnstone and Pamela Marcucci*

Abstract: The need for greater higher educational capacity, quality, and equity is leading more and more countries to turn to student loan schemes, both as a form of student assistance and also (at least desirably) as a crucial source of revenue to supplement the increasingly inadequate revenue available from governments and families. A serious problem, especially in low and middle income countries, is that the supply of capital for new and renewed student lending is dependent on a combination of prior year repayments—which in most schemes are woefully low due to excessive and needless subsidization and very high default rates—and the current year’s governmental operating budget—which pits the need for new loan capital against all other politically and socially compelling claims, such as basic education, public health, a social safety net, and the need for economic infrastructure.

The problem, to oversimplify, is that most of these student loan schemes treat the loans as *expenditures* rather than as *assets*. Student loans have asset value when they can be sold, borrowed upon, or securitized (that is, used as a basis for a lending agency issuing its own securities based on its anticipated loan repayments)—in all instances taping the private capital market. The asset values of student loans are enhanced in three basic ways: (1) by improving the design of the loan scheme (primarily the effective rate of interest); (2) improving the recovery (that is, lowering the rates of arrearage and default); and (3) covering the risk that will inevitably remain in ways other than 100 percent governmental guarantees—which, by international lending rules, must be fully expensed in the operating budget, thus imposing the same operating costs as drawing on the budget for the loan capital itself.

This paper is a theoretical as well as an empirical examination of ways in which student loan schemes, especially in low and middle income countries, can enhance the asset value of their loans and begin to tap the private capital markets for the annually increasing volume of new lending that their higher educational systems will require.

The steeply increasing costs of higher education, propelled by the combined trajectories of rising per-student costs and rising enrollments, have outrun the availability of public resources in almost every country. This has led most countries to search for non-governmental revenues to assist in supporting these ever-increasing costs of their higher educational enterprises. Such non-governmental, or private, revenue can come from the entrepreneurial activities of the university as a whole (e.g. selling or leasing assets) or of a department, school, or member of the faculty (e.g. contract research or revenue-supported instruction). It can come from philanthropy, either in the form of

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returns on past philanthropy (endowment) or from current giving, restricted or unrestricted. But the form of private revenue that is the most financially significant, sustainable, least disruptive to instruction (indeed, probably enhancing the quality of instruction), and supportable on grounds of both efficiency and equity has come to be known as *cost-sharing*.

Cost-sharing is both a statement of fact—i.e. that the costs of higher education are shared by governments (or taxpayers), parents, students, and philanthropists—and also a term designating a worldwide policy shift of the costs of instruction as well as the costs of student living from what was at one time, in many countries, a predominant or even exclusive reliance on governments to being shared by governments, parents (or extended families) and students. This shift, as documented by Johnstone (1986, 2004, 2006a) and Johnstone and Marcucci (2010 forthcoming), may take the form of tuition fees being introduced where instruction was formerly free (as in many countries in Europe or in the post-communist world) or being increased at rates well above the increase in underlying costs in countries in which tuition has long been accepted (as in the United States, Canada, and many Asian countries). The shift can also take the form of introducing fees for food, lodging or supplies that used to be heavily subsidized or even provided free of all charge by the government. A shift can even take the form of a policy-induced shift from highly subsidized public institutions to much less subsidized, tuition-dependent, private colleges and universities (whether non-profit or for-profit). Finally (or additionally), the shift of costs from government to students can take the form of shifting financial assistance from grants to loans, or from highly subsidized loans (that is, a combination of a *true loan* and a substantial *effective grant* in the form of embedded interest subsidies) to less-subsidized or even to unsubsidized loans.

I

Student Loan Schemes

The increasingly accepted notion that a portion of this non-governmental revenue is appropriately borne by the student rather than—or in addition to—the parents presents the need for ways to allow much or most of this student-borne share of costs to be deferred into the future, when the individual is likely to have entered the full-time workforce (presumably aided by his or her higher education) and is able to begin repaying a portion of the costs that were advanced either by the government or by the private capital market (or by a combination of both in ways that we shall discuss in this paper). Student loan schemes requiring some degree of governmental sponsorship—that is, for which governments establish the rules, absorb some or all of the risk, and generally provide some direct or indirect subsidies—are increasing throughout the world. Salmi and Hauptman (2006) estimated more than 60 student loan schemes, and Shen and Ziderman (2009) estimated more than 70, but this number is almost certainly growing annually, with many countries sponsoring separate loan programs differing by e.g. levels of subsidization, nature of underlying repayment obligations, target borrowing populations (and hence degree of default risk), and eligible institutions and/or programs. The University at Buffalo's *International Comparative Higher Education Finance and Accessibility Project* found at least 13 in Africa alone in 2009, with several more under serious discussion or in the process of implementation (Marcucci and Johnstone 2009).

Thus, any significant share of higher education costs passed on to students—either via tuition fees or via the expenses of student living or both—requires there to be some form of student loans. Student loan schemes attempt to realize two quite different and almost contradictory policy aims. The first aim is to provide an income stream from students, albeit sometimes far in the future, oftentimes substantially subsidized, and always with considerable risk of non-repayment, to supplement the increasingly inadequate revenue streams from governments (taxpayers) and parents (or extended families). This supplementary revenue, or cost-sharing, is needed in order to compensate for the diverging trajectories, in most countries, between the steeply rising costs and revenue needs of higher education and the limited ability of families to keep up with these rising costs or of governments to fund these ever-increasing costs with the tax revenues and ordinary deficit financing available from public treasuries. The second aim of student lending is to widen higher educational participation by allowing students, many of whom, for a variety of reasons, will have little or no financial support from their families, to invest in their own higher educations—investments that are thought in most economies to bring returns in the form[s] of higher lifetime earnings, less risk of unemployment, more career and general “life” opportunities, the advantage of greater social status, and the consumption value of learning and of the pleasant higher educational experience.¹

However, unlike other forms of investment, where the capital or real property can be repossessed in the event of default, the education received cannot be similarly repossessed in the event of default on the student loan. Therefore, strictly private student loans—that is, with no governmental participation—are usually limited to the most credit-worthy students, such as advanced professional students in medicine or law or management—or to students whose credit-worthy parents have co-signed the loan, making the parents, as they are assuming the repayment obligation, the real borrower.² To the extent that a student loan scheme is to be *generally available*—that is, not restricted to the most credit worthy students or to student with the most credit worthy parents, but available to all or most students —such loans will carry a great deal of risk, almost always requiring governmental participation. This participation includes the establishment of rules (e.g. loan limits, interest rates, and repayment periods); subsidies (if there are to be any); and generally the assumption of all or most of the risk of default. Governmental participation may, but does not have to, include loan origination, collection, or the provision of capital. This paper is about the mitigation of risk and the provision of capital: specifically, about turning away from an excessive and unnecessary reliance on governmental budgets and turning toward the private capital market for more of the capital provision—all the while preserving governmental participation for the elements of a student loan scheme that continue to need government.

¹ Some observers see a third aim, which is simply to put money into the hands of students, either as a form of income redistribution or as a kind of pay-off to students, who may be viewed, especially in developing countries, as politically volatile and threatening. However, student loan schemes that place no value on recovery—e.g. that are excessively subsidized and/or lackadaisically collected—are very expensive and cost *ineffective* for virtually all aims.

² Or, by the perspective that the bearer of risk is the true lender, parental co-signatories can also be considered the true lenders.

The literature on student loans, particularly on governmentally-sponsored loan schemes, is voluminous (e.g. Barr 2001, 2009; Chapman 2006a, 2006b; Johnstone 2006a, 2006b, 2006c; Salmi and Hauptman 2006; Usher 2005; Woodhall 2002; Ziderman 2004, Ziderman and Bevc 2009). For the purpose of this study, the following points are important and bear summarizing:

1. Our use of the term *student loan* applies to all enforceable obligations upon a student or a graduate to repay in the future, whether the loan has covered a portion of tuition fees or living expenses or both, and whether obligation is for a fixed schedule of payments (i.e. a *conventional*, or *mortgage-type*, loan) or a portion of future earnings or income (i.e. an *income contingent* loan).
2. We will also refer to the obligation as a *loan* whether it is openly acknowledged to be such, or is referred to by some euphemism such as a *deferred obligation*, a *financing scheme*, or a *graduate tax* (sometimes in order to disguise the fact that the obligation is, in truth, a loan). It is also a *loan* whether the borrowed funds pass through the hands of the student and are then sent on to the institution in the form of a tuition fee, or whether they are paid directly to the institution and the repayment obligation is incurred through either matriculation or graduation or both. (Thus, Australia's Higher Education Contribution Scheme, the former Scottish income contingent obligation to the Scottish University Endowment Fund, and Ethiopia's Graduate Tax are all *student loans*, even though money does not pass through the hands of the students.)
3. Student loans can be made by banks, by the government (or by a governmental agency), or by the college or university (in the latter case then sold, either to an agency of the government or directly to the private capital market, whichever is the provider of the capital).
4. To the extent that student loans are in part to shift a portion of costs (whether the costs of instruction or student maintenance or both) from governments to students—as opposed to simply placing public money in the hands of students—the student loan scheme must have an anticipated stream of repayments, the value of which is determined by the interest rate and the extent of recovery, and is represented by the discounted present value of this repayment stream.
5. Whether or not student loans are presented explicitly as an element of cost-sharing—that is, stressing recovery—or as a means of putting money in the hands of students for allegedly social objectives, recovery is important. Student loans that are largely recovered—that is, that carry a real interest rate and minimize defaults—can place significantly more purchasing power in the hands of the students and thus can obtain greater access and more participation for the public dollar than either grants alone or very low tuition fees.

The costs of student lending

The costs of student lending include four quite separable components: (1) the cost of capital itself; (2) the costs of servicing and collecting; (3) any subsidy that the government or other third party wants to contribute to reduce the repayment burden of the borrower or otherwise affect the borrower's behavior; and (4) the costs of defaults and all other forms of non-repayment (e.g. death, disability, incarceration, or disappearance). We

will examine each, keeping in mind the theme of this paper, which is to enhance the value of student loans as assets, especially in low- and middle-income countries, so they may be sold, collateralized, or securitized in the private capital market and not have to encumber the government's operating budget, competing with all other pressing public needs.

The cost of capital: The cost of capital, at least in a market economy, is the price, which we call *interest*, established by the market interaction between *savers*—that is, individuals, corporations, and financial institutions acting on their behalf that have more purchasing power than they need at the moment and are willing to sell or lease it for an appropriate price—and *borrowers*, who need more purchasing power than they have at the moment, and are willing to pay a price to the savers for additional purchasing power, either because their immediate need is so great, or because they can invest the purchasing power in productive ways and earn a return on their investment. There are many interest rates depending mainly on the perceived risks of default, the likely future rate of inflation, the rates of return on investments generally, the duration of the loan (or the repayment period), the costs attendant to servicing and collecting the loans, and simply the amount of purchasing power (money) up for sale or lease. The lowest interest rate is generally represented by the market price established on large transactions between a risk-free borrower (e.g. a stable government with sufficient taxing power to assure repayment) and a savings source with a great deal of purchasing power to lend (e.g. an investment bank or pension fund). In most countries, this would be the *government's borrowing rate*. Higher rates of interest, then, would apply to credit-worthy businesses (the prime commercial interest rate) or to home mortgages (with sufficient equity to protect the lender); and higher rates still to unsecured consumer debt.

With the increasing globalization of capital flows, and absent capital controls such as are found in e.g. China and Malaysia, savings tend to flow to places where returns (adjusted for risk) are the highest. Thus, absent country-specific adjustments for especially high risks of default or especially high costs of administration, the cost of capital is essentially a global cost. This global cost of capital will be at its lowest where there are economies of scale and technology along with little or no risk—such as in the sale of United States Treasury notes. On the other hand, the cost of capital for student loans, whether global or more local, will be high. In part this is because of the small denominations, long terms, and mobile borrowers that drive up the costs of collection, as cited below. But the most significant and volatile cost is the risk associated with non-repayment, also elaborated upon below, which is due to a combination of factors, some of which are inherent to student lending, some to prevailing lender practices that might be substantially improved, and some a function of country- and culture-specific factors such as familiarity with credit, job and earnings prospects, and attitudes toward cost-sharing and student indebtedness in general.

The cost of servicing and collecting: The cost of servicing and collecting include the costs of holding the purchasing power, negotiating with potential savers and borrowers, estimating the likely inflation, calculating the likely incidence of non-repayment, collecting the repayments, turning to legal recourse when necessary to collect, and performing all other functions of administration. In governmentally-sponsored student loan programs, much of this can be shifted to the institutions of higher education (which can be required to absorb most of the costs of origination and certification of

borrower eligibility), or to employers (which may be required by law to collect at the point of wage and salary payment), or to other government agencies, such as those charged with the responsibility to tax and to monitor income and earnings. Nevertheless, whoever is paying, the administrative costs associated with student lending will always be high due to: (a) the small size of the individual loans; (b) the costs associated with keeping track of highly mobile students through the in-school, grace, and early repayment years (especially as graduates are moving frequently in search of employment or adventure); (c) the long repayment periods; and (d) the costs associated with collecting loans that are frequently in arrears but short of default. And these costs will be especially high in very low income countries with insufficient (much less electronically stored and accessible) employment, tax, and credit records.

The cost of subsidies: Subsidy costs may include the rather small subsidies needed to compensate for the inherently higher administration and collection costs of student lending in order to bring the required interest rates on student borrowing (excluding any premium for non-repayment) within range of credit-worthy consumer debt or even of governmental borrowing generally. However, subsidies in the form of repayment forgiveness may be considerably higher and more expensive in pursuit of goals that are quite unrelated to student lending *per se*. These goals may include the encouragement of certain kinds of postgraduate professional practice or postgraduate practice in certain socially valuable venues, as in the US and other countries, or simply to encourage retention and program completion, as in South Africa.³ Or, the seemingly excessive subsidies and their attendant taxpayer costs may be more akin to grants given to mollify students or politicians who dislike cost-sharing to begin with. Such costs—that is, those costs that are essentially unrelated to the costs of providing a true student loan program—may or may not be cost-effective expenditures in support of these other public goals; but they should not be included in estimations of the costs of student loans as a genre of credit.

The costs of default, or non-payment: Defaults and other kinds of non-payment may be a function of lender error or ineptitude, willful default, uninsured death or disability, or through the inability to repay due to unemployment or other reasons. These are the costs of *generally-available* student lending that are potentially the highest and most troublesome, particularly in effectively closing off access to the private capital market and limiting the annual volume of student lending to whatever amount the government can provide in a given year from the combination of current loan repayments and new governmental budget appropriations. Although the incidence of default and other forms of non-repayment on generally available student loans varies enormously by country, program, and borrower characteristics, non-repayment as a percentage of amounts originally borrowed—and before turning to co-signatories and other guarantors—might range from a low that would be near the prevailing rate of default on auto loans or consumer debt generally (say, 5 to 10 percent), to a rate of 30 to 40 percent on loans to the least credit worthy borrowers in otherwise well-administered loan

³ A typical provision would be to forgive some percentage (e.g. 20%) of the principal amount owed for each year that the student borrower, say, teaches or teaches in a remote village such that the entire loan is converted to a grant after five years of the targeted practice and/or targeted venue. For application of what has been termed *workforce contingent financial aid* in the United States, see Kirshstein *et al*, 2004.

programs, to rates that may be as high as 50 to 70 percent or even more on student loans in the most adverse circumstances such as those that have plagued the many failed student loan programs in Sub-Saharan Africa and other developing countries.

The sustainability and success of student loan schemes

In order to serve the nearly universal policy of expanding higher educational participation as well as to shift some costs to the student, loan programs need, as nearly as possible, to be:

1. *Generally available*: Student loans should be available to all academically prepared students who need the loan in order to pursue post-secondary studies without regard to the wealth or credit-worthiness of their parents or to their individual career and earnings prospects.⁴ At the same time, it is the heightened risk of lending, which is enhanced by this requirement of *general availability*, that raises the cost of lending and limits access to the larger private capital market—and creates the problems addressed in this paper.
2. *Sufficient*: It follows from the above that at least the maximum student loan amount should be sufficient to enable the student—after reasonable allowances for parental contributions, other forms of financial assistance, and possibly some term-time and summer earnings—to participate in an appropriate form of postsecondary education without unacceptable personal deprivation, unacceptable parental sacrifice (e.g. spending pension assets on children’s postsecondary education), or spending an unacceptable amount of time (e.g. more than 20 hours a week) in term-time employment. From the standpoint of a higher education system or a country, *sufficiency* also means the provision of a sufficient number of student loans to achieve the country or system goals pertaining to the extent of higher educational participation.
3. *Means-tested*: Means-testing, a form of targeting, should be employed to minimize student borrowing that is not required for the desired enrollment behavior, but rather either: (a) merely replaces an officially expected parental contributions (if called for), (b) allows a standard of living substantially above that which is customary for a student of similar age, or (c) is simply *invested* by the non-needy student borrower at a more favorable rate of interest than the borrower is charged on the loan.
4. *Minimally subsidized*: Most, if not all, student loan programs that meet all of the above criteria will require some continuing governmental subsidization. However, subsidization that goes beyond what is necessary to maintain reasonable interest rates (e.g. at levels of governmental borrowing or credit worthy consumer debt) and to secure sufficient capitalization is revenue that, by definition and like all governmental expenditures, has an *opportunity cost* in the foregoing of other competing

⁴ This principle assumes that parents or extended families are contributing up to their officially-assessed expected family contribution. A qualification to this principle is that very high levels of essentially *discretionary debt*—such as might be required for students to declare themselves financially independent of their parents or to pursue costly advanced professional programs—can properly be either restricted or limited to students with higher paying career prospects.

expenditures (such as more grants, additional capacity, or higher quality of the existing higher educational institutions).

5. *Collectable: i.e. able to minimize defaults and other forms of non repayment:* Generally available student loans have a high incidence of non-repayment for reasons discussed above. But much of the high rate of default in many countries is attributable to bad lender practices—mainly by government agencies as lenders—and is thus, in theory, amenable to correction through a better legal framework and better lender practices.
6. *Able to tap the private capital markets:* This criterion is a function in part of the sufficiency of private savings—clearly less abundant in very poor countries—as well as of the extent of reliable financial intermediaries to channel what private savings as might exist into socially and economically worthwhile investments. However, a more significant limitation on the ability to tap private capital is the low value of the loans as assets, which in turn is a function of the high level of risk associated with generally-available student lending, especially where there are neither government guarantees nor sufficient co-signatories, and exacerbated in developing countries that frequently implement poorly designed student loan programs in government agencies with inadequate lender practices. Hence many low income countries need to rely on tax funds not merely for subsidies (generally excessive), but also for the loans themselves—thus having to compete with all of the other claims on the government’s budget.⁵

A host of countries have tried unsuccessfully, or tried successfully for only a limited period of time, to establish generally available, sufficient, and financially sustainable student loans programs. The lender in most cases is the government or a public agency. Too often, the present discounted value of the repayment stream is totally insufficient to cover the cost of the money plus the administration and collection costs *quite aside from any level of non-repayment, or default*. Adding the losses from default and other causes of non-payment—frequently very great, especially in developing countries—leaves many governments unable to provide loans either in sufficient numbers or in sufficient amounts to meet the dual objectives of widening participation and effecting real cost-sharing.

However, even if the criteria of minimal subsidization and reasonably minimal levels of default were to be met, there could still be insufficient amounts of new loan revenue as long as these funds had to come from the public treasury just like any other governmental expenditure. In other words, regardless of the government’s success in establishing a student loan agency, holding subsidization to some politically reasonable

⁵ Another reason for the inability, or at least the difficulty, of tapping private capital for student lending in a number of countries is a repayment obligation that is income contingent, which feature seems to be more difficult to sell, collateralize, or securitize than a fixed schedule obligation. Australia and England have made unsuccessful attempts to sell income contingent loans in the private capital market, but as of 2009 have evidently not found buyers at a sufficiently favorable price. At the same time, these countries, with generally effective collections on their income contingent loans, are able to hold the income contingent repayment obligations as assets on their governmental balance sheets (even if they do not have full value in the larger capital market) and forego the immediate revenue from the tuition and other fees so deferred.

minimum, and managing to collect a significant portion of repayments due, the actual loan capital needs to tap the country's (or better yet, the world's) capital markets rather than relying on tax revenues like an ordinary public expenditure.⁶

II

Student Loan Schemes in Low- and Middle-Income Countries

This paper examines student loan programs and policies in the low- and middle-income countries that are principal client countries of the World Bank. On the one hand, student loan schemes (along with other means of revenue diversification) are nowhere more critical than in such countries in order to further both of the above-mentioned aims of supplementing insufficient public revenue and expanding participation and access. On the other hand, student loans schemes in developing countries have a long history of failure, manifested by extremely low rates of recovery, which in turn leads to limited capacities for new lending and eventually, in some cases, to the abandonment of the loan scheme altogether. Student loan schemes in selected low- and low-middle income countries are shown in Table 1. This table illustrates, among other themes, the dependence on government or governmental agencies for the origination, capitalization, and collection of these loans, as well as their relatively low interest rates and generally limited volume (or severe rationing and consequent insufficiency of the loans).

Weaknesses of student loan schemes in low- and middle-income countries

The weaknesses in student loan schemes, especially prevalent in low- and middle-income countries, can be attributed to three interrelated problems. The first of these is *inadequate design*, stemming principally from a political imposition of very low interest rates incapable of yielding repayment streams able to amortize the debts even in the absence of defaults. The second weakness commonly found is *inadequate execution, or collection*: partly a result of excessive costs of collection, but especially including rates of default that are higher than they need to be, even in low income countries where high levels of defaults should be expected given the high rates of graduate unemployment, mobility and emigration on top of less developed credit cultures and less developed legal and regulatory frameworks in support of debt collection. The third weakness, to which this monograph will give special attention, is the *inability to tap private capital markets*, forcing all new lending to come not from savers, via banks and other institutions of the private capital market, but from a combination of: (a) repayments on past lending, which will be low due to the high levels of default mentioned above, but which would be insufficient to meet the growing demand for loan funds even in the absence of defaults; and (b) new governmental appropriations, which must compete with all of the other politically and socially pressing claims on increasingly scarce public revenues.

⁶ In theory, a student loan (or any other credit-worthy loan) could be given by the government and be booked as an asset rather than as an expenditure. However, because of the very high default risk of student loans in low- and most middle-income countries, accounting rules of international banking and development agencies such as the World Bank or the International Monetary fund require that the full amount of the loan be entered as a current expenditure—essentially failing to recognize any significant asset value to the obligation (IMF 2007).

Table 1: Selected Student Loan Schemes in Low- and Middle-Income Countries

Country	Origination	Eligibility	Estimate of Asset Value ^a	Bearer[s] of Risk	Capital Provision
Botswana	Dept. of Tert. Ed. Fin. (gov.)	general availability	low	government	government
Burkina Faso (prêt foner)	government	gen. avail. w. means test	negligible	government	government
Chile Fondo Solidario de Credito	“traditional” universities	gen avail w. means test: <i>traditional univ.</i>	low	government	government
Chile Crédito de la Ley	Comisión (student loan agency)	general availability	mod. to high	Univ. (in-school) & gov. (for agency)	banks & government
China (general subsidized student loans GSSL)	banks	Credit-worthy borrowers	mod. to high	co-signatory or government.	banks & government
Colombia (Access/ICETEX)	government	Limited & means tested	low	government	government
Ethiopia	universities	general availability	negligible	government	government
Ghana (previous: see box 1)	Student Loan Trust Fund	gen. avail. w. means test	mod. to low	Pensions of co-signatories	Pension fund (SSNIT)
Kenya	Higher Ed. Loans Board	gen. avail. w. means test	low	Co-signatories or government	government
South Africa	Tertiary Ed. Fund for South Africa TEFSA	gen. avail. w. means test	mod. to low	government	government
Tanzania	government	gen. avail. w. means test	low	government	government
Thailand	government	gen. avail. w. means test	low	government	government
Turkey	government	gen. avail. w. means test	low	government	government

^a Author’s estimates based on interest rate, likely defaults, security of guarantors, and reported repayment recoveries.

Source: International Comparative Higher Education Finance and Accessibility Project: <http://www.gse.buffalo.edu/org/IntHigherEdFinance>

Although these problems or weaknesses are interrelated, this paper is specifically about means of better addressing the third, or the failure or inability to tap private capital markets for new lending. This inability leaves most student loans schemes—whatever their other weaknesses—with insufficient revenue for new lending. The lack of sufficient new lending, quite aside from the burdens it imposes on students and families, exacerbates the political problem of raising tuition fees, which perpetuates the extreme austerity of universities in many low and middle income countries and diminishes both the capacity and the quality of colleges and universities. The lack of sufficient lending especially limits higher educational opportunities of low income students and students from rural areas, where living at home while studying is not possible and who therefore

face high living expenses. The lack of sufficient lending also limits the expansion of a private post-secondary sector (or a tuition fee paying track within the public universities, as in many transitional countries and countries in East Africa and elsewhere) that might provide both exemplary higher education and expanded accessibility if only students had opportunities to borrow. Again assuming that student loan schemes in low- and middle-income countries are both important and technically feasible, the challenge to student loan schemes is not only to design and execute properly, but also to find ways of tapping the capital markets and so allowing a flow of lending beyond the limited amounts that will generally be forthcoming from current repayments supplemented by current governmental operating budgets.

Expressed another way, the challenge is to turn the student loan notes, which have put cash in the hands of either the universities or the students or both, and which now constitute repayment obligations held by the lender—from *expenditures* into *assets*. That student loans are more assets than expenditures, at least in theory, is obvious. Student grants (or stipends or bursaries) are clearly expenditures. Student loans, on the other hand (or at least most of them) are going to be repaid. In accounting parlance, loans are assets, the worth of which depends on the present discounted value ascribed to the reasonably anticipated stream of repayments and reflected in the market price of such notes—or similarly, in the borrowing that can be collateralized by such assets, or the worth of securities that are backed by bundles of such notes.

The present value of these repayment streams, in turn, depends in the first instance on the rate of interest on the loans. The discounted present value of the repayment stream from a single note bearing a highly subsidized rate of interest—that is, a rate far below the market rate at the time the loan was given—will be substantially less than the amount of the loan, revealing the present value of the flow of annual interest subsidies, or the present value of the *effective grant* portion of the loan. This is why the highly subsidized rates of interest so common in so many countries so diminish the asset value of the notes—quite apart from, and in addition to—the likelihood of default (for whatever reason). The loss of asset value due to very low interest rates—that is, to high levels of built-in subsidies, or effective grants—is strictly a matter of governmental policy, and could, again at least in theory, be limited. The extent of non-payment, or defaults, is more complex and merits a special mention.

Causes for non-payment, or default, on student loans

The effects of a high anticipated proportion of notes that will be defaulted—which will always be high for unsecured student loans, and especially so in most low- and middle-income countries—constitutes an even more serious dimension of loss of the asset value of student loan notes. Student loan defaults can have many causes, sometimes multiple causes, with the same financial consequences to repayments and to the value of the loan, but suggesting quite different policy measures to lessen the incidence both of arrearage (being behind on payments) and of ultimate loss, thus enhancing the likelihood of recovery. For example, contributing to non-payment may be:

- an inability to make payments due to unemployment or other unanticipated financial stress (frequently a function of the state of the entire economy);

- an inability to make payments due to illness, disability, or death;⁷
- a difficulty in making full payments, particularly with larger aggregate debts, in those instances in which the periodic (generally monthly) payments take too great a portion of monthly income, which may in part be due to the repayment period being too short;⁸
- an unwillingness or outright refusal to make payments due to several factors (some of which might constitute *rationalizations* for such behavior), including: (a) dissatisfaction with the higher education received; (b) a sense of having been treated unfairly by the university; (c) a misunderstanding that the so-called deferred obligation was indeed a loan that had to be repaid; or (d) a political or ideological opposition to the very notion that students should be charged anything for their higher education;
- a failure to make payments contributed to by the failure of the lender (most often the government) to make clear that the obligation was indeed a loan and the failure to repay having potentially serious legal and other consequences, such as a loss of credit;⁹
- a failure to make payments contributed to by the failure of the lender (again, generally the government or a governmental agency) to pursue good lender practices, made more serious by such problems as inadequate computer systems or the lack in some low income countries of ubiquitous citizen/employee identification numbers;
- a difficulty of collection due to the absence of a political and legal context for pursuing borrowers or co-signatories in default (such as the inability to attach wages); and
- all of the above being exacerbated by high incidence of graduate mobility, including frequent periods of employment and travel outside the borrower's country.

⁷ Many mature student loan schemes in advanced industrialized countries have a separately-financed insurance policy attached to the loan contract that effectively eliminates death or permanent disability as a loss.

⁸ In theory, a lender holding a loan note bearing a market rate of interest (perhaps with governmental subsidization) should be indifferent to the repayment period, and should even prefer a period long enough to bring the periodic payments down low enough to minimize unmanageable payments as a cause of default. In spite of this, the Chinese student loan scheme in 2003 featured extremely short four-year repayment periods that took from 20 to 30 percent of average annual starting salaries of university graduates, almost certainly contributing to defaults while adding nothing to the value of the loans (Shen and Li 2003).

⁹ Anecdotally, many student loan schemes, especially in Sub-Saharan Africa, were implemented amid such political opposition that governments deliberately played down all reference to the contract being a true loan with consequences accompanying the failure to repay. In addition, obligations that never passed through the hands of the students (i.e., that simply added a repayment obligation to the earnings of some graduates), long periods of time between the onset of the obligation and the beginning of the repayments, and poor skip-tracing capabilities added to likelihood of the repayment obligations not being taken seriously—and of course ending in default.

Low income countries, especially where the student loan plans have been implemented with insufficient preparation and inadequate design, and where recovery, mainly for political reasons is not a major aim, can experience extremely high rates of default; in fact, the combination of high defaults and excessive subsidization of interest, can produce a student loan scheme in which the recovery rate is negative: that is, the country would have saved money (mainly the expenses associated with administration of the scheme) by simply giving the money as grants in the first place (Shen and Ziderman 2009). At the same time, there are virtually no precise records of default rates in Sub Saharan African and other developing country loan schemes that are comparable, say, to default rates on student loans as reported in the United States. This is because the seemingly uncollectible loans are rarely if ever written off of the government's books, and the public reports by the governmental loan agencies tend to stress the (generally rising) dollar amounts of debts collected, but not those in repayment that are in arrears or at a stage when they should be written off as losses.

Countries with mature and generally available student loan schemes will still vary considerably, depending on such factors as:

- co-signatory requirements (e.g. the United States has no such requirements, whereas many countries and many loan schemes require cosignatories from credit worthy parents able to pledge assets);
- the extent of lending to student borrowers at high risk of non-completion (e.g. the US lends to students who have not even completed high school, and has no academic or other credit-worthiness tests, whereas loan schemes in countries such as China, Japan, Germany, and Sweden lend mainly to students in selective universities who are likely to complete);
- the maximum indebtedness allowed (e.g. the United States allows undergraduate indebtedness as high as \$27,000 and a combination of undergraduate and graduate or advanced professional indebtedness can be as high as \$138,000¹⁰, whereas student loans in Australia are limited to tuition fees, the loans in Sweden to living costs, and the loans in Hungary to one-half living costs);
- the ease of bankruptcy and the aggressiveness by which lenders pursue borrowers in default (e.g. the United States does not permit the discharge of governmentally sponsored student loan debts through bankruptcy and aggressively pursues borrowers in arrears, including through the attachment of wages, whereas many governmental agencies, especially in developing countries, have historically pursued borrowers more indifferently and with uncertain legal standing); and
- the definition of officially reported defaults (e.g. whether expressed as a percentage of a cohort of borrowers defaulting, a percentage of a cohort's worth

¹⁰ The very high limits are reached only in combinations of subsidized and unsubsidized loans and only at private universities charging very high tuition fee, mainly in advanced professional programs such as medicine or law. The average undergraduate debt in US public four year colleges and universities in 2003/04 was only \$5700 (NCES 2009).

of aggregate lending in default, or a percentage of loans or of their dollar value formally written off).¹¹

In general, default rates on most student loans in most OECD student lending countries such as the United States, Canada, Japan, and the Netherlands are similar to similarly-measured default rates on unsecured consumer lending.

The low asset value of student loans schemes in low- and middle-income countries

To recap: all loans have some value to the lender (or to the current holder of the loan note). This value is a function of the interest rate, the risk (or likelihood of nonpayment or default), and the costs of servicing and collecting. The asset value of a year's worth of student loans can be viewed as the present discounted value of the year's worth of lending minus the losses from the interest subsidies (that is, minus the total of the *effective grant* portion of the year's worth of lending) and also minus all of the losses from defaults for all of the reasons suggested above (again, discounted back to the year of lending). Two of these sources of loss—the design flaw of excessive interest subsidization and the execution, or collection, flaws that lead to excessive defaults—can be improved upon, with the hope and expectation that student loan schemes can be designed and executed with recovery rates of, say, between 30 and 60 percent. Such recovery rates, while far below the levels that could be realized in OECD countries like the United States, Canada, Japan, Australia, Sweden, the Netherlands, Germany, and the United Kingdom, all of which provide extensive student lending, would still represent a far more cost-effective use of scarce public revenues than low or no tuition fees across the board or financial assistance only in the form of non-repayable grants or bursaries.

However, even with better design and better lender practices lessening the burden on governmental operating budgets, the supply of loan capital will still be constrained if student lending depends only on the government's operating budget for its capital. In theory, the new student lending that should properly be expensed to the government's current operating budget for a governmentally-sponsored student loan scheme would not be the amount of lending, but rather only: (1) the present discounted value of the flow of interest subsidies, if any, plus (2) the present discounted value of government's share of defaults (that is, less the shares of any other parties to such losses, such as co-signatories, life insurance carriers, other lending agencies, or the colleges and universities themselves.)¹² The student loans, then would be appropriately considered as *investments* and accounted as *assets*, balanced by the (not inconsiderable) current expenses set aside to account for the subsidies and the government's share (which need not be 100 percent) of future losses due to defaults.

For example, governmentally-sponsored student loans in the United States, have no co-signatories, are dispensed in large aggregate amounts (\$5700 for the average undergraduate borrower in 2003/04 in public and \$7100 in the private sector), and are

¹¹ Definitions of default—and reported default rates—vary considerably, and are discussed on page 39.

¹² Proper accounting would also have to assess the likelihood of, as well as the costs associated with, collection from family co-signatories (or any other risk-bearing parties). Anecdotally, the legal and political expenses of collecting from parental co-signatories in some countries may be too high to count upon; such co-signatories may thus be treated as having only a *moral obligation* to repay defaulted loans, or to assist in skip tracing the borrower, but not to be counted upon for the full amount due.

given by law with absolutely no rationing according to credit worthiness.¹³ Yet because the government guarantees against default and pays a variable interest supplement to the lending banks, because insurance protects against non-payment due to death or disability, and because collections in the United States are highly effective and almost impervious to bankruptcy, student loans are a highly desirable asset. They are sought after by commercial banks and other lenders wanting a share of the student loan business and salable (in bundles) in secondary markets or able to be securitized (that is, used to secure the notes of an originating student loan agency).¹⁴

However, many low- and middle-income countries will not guarantee student loans. Contributing to this unwillingness—and to the difficulty in low- and middle-income countries of tapping the private capital markets for at least some of their needed student loan capital—is the accounting convention used by international lenders such as the World Bank or the International Monetary Fund that requires 100 percent of the student loans guaranteed by a government or a governmental lending agency to be expensed as a current operating expenditure: that is, with no asset-reflecting offset (International Monetary fund 2007). Thus, even if banks could be induced to originate the loans with governmental guarantees, the governmental guarantee would have to be treated as current expenditures for 100 percent of the bank-originated, but governmentally-guaranteed, lending.¹⁵ In short, student loan schemes for most low- and middle-income countries, whether originated by a governmental agency or originated by a bank and governmentally guaranteed (which most governmental finance ministers will resist), must compete for a portion of the government's current operating budget along with all of the other socially and politically compelling needs such as elementary and secondary education, social services, public infrastructure, defense, and the like.

The high cost and/or great difficulty of tapping the private capital market for student loan capital, then, is no more nor less than a manifestation of the low asset value of student loans—which, in turn, reflects the two primary failures or flaws common to student lending: (1) the absence in most student loan schemes of an interest rate sufficient to fully (or even nearly) amortize the underlying costs of capital and collections and thus enhance the value of the asset; and (2) the high likelihood of defaults, which at least for loans that are generally available, will be high for the reasons cited above. In other words, if the design flaws could be solved or ameliorated by more reasonable rates of interest charged on student loans, and if the defaults could be lessened by e.g. better collection practices together with the addition of a governmental guarantee, or credit-worthy co-signatories, or by some degree of *borrower risk rating* (i.e. not lending to students deemed to be unlikely or unable to repay on the basis of their academic program or likelihood of completion), then—again at least in theory—student loan agencies in low-

¹³ NCES, 2003-04 National Postsecondary Student Aid Survey, Table 1.1, p. 26 (NCES 2009).

¹⁴ As of 2009, the Obama Administration has proposed eliminating the guaranteed student loans program in favor of the Direct Loan Program, in which colleges and universities make loans to students and hand them off to the federal government, which provides the capital at essentially the government's borrowing rate.

¹⁵ While this is the case for government guarantees on the student loan notes themselves, it is not necessarily the case with a governmental guarantee of the notes of an agency appropriately backed by loan notes without this guarantee—as is the case in the securitization schemes in Chile and Hungary, for example.

and middle-income countries could tap banks and other entities in the larger capital market seeking profitable uses of their savings, at least for some portion of the annual student lending volume. Thus, the fundamental flaws of student loan schemes in low-and middle-income countries (as well as in many high-income countries) are the politically imposed excessive interest subsidization; and the high rate of default—some, but not all, of which is inherent to student lending that is *generally available*. The inability to tap private capital—and thus the need to limit new student lending (beyond the flow of repayments) to amounts that can be made available in the hard pressed current operating budgets—is merely another reflection of these two more fundamental flaws.

However, as suggested above, even student loan schemes in developing countries should be able to be constructed with unsubsidized or only minimally subsidized interest rates and with policies and procedures that should lessen, perhaps substantially, the historically very high rates of default—and these are recommendations that we will continue to make and that are increasingly accepted by student loan agencies in these countries, even with new student lending continuing to be dependent on the combination of repayments on past loans plus new governmental appropriations.¹⁶ At the same time, the goal of more effectively tapping the private capital markets for student lending, along with these more fundamental reforms, need to be pursued in order to provide more lending as well as to reduce, to the degree possible, the impact on hard-pressed governmental budgets.

Tapping public savings for capitalizing student loans

Before turning to ways of enhancing the asset value of student loans to tap more effectively the private capital markets, it is important to raise and discuss a public alternative that has been tried in several countries. This is to secure loan capital not from the government's *operating budget*, where it has to compete openly with all other public needs and claims, but to tap *public savings* held in reserve, or in trust, for such public purposes as pensions, civil service retirement, unemployment benefits, or otherwise restricted or designated for some future public use. A number of countries have attempted to use such funds either as the source of student loans, or as a guarantee for such loans made by banks or other private capital sources, thus avoiding obligating or otherwise encumbering the public current operating budget¹⁷. The most widely cited example of such an encumbrance upon a public pension fund for capitalizing student loans in a low

¹⁶ A summary of a six nation workshop held in February 2008 in Arusha Tanzania for student loan agency professionals and interested governmental officials in Burundi, Ethiopia, Kenya, Rwanda, Tanzania, and Uganda, entitled "Making Student Loans Work in East Africa" is available at the International Comparative Higher Education Finance and Accessibility Project Website listed in the references.

¹⁷ Korea taps public savings for three student loan schemes. Teachers and their children can obtain loans capitalized by the Korea Teacher's Pension fund. Workers or their children certified as industrial accident victims can obtain student loans from the industrial accident compensation fund of the Korea Labor Welfare Corporation. Finally, employees at technical colleges are eligible for student loans administered by the Ministry of Labor and funded from the Employment Insurance Fund. All of these loan schemes are guaranteed by a combination of government and co-signatories (Kim and Lee 2003, Ziderman 2004). While it is unclear what advantage is gained by tapping these public trust funds over other forms of governmental borrowing, the Korean example seems not to have endangered the financial integrity of these public funds.

income country was the 1988 student loan scheme in Ghana. This plan was devised with the assistance of the World Bank and touted as an innovative breakthrough that seemingly surmounted the twin problems of the government's inability and/or unwillingness to provide the necessary student loan capital from its current budget, where it would have displaced other expenditures deemed to have greater importance, as well as a similar inability and/or unwillingness to provide the necessary guarantees to secure bank lending, as this would have had the same impact on the current budget (at least to

Box 1: Tapping Public Savings: The Case of Ghana

A student loan scheme was introduced in Ghana in January 1988. The purpose of the student scheme at that time was to supplement the student's private resources, especially parental support for food, lodging, and transportation. (Tuition fees are still nominal.) Cost recovery was unimportant, as evident from the extremely high degree of subsidization, the absence of means-testing, and the very high rates of default, which high rates were undoubtedly contributed to by the government's reluctance to place any emphasis on repayments. In the absence of the government's willingness and/or ability to provide the required loan capital from the public budget, and the unwillingness of any source of private capital to fund loans with such a degree of built in loss as well as extreme risk, the government turned for the source of loan capital to the Social Security and National Insurance Trust (SSNIT), which was the public savings repository for pensions. The SSNIT was funded jointly by Ghanaian workers, who contributed 5 percent of their earnings, matched by another 12.5 percent of their earnings paid by the employers. Even had there been no defaults, the required subsidization from the government to replenish the capital *borrowed* from the pension fund was massive. The Treasury bill interest rate at the beginning of the loan scheme in 1988 was nearly 20 percent, but the students were still to pay only 3 percent. Starting in 1999/00, the interest rate was made progressive: i.e. the greater the aggregate debt, the higher the interest the student was to pay (however, still with a maximum interest rate of 10 percent). The T bill rate by the end of the 90s was more than 40 percent, while the interest rate on the student loans was only 6 percent.

The government by 2001 owed the SSNIT \$23.9 million just in interest subsidies—with no government obligation to restore any of the losses due to default. The default losses were supposedly guaranteed by the three required co-signatories, who had pledged to repay defaulted loans not from their current income or even from other assets, but from their pensions—and even then, not from their current payments into the pension fund, but from their actual pension payments once (and not until) they had retired. Until the co-signatories made good on their pledges, the SSNIT had to continue holding increasingly worthless student loan assets, trying to recover the interest subsidies from the government, and waiting for the co-signatories to retire before effectively seizing their pensions. In the meantime, students were to repay their loans not from their current incomes, but only from a diversion of both their and their employers required payments into their pension fund, the SSNIT. In other words, the entire repayment obligation was effectively buried within an almost hidden depletion of the borrower's pension fund.

Thus, the “student loans were in the form of money paid by the SSNIT either to the student borrower or to the universities, with the SSNIT then coming into possession of *assets* in the form of student loan repayment obligations. The repayment obligations, however, seemed not to have been viewed by the borrowers as repayment obligations in the normal sense of payments having to be made to the holder of their loan notes, but rather (at best) as agreements to have their and their employer's pension contributions diverted from their future pensions into repayment of their loan obligations. Thus, until the loan obligation was repaid, the borrowers got no credit toward their eventual pension and would at some point (far into the future) suffer from a pension entitlement considerably less than the entitlements of their non-borrowing age peers—and quite

likely far from sufficient to retire upon. Furthermore, if the borrower was not in the formal labor market for his or her earnings to be so diverted, and was not otherwise disposed to voluntarily repay the loan obligation, the guarantors would have *their* pensions reduced: that is, the SSNIT covering the loss on such defaulted loans by reducing the liabilities it was carrying in the form of the guarantors' pensions. Thus, defaults necessarily jeopardized the pensions both of the borrowers and the co-signatories as well as the actuarial viability of the SSNIT itself.

In 2005, the increasingly unviable SSNIT student loan scheme was replaced by the Student Loan Trust Fund, which became operational in 2006/07. Under the new arrangement, the interest rate was increased to the 182 day T bill rate payable from the origination of the loan through the one-year of required national service and a one-year grace period, and further raised to the 182 day T bill plus 4 percentage points during repayment (albeit with a 10 % ceiling). Maximum loan amounts were differentiated by need and program of study, and were to be made available on a more timely basis. The number of required co-signatories was reduced to one (who must still be a SSNT contributor or pensioner or be otherwise credit-worthy). Borrowers must have ID numbers to aid in skip tracing. The new plan has improved both the availability and adequacy of loans for the borrower as well as the design of the program for long term financial sustainability. A new partial source of loan capital is a claim on 10 percent of the new VAT that is earmarked for education, which is in addition to a continuing reliance on borrowing from the SSNIT pension fund (in addition to an apparent hope that there would materialize additional philanthropic capital from individual contributors, international partners, and corporate donations—of which, as of 2009, there is no record. Source: Atuahene 2008; International Comparative Higher Education Finance and Accessibility Project Website

the degree to which Ghana was obligated to the aforementioned rules of international development accounting).

In addition, the use of the employer/employee payments into the Social Security and National Insurance Trust (SSNIT) as a way to repay the loans had the effect of disguising the politically contested introduction of a student loan scheme—even as the disguise almost certainly contributed to defaults and damaged the flow of repayments as well as the pension funds of the guarantors. In lieu of a governmental guarantee, the loan scheme required multiple co-signatories (usually parents and other relatives). However, rather than pledge current assets or become otherwise obligated to repay the loan in the event of a default, the co-signatories, in the event of a default, drew down their future pensions. In theory, the pension fund itself would remain actuarially whole in that defaults were to be recovered from the reduced pensions. However, the effective collection was much too far into the future, and the government was unable to continue its promised subsidies to maintain the pension fund.

As elaborated upon in Box 1, the Ghanaian scheme was a financial disaster for the National Social Security Trust Fund and would have been for the retirement assets of borrowers and co-signatories alike had the plan continued. The asset value of the loans was severely compromised by excessive, politically-driven interest rate subsidies, exacerbated by the very high inflation rates of the 1990s. Defaults were very high, due to all of the reasons cited above and exacerbated by the Government's decision that the loans should be repaid not from the borrower's current earnings, but rather from what would have been the borrower's and his or her employer's contributions to the borrower's pension fund—effectively confiscating the pension contributions of the

borrower to repay the loans (and confiscating the pension payments of the co-signatories in the event of default).

Thus, while tapping public capital has a seeming advantage of avoiding direct competition with all of the potential claimants on the government's current operating budget, it has the very serious disadvantage of compromising the aims for which these public savings were set aside in the first place, and effectively disguising the two fundamental problem afflicting so many governmentally-sponsored student loan schemes, which are the excessive subsidization and the risk of default, especially that portion of risk not covered through co-signatories or explicitly escrowed loan loss reserves. In short, it is the *private* capital market that needs to be accessed for student lending—to which challenge we now turn.

The remainder of this paper will suggest ways of maximizing the ability of student loan schemes in low- and middle-income countries to draw on the private capital market rather than on public savings in order to supplement limited public operating budgets for new student loan capital. The key—to oversimplify—is to enhance the perceived asset value of their student loans through improved design, better lender practices, and adding parties to bear some of the risk in addition to the government. (We say *perceived* asset value, because, like all markets, the capital market can only respond to the perception of worth and risk, which places student loan schemes in most low- and middle-income countries at a disadvantage and which is a function of e.g. past loan scheme failures, fragile economies, uncertain governments and regulatory frameworks, and the dependence of countries on international lending agencies and their unwillingness to accept anything less than full current funding of the contingent liabilities of governmental guarantees.) We will construct a schema for viewing the various policy options, and we will give examples of student loan schemes in countries that seem to have effectively tapped the private capital market for their continuously increasing need for new lending.

Two further explanations should preface these final sections. First, while we urge a greater reliance on the *private capital market* as opposed to direct governmental funding of new lending, this is not the same as an argument for only *private* as opposed to *governmentally-sponsored* (or governmentally guaranteed or even governmentally subsidized) student lending. Student lending that is strictly private is possible only for the most credit worthy students, such as medical or possibly MBA students (which does nothing for undergraduates or even for many graduate students) or for students with the most credit-worthy co-signatories, oftentimes at selective private colleges and universities (in which the co-signatories bear all of the risk and can be considered the true lenders—again leaving out most needy or low income students). Risk rating and co-signatories are important in sharing some of the risk for some of the lending, but cannot substitute for governmental involvement in what we have termed *generally-available* student lending.

Some private colleges and universities or consortia of such institutions in low- and middle-income countries have obtained initial capitalization and/or partial guarantees from the International Finance Corporation (IFC), which is the private lending member of the World Bank Group, in addition to portions of risk borne by the institutions themselves, foundations, and family co-signatories (along with the generally greater credit worthiness of private college and university students). While the numbers of

borrowers and the total loan volumes tend to be small, and while such schemes have limited transferability to the much larger governmentally-sponsored student loan schemes that may cover both the public and the private sectors and that are the principal interest of this study, there are clear higher educational benefits to the country from the financial viability of these private institutions and from some of the innovative loan models that have emerged. Several of these IFC assisted loans schemes are shown in section V.

Second, while we believe there is an important role for private institutions of higher education, and while we have spent many years advocating for the *privatization* of public institutions of higher education, and while both of these trends undoubtedly increase the need for effective student loan schemes, our advocacy in this paper of tapping the private capital markets and enhancing the asset value of student loans is an entirely separate theme. Expressed another way, tapping the private capital market for student lending is as important for the Nordic countries—with their tuition free public higher education and with very little in the way of private institutions of higher education, but with an important role for student loans in supporting student's living expenses and hastening financial independence from parents—as it is in Japan or the United States, with their extensive privatization of the public universities and their extensive private higher educational sectors also demanding substantial reliance on student lending.

III Enhancing the Asset Value of Student Loans

Tapping the private capital market, whether in low- and middle-income countries or in highly industrialized and wealthy ones, is first and foremost a matter of enhancing the asset value of the loans for which the student loan scheme is attempting to secure private capital and thus to become less reliant for new loan capital on the government's current operating budget. This section deals with eight strategies for enhancing the asset value of student loans. Not all of these are possible for all student borrowers or even for all student loan schemes. Most have been incorporated in some student loan schemes, although several are viable only for selective private institutions serving elite—and creditworthy—students, and are therefore may not be applicable to the generally available student loans schemes that are part of a country's comprehensive student financial assistance program. The eight strategies discussed in this section are:

1. Establishing a reasonable, minimally subsidized (if subsidized at all), rate of interest on student lending
2. Lessening defaults, enhancing recovery, and controlling administrative costs through good lender practices
3. Covering risk through the government
4. Covering risk through co-signatories
5. Creating a loan loss reserve and sharing the risk among e.g. government, public and private philanthropies, donor agencies, and higher educational institutions
6. Paying an originating bank or other private capital source an up-front fee to cover risk

7. Charging a premium interest rate to further enhance asset value and cover a portion of risk
8. Risk rating, or lending only to creditworthy borrowers (with *creditworthiness* assessed in a variety of ways, such as restricted to students of high ability, or in remunerative advanced professional programs, or near the completion of their programs, or middle and upper middle class students in elite private institutions or consortia of private institutions)

Let us consider each of the eight.

1. Establishing a reasonable, minimally subsidized (if subsidized at all) rate of interest

The largest cost in most governmentally-sponsored student loan programs, aside from guarantees covering the costs of default, is the subsidization of interest rates. Because there are so many different interest rates in any economy at any time, we are defining an interest subsidy conservatively and somewhat arbitrarily as anything below the prevailing rate of inflation plus 2 percentage points, which we also take as an approximation to the government's borrowing rate.¹⁸ Thus, an unsubsidized, or *minimally subsidized*, interest rate would be the rate of inflation plus, say, two percentage points, or roughly the government's borrowing rate from the origination of the loan to through the completion of repayments.¹⁹

Subsidies on student loans are frequently most extreme during the in-school and grace periods, when many loan schemes charge no interest. Subsidies also extend in most schemes to the repayment years, when some loan schemes charge a low fixed—and generally highly subsidized—rate, which then becomes an extreme subsidy when inflation is high, particularly if combined with a zero rate during the in-school and grace periods. Many loan schemes charge a *zero real* rate—that is, an interest rate equal to the prevailing rate of inflation—which is also a subsidized rate, as even governments cannot borrow in the market at such a low rate. Even charging the government's borrowing rate would be considered *subsidized* by many economists in that such a rate only covers at best the government's cost of capital and not the costs of servicing and collecting, as mentioned earlier. And compared to consumer credit generally, where rates must cover the costs of defaults as well, a student loan rate that charges only a governmental borrowing rate would have to be called at least a favorable, or minimally subsidized, rate, which would be clearly subsidized—with considerable opportunity costs to the government—when combined with a zero rate of interest charged during the in-school and grace periods.

Table 2 shows the effect of various combinations of interest rate subsidies (expressed relative to the rate of inflation) and interest rate treatment during in-school

¹⁸ Government borrowing rates, of course, also vary by country and by duration and sometimes denomination. For the purposes of this paper, however, the approximation of prevailing inflation plus 2 percentage points will serve to illustrate the point that interest rates on student loans matter and can impose substantial costs on the government.

¹⁹ Interest rates may get exceedingly low during a serious recession, as most of the world has been in during the writing of this paper in 2009; however, interest rates continue to exceed the rate of inflation, and will be still higher for loans that carry any degree of risk.

and grace periods, all expressed as a percentage or recovery. Thus, a policy of charging no interest during in-school and grace periods, a zero real rate during the repayment years, and an assumption of 12 repayment years recovers some 44 percent of the amount lent to a single year's borrowing cohort (assuming a discount rate of inflation plus 2 percentage points). A policy of charging a government's borrowing rate from time of origination (that is, compounding during the in-school and grace periods) recovers 100 percent of the amount borrowed—assuming that the loan scheme can be capitalized at this rate. And a more nearly market rate of interest creates a small surplus that could absorb some of the inevitable defaults, further strengthening the asset value of the loans.

Table 2
Percent Loan Recovery as Function of Interest Rate Relative to Inflation
(Assumes no defaults or servicing/collecting costs; recoveries discounted at inflation +2%)

Interest Rate ↓	No interest charged in-school or for 1 year grace period		Repayment rate interest charged or compounded during in-school and 1 year grace period	
	6 years	12 years	6 years	12 years
Repayment period →				
No interest charged	58%	44%	58%	44%
At 1/3 the rate of inflation (high subsidy)	62%	49%	65%	52%
At rate of inflation (zero real, moderate subsidy)	52%	62%	81%	72%
Inf. + 2 (Gov. borrowing rate minimal subsidy)	58%	78%	100%	100%
Inf. + 4 (premium to cover portion of defaults)	88%	98%	123%	138%

The difference in cost to a government for a large scale, generally-available student loan scheme—and we have not yet taken into consideration the very high costs of absorbing defaults, or paying off on the guarantees—is substantial. These calculations apply whether the government originates and collects the loans or provides an interest rate subsidy to a bank in order to bring the bank's effective rate up to this level (as in the US bank-originated student loan). They also apply whatever the form of the repayment obligation: that is, whether fixed schedule, income contingent, or a hybrid of the two forms.

There is no simpler way to substantially increase the asset value of student loans than to raise an interest rate from highly subsidized rate (generally imposed by politicians with little appreciation of the consequence to the long term financial viability of the loan scheme) to one that is at least only minimally subsidized—at least at the government's borrowing rate. While students will clearly prefer a lower interest rate to a higher one, there is no evidence from the literature on behavioral response to tuition fees or financial aid to suggest that this would impact students' enrollment behavior (Johnstone and Marcucci, 2010 forthcoming). The Higher Education Loans Board in Kenya, for example, has had to contend with an interest rate of 4 percent imposed by the parliament. However, when the Board made graduate students and students at private universities eligible for loans, it began charging an interest rate of 12 percent, with no evident loss in

“take up,” and there is a plan to raise the interest on all HELB loans to this level in preparation for tapping the private capital market in Kenya.

2. Lessening defaults and controlling costs by good lender practices

Aside from setting an appropriate interest rate—and also aside from guaranteeing the repayments in the event of default, to which we will turn in the next section—the likelihood of full repayment on student loans, and thus the asset value of the loans, whether individually or in bundles, can be enhanced by good lender practices. Among the good lender practices in the special arena of student lending are the following (not all of which are possible in all student loan schemes):

2.1 Professionalizing loan servicing and collecting. Electronic records allow cost-effective monitoring, billing, and accounting, and a comprehensive student loan scheme should not be attempted until the record keeping system, with sufficient numbers and training of staff, has been established. An electronic system should be capable of e.g. monitoring borrower status (e.g. through the in-school and grace periods), providing periodic notices to remind the student during these periods prior to initiation of repayments about his or her debt status, alerting the lender to any non-response for a personalized follow-up, keeping borrower accounts, generating all billing and follow up notices, contacting employers about their reporting responsibilities, and providing current data on aggregate arrearage, defaults, and write-offs. Professionalized loan servicing must have written and approved procedures for responding to e.g. late payments, as well as legal remedies for borrowers and any co-signatories in arrears. Professionalized loan servicing should also provide timely response to borrower inquiries and assistance to borrowers in repayment difficulties. All of this requires computing and telecommunications capabilities, policies in place, supporting laws and regulations, staff training, and competent professional staff. If politics or the nature of government agencies or the civil service is not supportive of such professionalization, serious consideration should be given to privatizing all of these functions.

2.2 Limiting aggregate student indebtedness: Aggregate loan debts should be limited to amounts that can reasonably be amortized over an appropriate repayment period at the given interest rate according to the prevailing wages and salaries of most graduates. Debt limits can be larger in countries, and for the kinds of programs and levels, in which salaries are higher and employment in the target field more certain. Aggregate loan limits in the United States, for example, are limited by the year of borrowing (lower in the initial years and higher for the last two years of the undergraduate degree) and also considerably higher for graduate and advanced professional degrees. Political pressure for higher aggregate student loan limits in the United States comes from private colleges and universities and their advocates because of their much higher tuition fees. There are also political pressures for lower limits to lessen the burdens on students and to resist both the seemingly inexorable rise in tuition fees (in both public and private colleges and universities) as well as the pattern of shifting publically-supported student assistance from grants to loans. Pressure for very high aggregate debt limits in the United States also comes from the prevalence of professional programs at the post-bachelors level, when parental support is much less likely and where tuition fees at both public and private institutions are also likely to be much higher. Thus, US students in law, medicine, dental medicine, veterinary medicine, and management, as

well as in education, face high tuition fees and high living costs with less prospect of parental assistance—and a consequent pressure for higher and higher aggregate debt limits.²⁰

Tuition fees tend to be lower in most middle and low income countries, although the prevalence of the so-called *dual track* tuition fees, where a relatively limited number of high achieving students are admitted for very low or even no tuition fees, while other students, supposedly capable of university-level work but scoring below some threshold, or cut-off, are admitted but charged very high (near full cost) fees, has greatly raised the total cost of higher education in most of the formerly communist *transitional* countries, as well as many countries in East Africa and elsewhere. More significant in limiting the aggregate debt loans of graduates has been the sheer necessity of limiting both annual and aggregate debts simply because of limited capital availability (which of course, this exercise is attempting to ameliorate). However, a good example of the likely *default lessening* effect of modest annual and aggregate debt limits is in Hungary, where, as of 2009, tuition fees continued to be nominal and loans were limited to not more than one-half of estimated student maintenance costs.

2.3 Establishing appropriate repayment periods to assure manageability of periodic repayments. The manageability of repayments—which in turn affects the likelihood of default, and thus the value of the student loan as an asset—is a function of three features of student loan schemes: (a) the average level of aggregate indebtedness at the initiation of repayments (which in turn is affected by whether interest is compounded or subsidized during the in-school years and the grace period); (b) the interest rate during the repayment period; and (c) the length of the repayment period. Most conventional, or mortgage type, or fixed-schedule student loan repayment obligations have repayment periods long enough to limit monthly repayments to something in the vicinity of 8 to 10 percent of monthly earnings for starting salaries. With fixed schedule obligations, for example, repayment periods are generally about ten years, although larger aggregate debts—for example, for graduate and advanced professional students attending high tuition fee private universities—may be 15 to 20 years.²¹ Repayment periods on income contingent repayment obligations (as in Australia, Chile, England, Ethiopia, New Zealand, South Africa, Thailand, and Wales) automatically adjust to make the repayment burden manageable; however, as nothing about income contingency itself reduces the total repayment burden for most students, the repayment periods on income contingent and conventional loans will be similar loans of equivalent size and interest rates.

At the opposite extreme—that is, a repayment period so short that it virtually invites default—would be exemplified by the Chinese student loan schemes in their early years from 1999 through 2005 (see fn. 8, p. 12). The repayment period on loans in 2003 was held to four years, forcing the monthly payments to be as high as 20 to 30 percent of the average starting salaries of university graduates (Shen and Li 2003). The consequence, of course, was considerable hardship for borrowers. But an additional

²⁰ See fn #10.

²¹ Fixed-schedule repayment obligations for a given aggregate debt and a given repayment period can also be made more manageable by sloping the schedule upwards over time to approximate the growth in earnings.

consequence was almost certainly higher rates of arrearage and default than would have been with debt repayments taking a more normal—and more importantly a more manageable—percentage of earnings: say, in the range of 10 to fifteen percent. (Baum and Shapiro). Once again illustrating the interconnections among student loan design elements and asset value, the only financial reason for such an abnormally short repayment period is the highly subsidized interest rate and the greater cost to the government lender for longer repayment periods. With an interest rate set at or very near the market rate of interest, the lender, in theory, should be essentially indifferent to the length of the repayment period. Thus, one more reason for reducing excessive subsidization of interest—in addition to enhancing recovery and limiting the need for costly and imperfect means-testing—is removing the lender’s incentive for problematically short repayment periods that increase the likelihood of arrearage and default and further diminish the loan’s asset value.

2.4 Assuring borrower understanding of repayment obligation: Many student loan programs throughout the world have downplayed, or not mentioned at all, that this form of student assistance is to be repaid and that there are penalties associated with failure to make timely payments. The reluctance to emphasize the obligation to repay reflects the political ambivalence and contestation that frequently surrounds the inauguration of cost sharing. Financial assistance is popular, but tuition fees, loans and repayment obligations are not, and many governments have chosen to accentuate the financial assistance feature of loans, while suppressing the obligation of repayment. However, this approach seriously erodes the likelihood of recoveries and lowers the asset value of the loans. Instead, good lender practice requires not merely clarity at the time of the initial loan, but reminders throughout the college or university experience, and ideally a required exit interview, about the need for, and the mechanics of, repayments as a condition for the awarding of the degree.

One way to instill such an understanding together with the habit of periodic payments is to require some small payments (such as interest only) during the in-school years. Hardship exceptions may need to be made in some cases, but such decisions can be made more sensitively as well as more cost-effectively while the student is in school. But the requirement of a small payment of interest only may provide occasions to counsel students about alternative repayment plans and the consequences of default. In addition, some of those who may be disinclined to repay for political or ideological reasons may be identified early and appropriately counseled.

2.5 Having clear, cost-effective, and legally secure forms of sanction against arrearage and default: There must be some form or forms of sanction against arrearage and default—with provision, of course, for the many inevitable instances of financial hardship or other reasonable excuses. However, sanctions must fit the severity of the misdeed and be legally secure, as well as cost-effective. For example, failure to begin repayments could result in the withholding of the degree or diploma. Failure to maintain payments could result in the inability to secure a driver’s license or a passport, to enter into the government’s pension plan, or to obtain public employment, in addition to the loss of credit for countries that have viable systems of credit rating. Such provisions may be more cost-effective and legally secure than the more extreme steps in debt collection such as the attachment of wages, or actions taken against family co-signatories.

2.6. Considering enlisting the assistance of the tax department in collecting and/or skip tracing: A tax department can provide considerable assistance in *skip tracing*, or tracking borrowers: for example, by obligating the tax authority to share addresses and reported incomes of borrowers, as is done in South Africa, or by obligating the authority simply to confirm whether an individual is paying taxes, as in Kenya. A much more powerful form of assistance, of course, is enlisting the tax authorities and the employers in the actual collection of repayments, along with employer withholding of income taxes or mandatory pension contributions. Although frequently associated with the income contingent type of repayment obligation, this enlistment of the tax authority is just as workable for conventional, fixed-schedule loans. At the same time, tax authorities in most countries are likely to resist—and with some reason. They may assert that the overwhelmingly critical function of tax collection is to collect revenue so that the obligations and agencies of government can function—and that adding another function (i.e. debt collection) is a diversion from this essential task, as well as one more reason for individuals and employers alike to resist the payment of taxes.²² Furthermore, although the enlistment of the tax authority in the collection of student loans may seem like a good idea from the vantage point of student loan collection, there are other public causes, equally worthy, that would like similar treatment: mandatory auto insurance, for example, or child support, alimony, local taxes and assessments, and the repayment of publically-assisted development loans, among others, come to mind, and these would clearly overwhelm any tax department. Finally, if the assistance of the tax department is obtained, it will be important to retain all of the loan agency collection policies and procedures for those borrowers who are not subject to periodic income tax withholding.

2.7. Considering enlisting the assistance of the employers in collecting: Similar to, but still separate from, the assistance of the tax department is the assistance in student loan collection of employers. Such assistance would have to be mandated for it to become an effective tool for the collection of student loan repayments. Like enlisting the tax authority, requiring employers' assistance is just as workable for conventional, fixed-schedule loans, as it is for loans of the income contingent form. Employers can assist in at least three ways: (a) informing the proper authorities when someone with a student loan repayment obligation is first hired and when that person leaves employment, thus assisting in skip tracing;(b) informing the student loan collection agency, upon request, of the borrowers current earnings, thus assisting in the adjudication of a request from the borrower for repayment deferment on the grounds of economic hardship; and (c) actually collecting the payment from the employee at the time of wage or salary payment (along with the withholding of taxes and pension contributions) and disbursing the payment to the student loan collection agency. South African law, for example, authorizes the National Student Financial Aid Scheme to require employers meeting certain criteria to

²² This has been the core of the objection of the United States Internal Revenue Service to add student loan collection to its already formidable (and unpopular) task. (US Department of the Treasury and US Department of Education 1995). Braithwaite and Ahmed (2005) also report some evidence from Australia that the Australian income contingent loan scheme, which employers collect along with income tax and pension payments from employees at the time of wage and salary payment has had an adverse effect on voluntary tax compliance.

deduct student loan repayments from a borrower employee's monthly salary.²³ (Kenya has adopted a similar law.)

Such a provision cannot apply to all borrowers or to all employers. As in the qualification mentioned above in connection with the enlistment of the tax authority, the student loan collection agency must retain all of its policies and procedures for the very many borrowers, such as the self-employed, the unemployed, or the seasonal worker, whose repayments cannot be left to their employer, or who may pass in and out of employer collection status. Nevertheless, at least for public agencies and for employers of any significant size, employer participation and especially employer collection can add significantly to the recovery of student loans—and to their effective asset value.

3. Covering risk of student lending through the government

The principal key to enhancing the asset value of student loans—and therefore to secure private capital and lessen the drain on the government's operating budgets—is to cover the abnormally high risk of generally-available student lending (and to do so in ways other than through extremely high rates of interest charged to all student borrowers). It is true that the minimal risk involved in student lending that is *not generally available*—that is, which is limited to students with credit-worthy parents who are willing to co-sign the note, or only to students in elite advanced professional programs such as medicine or advanced management—can be handled by the lender alone through a small *interest premium*, like that which is charged to other kinds of consumer lending, whether for autos, homes, or consumer credit generally. However, the risk of non-repayment for student loans that are made available to the general student without these tests of creditworthiness is too great to be handled simply through an interest premium paid by all borrowers. Thus, *generally available* student loan programs need alternative ways of handling risk. Most of these ways cover some or all of the risk through the government, albeit in slightly different ways, and with somewhat different implications for the current operating budgets. For example:

3.1 The government as direct lender: The government itself or a public agency can make, hold, and service the student loans. Or (with no material difference), the colleges and universities can actually originate the loans, but then pass them off to the government or to a public agency (as in the US Direct Student Loan Program). The source of capital is then either taxes of some sort or new governmental borrowing. In either case, the government will have spent the amounts lent, but will also have come into possession of assets in the form of the student loan notes. The worth of these assets depends on the interest rate or rates (more accurately on the spread between the interest on the student loan notes and the interest rate on its own government bonds) as well as on the level of defaults that the government will ultimately have to bear, which depends in part on the government's (or the public agency's) lending practices and on the country's general culture of debt repayment. This is the way that generally-available student loan schemes in most middle- and low-income countries handle risk and capital provision and is the very problem being addressed in this paper, as most new student lending thus competes with all other governmental expenditures in the operating budget.

²³ TEFSA Act 121 of 1995

3.2 The government as implicit lender: In the student loan schemes of Australia, New Zealand, England, Wales, and most other countries that feature income-contingent lending, the borrowed capital does not flow through the hands of the student, but rather is paid (or presumably so) directly to the university from direct tax appropriations, a portion of which it notes for each student as a *deferred fee* and which the government then attempts to collect (with payment of interest) from students after they have graduated or otherwise left their universities. That most of these *deferred tuition fee loan schemes* take the form of an obligation to repay a portion of the borrower's earnings or income rather than an obligation to repay a fixed amount per month may have important consequences with regard to the manageability of the repayments and the political acceptability of the obligation. However, with regard to the ability to sell the obligations to the private capital market, potential purchasers thus far (as of 2009) have been reluctant to purchase bundles of the relatively unfamiliar income contingent repayment obligations except at a very high discount, further diminishing the asset value of the repayment obligations.²⁴

3.3. The government or government agency as guarantor of private lending: Alternatively, the government can rely on banks or other private lenders to provide the needed capital—according to lending principles such as interest rates and repayment periods laid down by the government—and agree to buy those notes that the private lenders claim to be uncollectible (with contractual provisions requiring the private lender first to exercise some level of diligence in its attempts to collect). This, of course, is the dominant method in the United States for the Stafford Federally Insured Student Loan program, under which most student loan origination is done through private banks. A governmental guarantee also makes it possible for the private banks to sell the guaranteed notes to secondary lenders in the larger private capital market, thus replenishing their capital. The value of the notes, sold in bundles, depends on the interest rate (or rates), the likely costs of servicing and collecting, and in the end on the strength of the guarantee and the costs to the holder of the defaulted notes to redeem them.

A government guarantee also makes possible another form of tapping the private capital market known as *securitization*. In securitization, the originator of the loans (either a public agency or a bank) sells the bundled student loan notes to an intermediary purchaser (frequently a special form of trust, or *Special Purpose Vehicle*) that then issues its own asset-based securities for sale in the private capital market, collateralized by the student loan notes it now holds. The value of the securities—the sale of which then allows new loans to be made—depends on the value of the notes as assets, which in turn continues to depend on the repayment flows (a function of the interest rates on the notes in repayment) and on the aggregate likelihood of defaults, which in turn is greatly enhanced by the government guarantee. One value of securitization is that whatever risk

²⁴ This reluctance to purchase income contingent debt may change, at least in the more developed countries with greater experience with student loans (or *deferred obligations*) of the income contingent variety and the ability to predict with greater precision an appropriate discounted present value of the lifetime repayments from a bundle of such obligations. The UK had announced in March 2007 that it would sell £6 billion of student loans to the private sector, but as of late 2009, the sale had not happened. However, by the Sale of Student Loans Act of 2008, the government in late 2009 announced its intention to sell some £3 billion worth of its income contingent loan assets to a special purpose company that would then issue bonds backed by the student loans, thus *securitizing* the assets (see middle paragraph on this page).

remains after the government guarantees is further lessened by the large numbers of revenue producing notes and by the ability of the market to impose its discipline on whichever entity is charged with collection and servicing (Kendell and Fishman 1996).

3.4. Government or government agency as partial guarantor. The government may also guarantee only some loans: most often those loans for which there are no credit-worthy co-signatories, or for whatever reason the principal originators will either not originate or will not continue to hold. In this way risk may be shared by the government and cosignatories, originators, borrowers (though interest premiums), or other parties. In Japan, for example, a student applicant who is not able to provide a guarantor may get a guarantee from Japan Educational Exchanges and Services by paying it a premium and by paying a certain amount of monthly insurance to the higher education institution.

An important lesson in these seemingly dissimilar modes of tapping private capital is that they are essentially the same: dependent, in the end, on the asset value of the student loans, which in turn depends mainly on the interest rate[s] (compared to the rates prevailing at the time in the larger capital markets), the costs of servicing and collecting, and the likelihood of defaults and other forms of non-repayment. Some form of guarantee by the government (assuming that the government is creditworthy, which not all low-income country governments have always been considered) may seem to be the most obvious way to enhance the asset value of student loans and induce banks either to originate the loans, or to purchase the loan notes after origination by a public agency or a university, or to purchase the notes of the lending agency itself (thereby securitizing the asset value of the notes). At the same time, what appears simple and even obvious in the United States, Canada, Japan, the Netherlands, or other highly industrialized countries with student loan schemes is not at all simple in low- and most middle-income countries. In an earlier section (page 15, above), we referenced the accounting convention used by international lenders such as the World Bank or the international Monetary Fund that would require 100 percent of the student loans guaranteed by a government or a governmental lending agency to be expensed on the government's books as a current operating expense (IMF 2007). Therefore, while a full government guarantee could almost certainly induce bank participation (assuming an appropriate rate of interest or an interest rate subsidy in addition to the guarantee, and further assuming that the government was credit-worthy), it would impact the government's operating budget as much as any other expenditure. This is the reason why finance ministers of World Bank client countries generally oppose government guarantees of generally available student loans—and why such loan schemes tend to be so capacity constrained.

4. Sharing risk through co-signatories

Because of the negative impact of government guarantees on governmental books (and thus on governmental budgets), particularly in low- and middle-income countries that depend on international lending agencies, the most direct and prevalent guarantor of student loans in much of the world is the requirement of having a co-signatory: usually a parent or an extended family member who has sufficient assets to cover the obligation if the student borrower defaults (and sufficient assets to be cost-effectively seized in the event that the co-signatory defaults). The principal limitation on a co-signatory requirement is that many students simply do not have parents or relatives with sufficient assets to serve as an effective guarantor. Another limitation is that the legal system may

not be conducive to collecting from co-signatories. Or, a seizure of family assets to collect student loans may be politically difficult or prohibitively expensive, effectively devaluing the worth of the co-signatory guarantee, and thus devaluing the asset and the ease of tapping the private capital market. However, there may still be some value on some variants on the theme of a co-signatory as guarantor. For example:

- 4.1. **A “soft” co-signatory requirement:** In theory, a “soft” co-signatory contract could be drawn that would obligate the parents not to a full repayment of the defaulted loan, (with the threat of losing their assets) but rather to steering the lender or collection authorities to the borrower who is in arrears. In addition to the addition of some potentially useful *parental moral suasion*, such a provision might at least recover some payments that would not otherwise be recovered due to the loss of the borrower’s current whereabouts. A means-tested co-signatory requirement would require a true, or “hard” co-signatory obligation only from more affluent parents, and allow less affluent parents, who could prove financial hardship, either to be free altogether from the co-signatory obligation, or to be required to sign only the *soft* form.
- 4.2. **Employer as cosignatory:** An employer could also serve as a cosignatory, which would obligate the borrowing student to a period of employment after the degree in return for a prospective employer guaranteeing the loan. Such an arrangement would likely help only the more creditworthy students, or student pursuing a post-bachelors degree who could find a potential employer willing to assume this obligation in return for an agreement to join the particular firm or business.
- 4.3. **Fellow borrowers as cosignatories on conventional student loans:** Student borrowers might, at least in theory, have *fellow borrower[s]* as co-signatories. In this untested model (similar to the soft parental co-signatory model described above), the fellow borrower or borrowers would be co-signatories not because they will necessarily be in a position to assume the defaulted obligation or be subjected to the debt collector, but because they are likely to know where the defaulting borrower may be. These special cosignatories would be liable, in so far as they could, to assist in the tracking of the defaulting fellow borrower. Although there will be little or no direct recovery from the cosignatories themselves, such a provision (as yet untested) might at least help to surmount one source of student default risk, which is the extreme mobility of student borrowers in the immediate post-graduation years (as well as possibly providing some personal pressure on their fellow students to repay).
- 4.4. **Fellow borrowers as cosignatories in mutualized income contingent student loans:** In a so-called *mutualized* income contingent student loan scheme, each borrower joins a cohort of borrowers (e.g. all of the borrowers who finish their schooling and enter into repayment status the same year), all of whom are obligated to repay some percentage of their income or earnings until the collective debt of the entire cohort is repaid. High earners contribute more to the amortization of the collective indebtedness, and low earners contribute much less; and the debt is repaid as a collective, or mutualized, obligation. Although there would be a legally enforceable obligation to repay the amount due even if this amount were very low, such a provision is inevitably ambiguous about

whether the low payments—which prolong the discharge of the cohort obligation and add considerably to the repayment burdens of the high earners—are the consequences of low paying jobs, failure to report earnings, unemployment, voluntary withdrawal from the workforce, or behavior that would more nearly coincide with *default* on a conventional fixed schedule repayment obligation. At the same time, the prospect of *adverse selection* (that is, the likelihood that potential higher earners would void participation, while potential low earners would over participate) and the general uncertainty of the scheme make capital market participation unlikely.²⁵

5. Creating a loan loss reserve and sharing risk among government, public and private philanthropies, donor agencies, and institutions

An alternative to guarantees and/or co-signatories to absorb the risk of student lending is a loan loss reserve fund. *Reserves* as opposed to *guarantees* as a way to cover risk illustrate the interaction of risk aversion and/or risk tolerance. To a holder of debt, seeking to reduce the risk of non-payment, the greater the likelihood of default and the greater the perception of, and aversion to, this risk, the larger the reserve fund that will be sought (in lieu of a guarantee, which may also carry an element of risk if there is any uncertainty that the guarantor might not make good on the guarantee—or if the costs of obtaining satisfaction on the guarantee might be too great or time consuming). On the other hand contributors to a reserve fund, seek to minimize their contribution (which is like making a certain current prepayment in lieu of being liable for an otherwise uncertain future guarantee) as these contributions incur an opportunity cost in the form of lost interest on what could have been invested money. The size of the reserve fund that eventually satisfies both the holder of the debt and the contributor to the fund depends on this opportunity costs and on the respective aversion to, or tolerance for, risk on the part of the two parties—much like a price that clears the market between buyers and sellers.

An advantage to a reserve fund— particularly in light of the facts that generally available student loan schemes in low- and middle-income countries are inherently risky, and also that that banks are (or should be) risk averse —is that a loan loss reserve can be composed of various contributors, or *risk bearers*, each assuming only a portion of the risk of default. Each participant to the reserve would thus assume a level, or *tranche*, of liability, differing in the order in which its contribution would be called upon—and thus each contributor differing in the risk of loss that it might have to bear. For example, if a loan loss reserve of, say, 60 percent of the aggregate loan debt in a *bundle* of loans would be considered secure enough to be able to sell or securitize the notes, then the contributors to such a reserve could be composed of any of the following:

- the government or government agency (probably taking the first tranche of loss, but with a cap or limit);

²⁵ This was the method of the first strictly private operational income contingent loan plan in the early 70s, the Yale [University] Plan for Tuition Postponement, which was abandoned by the university due to a combination of factors including adverse selection, the difficulty of competing with the governmentally guaranteed and subsidized student loan programs, and the inability to access private capital. For a full description of the Yale Plan and other early income contingent loan experiments see Johnstone (1972).

- the participating banks—if allowed to charge a rate of interest mirroring consumer debt generally (which interest rate always covers the anticipated losses from defaults and other forms of non-repayment);
- a consortium of public and/or private donor agencies interesting in maximizing higher educational accessibility and believing they could secure more net access contributing to a tranche of a loan low reserve than in other forms of assistance;
- a private collection agency (required to take a small share, considered part of the fee paid to it, but held in escrow as one of the last tranches, but with sufficient risk of loss to constitute an incentive for good collection practices);
- the participating colleges or universities absorbing a portion of losses on students who default after early withdrawal, providing an incentive for appropriate admission standards and good retention practices;
- an institution or consortium of higher educational institutions (most likely private) that would consider a contributing to a loan loss reserve a more cost effective form of enrollment-inducing financial assistance than discounting tuition fees;

The possibility of colleges and universities bearing a portion of default risk merits further discussion. Participation in a loan loss reserve by public institutions is unlikely, although not impossible or without some examples that we shall discuss below, as public participation would seem to simply hand the risk back to the taxpayer. This was tried in China in the early years of its experimental student loan program, but the universities (all of them public) simply refused to lend unless there were sufficient parental guarantors to reduce the institution's risk to virtually nothing, in which case the purpose of the lending—to those who really needed the money—was essentially lost.

Few private institutions have the resources to place a large contingent liability on their books. However, some private universities have signaled their willingness to share in some risk: perhaps with philanthropic assistance, or in student loan schemes limited to credit-worthy students, to back up the guarantees of parental co-signatories in order to tap private bank capital. Several Latin American loan programs (public and private) are experimenting with involving the higher education institution in a guarantee role. In Chile, under the newest government student loan program (*the Crédito de la Ley 20.027 para Financiamiento de Estudios de Educación Superior*), the higher education institution (whether public or private) must guarantee the student loan during the in-school and grace periods, while in Mexico, under the *Sociedad de Formento a la Educación Superior* (SOFES) program, private universities must take over the loan after nine months of default.

In any event, the essence of a loan loss reserve is the ability to tap a number of possible *risk bearers*, none of which would have to bear the entire loss from a loan scheme experiencing a high rate of default. The key to a workable loan loss reserve is the legal documentation that assigns levels, or tranches, of risk, in order, to the various participants, with limits of the risk that any one party might bear, and with deference to the degrees of risk that each of the participants might be able to handle.

6. Paying an originating bank an up-front fee to cover default risk

This is a variation on the governmentally provided loan loss reserve in which the government or governmental lending agency would take bids from banks or other private

lenders on the right to originate or to purchase a given volume of student lending, with the winning bid being the lowest up-front fee (or alternatively, the lowest effective loan loss reserve). In the event of new lending, the government or governmental lending agency would stipulate the loan scheme parameters such as interest rates, repayment periods, and the need for co-signatories, and award the business to the bank or lending institution that would require the lowest up-front fee. The bank thus shares the risk with the government: *winning* if the defaults are low—that is, more than covered by the up front fee—and *losing* if the fee should prove insufficient. The risk on a new student loan scheme, with no history, would likely be very great—that is, would require too large an up-front fee—to be worth it for most governments. But a narrower loan scheme featuring creditworthy borrowers (medical student, say, or graduate students in finance or management) might sell for a rather modest up-front fee—but then the government might be more fiscally prudent by holding the asset and taking on the risk itself.

Canada in the past experimented with the up-front fee in lieu of the post hoc guarantee, or escrowed loan loss reserve, but this means of governmental risk bearing, has been abandoned, presumably because of the remaining risk to the participating banks as well as the high cost to the government. China in 2004 began paying banks participating in the Student loan program an up-front fee in lieu of a guarantee.

7. Charging a premium interest rate to cover some of the risk of default

In ordinary private lending, the costs of default are no different from the cost of capital and the cost of servicing and collecting: all costs are covered by the interest spread between the rates the bank must pay to savers, and the rate or rates it gets from borrowers. This is the case in strictly private student lending as well—which in the United States was estimated in 2008 to be a \$17.6 billion dollar industry, providing some 23 percent of all new student lending—with no government subsidies or sharing of the risk of default (College Board 2008). In middle-income countries, the growing number of private universities or private fee-paying tracks within the public universities—especially in the graduate and advanced professional programs that are the key to remunerative employment—the demand for places, and thus the demand for student loans, may be so high, and the risk of default so relatively minimal, that the lender can cover losses with an interest premium, just like any other kind of unsecured consumer lending. This would almost certainly not be possible in *generally-available* (that is, with no test of credit worthiness) lending to first year undergraduates. But to upper class undergraduates or to advanced professional students, the risk of default may be low enough to attract private lenders as long as they can choose the student to whom to lend.

The loans of the Hungarian Student Loan Agency, for example, have neither governmental guarantees nor co-signatory requirements, but carry an interest premium of up to 4.5 percentage points (but reported in 2008 to have been less than 2 points). This interest premium, along with good lender practices, allows the agency to cover most of the risk of aggregate default and to securitize its own notes in the private capital market. The key to the securitization, however—beyond student loans of good asset value—also

rests on the government guaranteeing the notes of the Agency, which in a sense is a guarantee of the aggregate asset value of the student loans (see Box 2 next page).²⁶

Interest rates high enough to cover all losses due to default in student lending—even to selective and low-risk students—would still normally be very high. However, there are ways to absorb some of the costs of marketing, originating, servicing and collecting student loans that are not available to ordinary consumer lending. For example, the costs of marketing and originating the loans until they are ready for repayment can be absorbed by university financial aid offices. Collecting costs can be passed on to employers. Some of the skip-tracing costs can be absorbed by the office of tax collections. In short, some of the normal costs of lending can be both lessened and also absorbed and hidden, leaving more of the interest rate to be devoted to absorbing the costs of default—or at least to at least to absorbing a tranche of default costs, along with the government and perhaps other parties, as in #5 above: *creating a loan loss reserve*.

Box 2 Hungary

The Hungarian Student Loan Agency (Diákhitel Központ), a limited share company owned by the Hungarian State, awards loans to students enrolled in accredited public (both state financed and privately funded) and private higher educational institutions in Hungary or the European Economic Area. The loan scheme, which began in the 2001/02 academic year, covers tuition fees (dual track in the public sector) and living costs. The loans are capitalized by the private capital market through securitization of the notes of the Student Loan Agency, which are guaranteed by the government. Initial capitalization came from the state-owned investment bank and required a subsidy in addition to the guarantee. Short term agency bonds were issued in 2003/4. In 2005, the European Investment Bank, the European Union's long-term financing arm that is owned by its member states, provided long term loans at favorable interest rates, which solidified the capitalization.

The asset value of the student loans is rather high, even though the individual loans are not guaranteed. However, the interest rate is set high enough to cover the costs of capital plus an operating cost premium, plus a risk premium, which in 2008 had been vacillating between 1 and 2 percent, but which could rise to as much as 4.5 percent if the default experience worsens. (As of June 2007, the total interest rate was 9.5 percent—paid by the borrower from the time of origination.) Repayment is a creative combination of a fixed schedule during the first two repayment years set 6 percent of the previous year's minimum monthly wage, which converts in the third repayment year and thereafter to 6 percent of the borrower's own average gross monthly income from two years prior—or the minimum 6 percent of the monthly minimum wage, whichever is the greater.

Hungary has adopted a loan scheme without a governmental guarantee or co-signatories on the individual loans—yet it taps the private capital market. It does this through a relatively good asset value on the loans, which in turn reflects a combination of good lender practices by the Student Loan Agency, an interest rate high enough to cover all of the costs of capital plus administration plus a risk premium, and the assistance of the Hungarian tax authority in collecting defaulted loans. These asset values plus a government guarantee on the notes of the Agency allows the Agency notes to tap the private capital market, thus securitizing the student loan assets (Berlinger 2009).

²⁶ International lending conventions on governmental backing of agency notes that are in turn backed by student loans evidently do not require governments to expense the full amount of the loan notes being securitized.

8. Risk Rating

A final way to lessen default risk on student lending is to *risk rate*, or differentiate among borrowers by creditworthiness, either by lending only to credit worthy borrowers, or by segregating the creditworthy borrowers in a separate loan scheme, reserving the governmental guarantees to students not considered so credit worthy. Borrowers whose parents or family members have co-signed their loans are already, in most cases, considered more credit worthy because of the pressure from their families to repay their loans. However, quite apart from family co-signatories, certain students are better credit risks than others—for example, advanced professional students in medicine or dentistry, or post-bachelors degree students of computer science, finance, management, or law. In these cases, their greater presumed creditworthiness comes from a combination of factors including the presumptions of: (a) their greater likelihood of completing; (b) their greater academic ability; (c) their likelihood of immediate employment as a good salary; and (d) their greater understanding of the need to establish a good credit rating.

Several of the ways cited above for enhancing the asset value of student loans—especially requiring *hard* co-signatories and risk rating the borrowers—will eliminate many potential students, including virtually all low-income first-year students, most low-income undergraduate upperclassmen, and most adult students other than those in selective advanced professional programs. At the same time, if loans for those students who can produce creditworthy co-signatories and advanced professional students who themselves may be deemed to be of lesser risk can be bundled separately from the loans of all other students, at least these loans have a chance of tapping private capital, and the government's scarce revenues (and in some cases the government's equally scarce guarantee capabilities) can be targeted upon those borrowers for whom the government's participation can make the greatest difference.

The Bridge Loan funded by the European Investment Bank through the Banco Intesa Sanpaolo uses such risk rating. Applicants for the loans are not required to provide co-signatories, nor are there tests on family means. Instead, the loans are only available to students who have completed 100 to 120 credits during their first two years of undergraduate study or are attending graduate courses (Mancini 2009). Similarly, student loans at the American University of Beirut are only available to needy medical students and undergraduates studying engineering, architecture, nursing and business management.

Summary: sharing the costs of enhancing the asset values of student loans

In the end, there is no way to avoid a very substantial cost to the government for the provision of generally available student loans. The costs of servicing and collecting relatively small loans with long repayment periods, and especially the costs of defaults, especially on loans to young students with little or no established credit, many of whom probably saw acceptance of a loan as their only chance to have a chance at a good job and social acceptability, will be very high. If the greater risk posed by loans that are generally available—that is, not risk rated—is to be borne only by the government, then it makes little strictly financial difference whether this risk is funded by (a) the government (or public agency of the government) originating and holding the debt, taking the losses in

lost recovery; (b) the government guaranteeing private bank loans, taking the losses in having to purchase the bad loans from the bank at a considerable loss; (c) contributing up-front to a public loan loss reserve held on the government's books as a kind of public escrow; or (d) contributing up-front to the bank's loan loss reserves through an up-front fee to the participating banks. The key to enhancing asset value and providing more student lending—other than minimizing interest subsidies and following good lender practices—is to spread the high risk inherent in student lending to other parties other than (or beyond) the government—for example, to:

- co-signatories;
- participating banks and borrowers via interest premiums paid by credit-worthy borrowers (concentrating the government's liability only on the higher risk loans for which there are no other guarantors).
- foundations and other private philanthropy;
- international development agencies.

For example, Chile reduces the required amount of the fee by combining the up-front fee with a kind of *post-hoc* risk rating. The government pays the participating banks an up-front fee (with no guarantee) to originate generally available student loans, but further reduces risk by adding a post hoc risk rating by permitting the banks to retain after borrowers' completion and upon the initiation of their repayments only the ones it wished to keep in its portfolio—presumably retaining only the most credit worthy and best potential future customers, and turning the rest back to the governmental loan agency. This is an example of the kind of loan scheme that employs a combination of means to bear risk and enhance asset values—in this case an up front fee (constituting an effective loan loss reserve) with a post-hoc risk rating that keeps the notes of the most credit worthy borrowers in the bank's portfolio and limits the government's liability to the loan notes that banks do not wish to hold.

The Diamogli student loan scheme begun in Italy in 2008 similarly covers the risk of loss with a combination of the government (via a limited loan loss reserve liable for up to 50 percent of losses), the borrowers (via a portion of each loan set aside up-front as a "risk coefficient," which translates into an effective interest premium), and the participating banks (up to 50 percent after the state fund and the bank's loan loss reserve), in addition to some limited risk rating via a merit requirement.

In Portugal, risk in the newly (2007) created student loan program is spread among the actors in a mutual guarantee system (banks, private mutual guarantee companies and the government via a mutual counter guarantee fund), modeled on that used to provide support to small enterprises. Under the new student loan system, the banks provide the loans to students and are required to acquire shares in a mutual guarantee company (there were three involved in 2009) in an amount that is equal to 0.5 percent of the total loan guarantee in return for the guarantee that the company provides. The banks also provide the mutual guarantee companies with a mutual guarantee commission of 35 basis points per year (already included in the interest rate charged by the bank to the borrower). The government guarantees 10 percent of the loans (providing 150 million Euros to the Mutual Counter-Guarantee Fund). Actual risk is therefore shared by the government/taxpayers, borrowers, private mutual guarantee companies and the banks.

Although each student loan scheme uses a variety of means to originate, provide capital, service, and cover risk on its loans, there is too much variation in economic, political, ideological, institutional, and in all other elements of underlying context to portray meaningfully *best practices*. However, in the next section, we portray eleven composite models that feature most of the significant loan schemes and important variations.

France is another continental European country edging into some cost-sharing via a new student loan program. In September 2008, the Ministry of Higher Education and Research launched a new state guaranteed student loan program through bank origination that does not require a third party guarantee and is available to all higher education students. The risk of default is evidently handled by a combination of a governmental contribution to a loan loss reserve, administered by: (a) a new public holding company to which the government makes a yearly contribution; and (b) the participating banks and the borrowers via the small interest premium from the market interest rate that the banks are allowed to charge on the loans from the time of origination. The reserve fund covers up to 70 percent of the default risk. Repayments must be made within 10 years of the first loan allocation, but may be deferred in part or in whole in cases of economic hardship. The Ministry in 2008 announced an intention of providing 60,000 loans averaging €7,500 [US\$8,152] each during 2009. In 2009, there were two participating banks, CETELEM and the Banque Populaire, but data on the actual number and Euro volume of the loans disbursed was not available (and of course there were as of the end of 2009 no data yet on deferment, arrearage, or default (Ministère de l'Enseignement Supérieur et de la Recherche 2008).

IV Accessing the Private Capital Market

Tapping the larger private capital market—banks, money market funds, insurance companies, pension funds, governmental reserves, sovereign investment funds, and the like—as an alternative to the government's operating budget for student loans, then, is a matter of enhancing the asset value of student loans. The capital market, above all, is a market, and risk is a cost that must either be covered (e.g. by secure collateral or equally secure guarantees and/or co-signatories), or the risk of a loss (the downside risk) must be balanced by a substantial chance of gain (the upside risk). A relatively small and predictable downside risk of loan loss by default—as in consumer lending generally—can be covered by the lender within a normal interest premium: that is, the difference between what the consumer borrower must pay, and the interest rate the lender must pay to attract the savings needed to lend. But the interest premium on generally available student lending in low- and middle-income countries—in the absence of any risk rating and in the absence of governmental guarantees or credit-worthy co-signatories—would be so high as to be practically and politically prohibitive.

Of course, the capital market routinely provides capital for risky ventures, even with limited collateral and no guarantees. The private capital market does this by balancing the risk of loss with the chances of substantial gain—which, after all, is the essence of *equity financing*, in which private capital flows to stocks rather than to bonds. However such a model of student finance is possible only in the pure equity model of the income contingent loan, where the lender literally purchases a share of the student

borrower's future earnings, with no payment due unless there is an earnings return on the higher educational investment—but there is also either no upper limit, or a very high upper limit, on required payments (or profit to the lender) if the investment pays off in high lifetime earnings.

This equity financing model of student lending model has long fascinated economists, beginning with Milton Friedman as early as 1955, and has been more recently described and recommended for implementation by Palacios Legeras (2004), and in its strictly governmental, or *graduate tax*, form, by Glenerster (2005). However, this equity model of financing has always floundered on three problems. First, *adverse selection* would logically lead potential borrowers who have other means to finance their higher education and who are reasonably certain of earning above the average of their borrowing peers to decline participation—thus depriving the fund, or lenders, of the upside risk, or profitability—while potential borrowers lacking in pecuniary ambition or very uncertain about their future earning ability will disproportionately seek to finance their higher education in this manner, leaving a plan unbalanced with too many borrowers who will not be able to repay. Second, even those who will earn less and who thus might benefit from this equity financing model have been more than satisfied with the governmentally subsidized income contingent loans such as in Australia, New Zealand, England, Wales and South Africa and other countries, and those who believe they will earn more are also satisfied as these schemes present the high earning borrower with no downside risk because maximum repayments are capped, and there is no attempt to collect surpluses or premiums from them (beyond the higher income taxes they are already paying) in order to make up for the losses on the less fortunate who will never fully repay. Finally, aside from a few very small short-lived experiments in the United States, the equity model has not in fact attracted private investors.

In short, the only practical models of tapping private capital for student loans are those in which the asset values have been secured in one or more of the ways described in the preceding section. And, perhaps ironically, when the assets values of the student loans are high, there is less reason for a student loan scheme to have to tap a private capital market: that is, the loans can stay within the portfolio of the government or of a governmental agency, bringing a return, just like other investments. Nevertheless, there remains an advantage, particularly in low- and middle-income countries, to a government being able to tap a private capital market if this can be done without a 100 percent governmental guarantee—thus freeing some of the government's very limited operating budget for expenditures on programs and expenditures of greater priority.

In this light, then, the challenge to student loan schemes in low- and middle-income countries is to enhance the asset value of student loans with the following four elements: (1) good design, meaning an interest rate that is minimally subsidized at best; (2) good lending practices; (3) co-signatories and guarantors other than government; and (4) a degree of appropriate risk rating that taps the private capital market for the most credit worthy, while concentrating the limited governmental capital and/or guarantee capacity on those students who are not so credit worthy.

One may assume that any government that wants to enhance the asset value of its governmentally sponsored loan scheme and thus enable the tapping of private capital can have a good design: that is, that is, an interest rate that is, at best, only minimally

subsidized. Minimal subsidization could suggest an interest rate that is set at the government's borrowing, or T Bill, rate from the origination of the loan, and either accruing interest during the in-school and grace periods, or requiring interest only to be paid from the time of origination. Minimal subsidization could also be maintaining subsidized interest during the in-school and grace periods, but then requiring an interest rate closer to a market prime rate during the repayment years. We may also assume that a government wanting to enhance the assets value of its loans in order to tap a private capital market can have good lender practices.

Thus, the real policy options that affect the ability to tap a private capital market and thus lessen the reliance on the government's operating budget for new loan capital lie in the remaining two features—namely: (a) providing credit worthy co-signatories, loan loss reserves, and guarantors other than government; and (b) risk rating some of the student lending by academic program, academic selectivity, and level (that is, undergraduate arts, or graduate and professional). Within this construct, and considering many combinations of the above referenced features, then, eleven common models of student loan schemes are shown in Table 3, focusing on the asset worth of the loans and the degree to which the private capital market can be an alternative for some or all of the needed new loan capital. The first eight are all loans schemes that are *generally available*: that is, for which either all borrowers are eligible, or eligibility is based on financial need or criteria other than the credit worthiness of the borrower.

1. Model 1 portrays a government loan agency as originator of loans to all or to all needy students, covering costs of tuition fees, paid directly to the university, and expenses of student living, paid to the student borrower. The interest rate is highly subsidized, the lender practices uneven, defaults high, and the asset value of the loans is very low. This model represents most of the loan schemes in Africa and many other low income countries, where politics intrudes on the allowable interest rate as well on many of the good lender practices listed under point #2 above (pp. 23-24). The reluctance of the government to guarantee the loans is understandable, given the need to cover all guarantees with current operating budget allocations and the presumably compelling queue of competing needs for these scarce governmental budget dollars. In the absence of guarantees—and in the absence as well of a record of successful loan recovery—banks

**Table 3: Models of Student Loan Schemes Showing
Asset Worth and Access to Private Capital**

	Originator of loans	Borrower Eligibility^a	Flow of funds	Interest subsidy to borrower^b	Anticipated default^c	Bearer of risk	Asset worth of loan^d	Provider of capital	Country examples
1	Government Agency	General availability	To univ. & student	Highly subsidized	High rate of default	Gov. as holder of note.	Very Low	Gov. via budget; no private participation	Most low income countries
2	Government Agency	General availability	To univ. & student	Moderate subsidy	Moderate to high	Gov. and co-signatories.	Moderate to High	Gov. (capital mkt. may enter w. discount)	Kenya HELB aspiration, Japan, Korea, Malaysia
3	Government	General availability	To universities and to students	High or moderate subsidy	Moderate to low	Gov. as holder of inc. contngt obligation	Moderate to Low ^e	Gov. (capital mkt. reluctant to purchase)	England, Australia, Chile, New Zealand, South Africa, Thailand
4	Government	General availability	To universities (if at all)	High or moderate subsidy	Moderate to high	Gov. as holder of inc. contngt obligation	Very Low	Gov. (if provided at all: no private participation)	Ethiopia & other low inc. w. inc. cont. oblige.
5	Bank	General availability	To students	Moderate subsidy	Moderate to low	Gov. as guarantor	High ^f	Bank and secondary market	Canada, Finland, France ^g , Germany, Italy ^g , US
6	Bank	General availability	To students	Moderate subsidy	Moderate	Gov. as guarantor	Low	Bank, but also Gov. via 100% guarantee	Chile ^h , China
7	Bank	General availability		Minimal subsidy	Moderate: (consumer credit)	Gov. and co-signatories	Moderate	Capital market	Poland, Chile CORFO loans

Footnotes on following page.

	Originator of loans	Borrower eligibility^a	Flow of funds	Interest subsidy to borrower^b	Anticipated default^c	Bearer of risk	Asset worth of loan^d	Provider of capital	Country examples
8	University	General availability		Moderate to minimal subsidy	Moderate to high	Gov. as purchaser of note	Low	Gov. or capital Mkt. if sold or securitized	United States
9	Government Agency	Selective: Risk rated		Minimal subsidy	Moderate	Co-signatories	Moderate	Gov. or capital Mkt. if sold or securitized	Kenya aspiring to this w/loans to working students.
10	Bank	Selective: Risk rated		Minimal subsidy	Moderate	Gov. and co-signatories	Moderate	Capital mkt. via origination, or securitization.	India ^h
11	Government Agency	Selective: Risk rated		Interest premium ⁱ	Moderate	Loan loss reserve.	Moderate to High	Capital market securitization	Proposed model for low and middle income countries to better tap private capital.

a *General availability* signifies no “risk rating, with all or most students eligible for loan. *Risk rated* signifies test of credit-worthiness usually by program and level (e.g. limited to medical or MBA students)

b A high subsidy is well below the government’s cost of money: e.g. a combination of no interest during in-school and a zero real rate during repayment. A moderate subsidy might be no interest during in-school and government’s borrowing rate thereafter, or perhaps a zero real rate from the origination of the loan. A minimal rate might be the government’s rate from the origination of the loan. A premium rate would be a rate of interest sufficient to cover the cost of money, the cost of servicing and collecting, and at least some contribution to the costs of defaults.

c. Authors’ estimates of likely defaults. There are many measures of default, but most governments are reluctant to write a loan off (that is, officially declare a loan defaulted), and most governmental loan schemes in low- and middle-income countries do not give a transparent and verifiable rate.

d. Asset value is what a secondary market buyer might pay or accept as collateral on loan. The asset value should be the present value of the anticipated repayment stream (less a reasonable allowance for defaults).

e. Reluctance of capital market to purchase or securitize income contingent obligations is probably influenced by unfamiliarity with this form of obligation, as well as by the dependence of the worth of the assets on governmental policies and the cooperation of revenue collection authorities.

f. High asset value due in part to interest subsidy to banks during in-school and grace periods.

g. Risk is handled by a combination of a governmental contribution to a loan loss reserve and the participating banks and the borrowers via the small interest premium from the market interest rate that the banks are allowed to charge on the loans from the time of origination.

h. However, the loans in India do not carry a governmental guarantee.

i. An interest premium suggests some ability of lender to cover some defaults (or assume a tranche of loss in a loan loss reserve).

and other elements of the private capital market will neither originate nor purchase the loans nor securitize the notes of the government loan agency. New lending depends on the prior year's repayments plus new capital provided by the government's operating budget—which is heavily constrained, thus limiting the number of new and continuing loans that can be given.

2. Model 2 is similar in originating agency and borrower eligibility, but the interest rate has been raised to a moderate subsidy—perhaps a zero real rate (that is, mirroring prevailing inflation) payable from the time of loan origination, and has added a serious requirement for credit-worthy co-signatories (that is, with intention to use legal means to collect), with the governments in some countries providing a guarantee on the loans of borrowers who are excused from the co-signatory requirement by a means test. Although the government may have to expense its means tested guarantees against the operating budget, thus incurring a real opportunity cost, there should be enough asset value on many of the loans to allow the loan agency to tap the capital market by securitizing some portion of its loan portfolio.

3. In Model 3, we turn to loans with income contingent repayment obligations as in Australia, England, Wales, South Africa and some of the loans in Chile. Most of these loans have a moderate to high level of interest subsidy, but a moderate to low default experience. The asset value has been generally low, reflecting more the unfamiliarity of the capital market with this form of repayment obligation. Thus, although the government in England was able to sell some 2 billion worth of its fixed-schedule (mortgage type) student loans between 1997 and 2000, it had, as of late 2009, not yet been able to satisfactorily sell or securitizes its holdings of the new income contingent student loans, and we are unaware of any other country managing to do so.²⁷ At the same time, as these countries are all highly industrialized and not dependent on the World Bank or the International Monetary fund, and as they face somewhat less fiercely compelling competition for the scarce governmental budget dollar than the low-income countries, and as most of their borrowers will repay in full (although at the subsidized rate), the need for tapping the private capital market is also less critical. Most of the advanced industrialized countries featuring income contingent loans may then be content simply to keep these obligations on their books as reasonably good assets—albeit assets that the private capital market may continue for some time to devalue. At the same time, the considerable uncertainty of the income contingent form of repayment obligation in low-income countries—where unemployment among university graduates tends to be high and where so many borrowers will be in the informal economy or emigrate, and where the taxation of income is difficult anyway—makes the asset value of income contingent loan obligations exceedingly low, and the inability to tap private capital markets more serious.

4. Model 4 is the income contingent loan model as inaugurated in a low income country lacking a ubiquitous and efficient income tax system, citizen ID numbers, and secure employment for university graduates, and thus presenting a loan scheme with little or no asset value. Ethiopia's income contingent loan scheme, misnamed as a *graduate tax*,

²⁷ See page 28 and footnote 22.

Box 3 Chile:

Tuition fees and student loans were introduced for higher education as part of the Pinochet regime's 1981 neoliberal economic agenda. In the 1990s, with the restoration of democracy, a new, means-tested, income contingent loan scheme (*the Fondo Solidario de Crédito Universitario*) was begun, covering tuition fees in the traditional universities, both public and private. As of 2007, the interest rate is 2 percent. Repayment begins after a two year grace period and is set at 5 percent of the borrower's yearly earnings for a maximum of 15 years, after which any remnant is written off. As with other income contingent, low-interest loans provided by the state or an agency of the state, the loan capital comes from the government's current budget, supplemented by repayments on existing loans.

A second student loan scheme, fixed-schedule and means-tested, was introduced in 2005 to provide loans covering tuition fees for all accredited Chilean colleges and universities (that is, beyond the so-called traditional universities). Loan capital comes from banks. The loans are guaranteed by the institutions prior to student graduation—that is, against defaults that may be attributable (in part) to dropping out. The institutional guarantees cover up to 90 percent of the capital plus interest of the loan for a student's first year, up to 70 percent for the second year and 60 percent for the third year. After graduation, the loans are guaranteed by the state up to 90 percent of the capital plus interest. Upon approval of the loan by an agency of the state (the Comisión Administradora del Sistema de Créditos para Estudios Superiores), the funds are sent directly to the institution. Collection is contracted to the banks.

Although the money does not pass through the hands of the students, borrowers are encouraged to make at least 70 percent of the interest payments during the in-school and 18 month grace period, and receive a reduction of 0.5 percentage points in the interest rate if they do. The interest rate is based on the government's borrowing rate. Repayments, once they begin, are graduated step-wise, beginning low and increasing in three stages to correspond roughly with expected increases in borrowers' earnings. Upon initiation of repayments, the banks keep the loans they wish to hold on their books, with the advantage of several years of partial repayments and the completion of the student's academic program to assist in risk rating; loans the bank does not wish to hold revert to the loan agency. The asset values are moderate because of the partial institutional guarantees and the minimally subsidized interest rates, but the absence of a government guarantee on the loans. Private capital is tapped by the participation of banks, particularly to the degree that the risk rated loans are retained by the banks during the repayment period.

Private capital is also tapped in the Crédito CORFO loan scheme under the sponsorship of the Chilean Economic Development Agency (CORFO), which provides commercial bank loans for students who demonstrate some financial need, but who are able to provide a credit worthy co-signatory. The loans cover registration and tuition fees (paid directly to the higher education institution) plus up to 20 percent additional for living costs and other expenses. Interest rates and grace periods are set by the banks up to a maximum authorized by CORFU. The asset value is good because of the cost-covering interest rates and the co-signatory guarantees, even without a governmental guarantee.

Source: Laurraín and Zurita (2007) and International Comparative Higher Education Finance and Accessibility Project Website

is an example of such a loan scheme that seems to have turned to an income contingent form of repayment obligation to lessen student resistance (although it was adopted with World Bank assistance and with World Bank calculations suggesting a substantial rate of recovery). At present (2009), however, the Ethiopian graduate tax continues to rely on government appropriations for all new and continuing lending, with little or no asset value to its loans.

5. Model 5 in Table 3 illustrates the government-as-guarantor-and-subsidizer with bank-as originator-and-debt servicer scheme so familiar to Americans. The US Federal Family Education Loan Program (FFELP) loan program offers both the means-tested subsidized loans and the non means-tested (but still with limits based on unmet financial need) unsubsidized loans known as Stafford loans. The government pays interest during the in-school and grace periods on the subsidized loans, and guarantees both kinds of Stafford loans. Interest during repayment period was 6 percent on subsidized loans disbursed between July 1, 2008 and June 30 2009 and 6.8 percent on unsubsidized loans and all graduate student loans.²⁸ Defaults are relatively low for student loans that are *generally available* (that is, without risk rating or the requirement of co-signatories): less than 7 percent in 2007 for all types of institutions (as low as 4.3 and 3.8. percent for four-year public and private colleges respectively) on the so-called *cohort default* system of default reporting, although defaults during the economic downturn of 2009 appear to be rising.²⁹ But the combination of interest rate subsidies plus governmental guarantees and generally excellent lender practices (including virtual prohibition against the discharge of student loan debt through bankruptcy), together with many experienced private participants, including banks, state guarantee agencies, and public and private secondary markets, makes the student loans a valuable asset in which the private capital market wants to invest. At the same time, the cost to the government is high, and as of 2009 the Obama Administration is attempting to end bank participation as originators of student loans, preferring to move all student lending to the direct loan model, in which the institutions are the originators and the government is the provider of the capital.

6. Model 6. Applying the bank-as-lender model to low- and moderate-income countries, model 6 illustrates the effect of the perceived low asset value of loan notes in countries that traditionally have experienced very high rates of default. The banks may participate, but only with secure governmental guarantees and interest subsidies to cover their costs of capital and administration. The result, as required by international lending accounting conventions and covered above on pages 14-15, is that 100 percent of the guarantees must be expensed on the government's operating budget, incurring full opportunity costs (that is, displacing other politically and socially compelling competing needs) and substantially lessening the usefulness of private capital market participation. In summary, what may appear to be private capital market participation in the reliance on banks as lenders has not in fact displaced the government as the real provider of the capital as it is bearing all of the high risk of default. Bank participation may still add value to the loan scheme if the origination and collection is performed more cost-effectively than it would be by the government or a public agency. But the more substantial value of private capital market participation is denied because of the very low asset value of the loans.

²⁸ In keeping with the fall in interest rates during the US recession that began in 2008, the interest rates on Stafford Student Loans is to drop to 5.6 percent for loans disbursed after July 1, 2009, and further to 4.5 percent on loans disbursed after July 1, 2010.

²⁹ Default rates vary significantly with any system of reporting among institutional type. Corresponding to the reported 3.8 percent for private four year colleges would be almost 10 percent for public community colleges, and more than 11 percent for all proprietary colleges. (Inside Higher Education September 15, 2009 at www.insidehighered.com). Furthermore, defaults rates tend to be higher when measured and reported in other ways—such as by aggregate dollar losses written off as uncollectible (Dillon 2007).

7. Model 7 is a model of what a low- or middle-income country might be able to achieve with a loan scheme featuring only a minimal subsidy (e.g., the government's borrowing rate from the time of loan origination), good lender practices (to lessen the default rate), and a guarantee that is shared by credit-worthy co-signatories and a means-tested government guarantee for families unable to demonstrate the financial strength for the co-signature. In these respects, this bank origination scheme is similar to the government agency scheme in model 2, above, in that some private capital market participation is at least theoretically possible without 100 percent of the guaranteed lending needing to be covered with current budget appropriations due to greater loan asset value and the sharing of the guarantee with co-signatories

8. Model 8. A final model of generally available student lending features loans originated by the universities. The universities would then sell the notes to a government agency that would issue its own debt, collateralized by the student loan assets. Depending on the degree of interest rate subsidization and the quality of the servicing and collecting practices, the loan notes could have enough asset value to provide meaningful private capital market participation. An advantage to the university as originator is the opportunity to fold some of the administrative costs associated with marketing and borrower counseling into the university's financial assistance operations.

The remaining models portrays student loans schemes that are able to *risk rate* their borrowers according, for example, to their year or level (favoring upper class undergraduates or graduate students), program (favoring professional programs), or other indices of default risk, including credit worthy parents. As such, these models presume that other loans schemes, more dependent on risk being assumed by the government, are supplying the needed credit to those students who the government has determined should have access to higher education and who need credit to afford their share of the expenses, but whose loans carry too much risk.

9. Model 9. The first of these, presented in Table 3 as model 9, portrays a governmental agency as the originator of the loans, which feature minimal (or even no) interest subsidization, good lender practices, and required co-signatories, but without governmental guarantees per se. The combination of these features should result in loans of at least moderate asset worth, which should, at least in theory, allow private capital market participation via either a secondary market purchase or the securitization of the notes of the agency. Securitization, in turn, would maintain the servicing and collecting functions in the public agency.

10. Model 10 is like model 9, targeted upon more credit worthy borrowers, except that the notes are originated by a bank, and the government is a party to guaranteeing against default. The only detraction to the worth of the asset is the slight subsidization of interest rates, for which the bank compensates by a front end fee paid either by the borrower or by the government.

11. Model 11. A final model presented in Table 3 features the concept of a loan loss reserve to which the government is one of several contributors rather than the sole guarantor. This model contemplates a loan loss reserve that might have contributions from some or all of the following other than the government:

- (a) the lender, through an interest premium (e.g. government's borrowing rate plus 3 to 4 percentage points);
- (b) the universities, perhaps by covering defaults of borrowers who drop out before completion;
- (c) a private university or a consortium of private universities that would see a contribution to a loan loss reserve in order to give their students access to a student loan scheme as one of the many costs of doing business (not unlike the costs of marketing or tuition discounting);
- (d) a private foundation that was interested in leveraging the maximum amount of additional higher educational accessibility for its philanthropic contribution; and
- (e) a donor agency or an international economic development agency interested in the promotion of cost-sharing and the expansion of private higher education as well as in leveraging additional higher educational accessibility for its contribution.

The eleven models presented in Table 3 and discussed above illustrate most of the significant variations in student loan schemes as found throughout the world toward the end of the first decade of the 21st century. Given the monograph's main focus on low- and middle-income countries, only those high-income country programs that fit cleanly into the described models are included in Table 3. There are a variety of other loan programs in high income countries such as Hong Kong, Hungary, Norway, Sweden and Taiwan that involve small, but important, variations and were, therefore, not included. The Hungarian Student Loan Scheme, for example, corresponds to model 2, with three differences. First, borrowers are not required to provide co-signatories. Second, the government guarantees all of the payment obligations undertaken by the Loan Centre to finance the loan scheme, but not the individual loan notes themselves. Finally, the Loan Centre adds a risk premium (which cannot exceed 4.5 percent) to cover credit risks (defaults, losses due to loan write offs when borrower retires, or becomes disabled or dies) and an operating premium to cover operating costs. The Taiwan student loan program corresponds to model 1, but provides quite different levels of interest subsidy, which depend on family income, not on political expediency.

The significance of these variations—especially in the degree of interest rate subsidization, the degree of risk, and the provision for some of this risk to be borne by parties other than governments alone—is the effect on the value of the loan notes as assets, which in turn determines the likely value of the repayment streams, as well as the degree to which the private capital market can be tapped for the recurring need for new loans. There is no *best* model, as such, for the reason that the aims of student loan schemes legitimately differ, as do the political and economic constraints among countries and over time for the construction and perfection of student loan schemes. Nevertheless, an underlying thesis of this monograph is that the value of what we have termed the *reasonably anticipated repayment streams* matters, and excessive subsidization and defaults should be minimized in order to maximize the resources available both for university operations as well as for reducing the financial barriers to wider higher educational participation.

The models above deal with student loan schemes in low- and middle-income countries that serve a public purpose and that properly entail some form of governmental participation. Before we summarize the lessons to be learned for the making of more effective public policy, we will turn below to some student loan schemes, also in low- and middle-income countries, that serve mainly private colleges and universities and that do not call upon government.

V

Private Student Loans in Low- and Middle-Income Countries

In addition to the governmentally-sponsored student loan schemes in low- and middle-income countries, private colleges and universities, or consortia of private institutions, have launched private loan schemes in cooperation with local banks. Such schemes have been put in place generally with foundation or regional development agency assistance and often with the technical and financial assistance of the International Finance Corporation, a member of the World Bank Group with a mission to promote sustainable economic development in low- and middle-income countries through the private sector, generally in partnership with banks and other foundations and development agencies.

These innovative private student schemes are generally small in relation to the total higher educational systems of the countries, including both the public and the private sectors. At least as of 2009, most are too new to have good data on repayment or default experience. Also, such private loan schemes are thought to include more credit-worthy borrowers—hence able to present less overall risk—than would be found in large, generally-available (that is, without risk rating) student loan schemes serving public sector students. At the same time, such schemes can provide models of student loan programs without the need for governmental capital, guarantees, or subsidies. In this way, these small programs are able to demonstrate the viability of unsubsidized or minimally subsidized interest rates as well as the feasibility and means of attracting private capital. Several models are presented below.

Strathmore University in Kenya: This is a model of a private university partnering with a commercial bank and the IFC. Strathmore University in Nairobi, together with the IFC and Commercial Bank of Africa Ltd., introduced in 2008 a new loan product. The CBA manages the loan program which consists of a 280 million Ksh. portfolio [US\$4.5 million]. Strathmore contributes funds to cover potential initial losses on the loan portfolio. IFC provides a structure to reduce the remaining risk. Loans cover tuition fees and bear a 12 percent rate of interest, which is near the current (2009) commercial prime rate in Kenya and thus able to cover some of the remaining risk of arrearage or default. Repayments are in equal monthly installments over a 12 month period and enable students to meet annual tuition costs. This program illustrates the willingness of private institutions of higher education to bear a portion of the risk, which, with the IFC covering more senior risk, can support commercial bank lending to credit-worthy students³⁰.

³⁰ See <http://www.ifc.org/ifcext/spiwebsite1.nsf/1ca07340e47a35cd85256efb00700cee/BE1B021F799DFBD48525741A00639535> accessed on November 20, 2009.

Sampoerna Foundation Student Financing facility (SFF), Indonesia: The Sampoerna Foundation was founded in 2001 to support Indonesian education through a variety of programs, including teacher education, curriculum development, and financial assistance at the levels of primary, secondary, and tertiary education. In 2006, the foundation began a student loan scheme called the Student Financing facility (SFF), to be a joint venture with Bank International Indonesia (BII) and the International Finance Corporation (IFC). The scheme provides non-collateralized loans for undergraduate and post graduate (masters and doctoral) students in educational institutions across Indonesia. The three partners—Bank International Indonesia, the International Finance Corporation, and the Sampoerna Foundation—contribute to the operations and share the risk, with BII managing lending and promotion, and the IFC monitoring, sharing its experience with private student loan schemes elsewhere in the world, and sharing some of the senior risk. Begun in 2006, the loan program provides means tested loans for tuition fees, paid directly to the institution (public or private), to be originated by the Bank International Indonesia, with repayment beginning at origination, and with no collateral or co-signatory requirement—albeit with bank discretion as to who may borrow, thus lowering risk though an element of risk rating. The remaining default risk is to be borne by the guarantee parties, with the First 30 percent loss to be shared by the participating universities and the Sampoerna Foundation, and the Second 70 percent (the senior risk) to be shared by the bank and the IFC.³¹

Society for the Promotion of Higher Education (Sociedad de Formenta a la Educacion Superior, or SOFES) in Mexico: Mexico, as of 2009, still lacks a national governmentally-sponsored student loan scheme. However, several private schemes have been established with World Bank and IFC assistance. The World Bank's Mexico Higher Education Financing project supported the development of SOFES, which has a number of programs, including student loans, for private institutions of higher education. SOFES in 2009 consisted of some 90 private colleges and universities and reported in 2006 some 27,000 loans—a penetration rate of about 1 percent of Mexican higher educational enrollments (Devasa and Blom 2007, p. 2). The delinquency rate was very low, but this may have been attributable to the relatively small number in repayment; no data was available in 2009 on defaults or arrearage. The original capital was provided as part of the World Bank loan to the Mexican government through its development bank. SOFES loans cover from 20 to 80 percent of the total registration and tuition fees depending on discipline and students' socio-economic situations. Loans are repaid in fixed monthly amounts over a period that is double the time from origination to the commencement of repayments. Interest plus an amount to cover the expense of life and accident insurance begin at origination and extend through the in-school and grace periods. The loans require co-signatories when available, although there was no data on the extent to which the co-signatories were called upon to repay loans in arrears or what legal steps might be taken to recover. Loans are to revert to the participating universities after a period of delinquency, making the universities the ultimate guarantors.³² The World Bank project financed a substantial expansion of student loans in Mexico, the largest number being

³¹ The loan appears on the Website of the Bank International Indonesia (BII) in November 2009 at: <http://www.bii.co.id/>

³² See <http://www.sofes.com.mx> [accessed November 2009].

within the SOFES program. In turn, the Mexican higher education enrollment rate grew from 14 percent at the 1997 baseline to over 23 percent by 2005, with the World Bank project, including SOFES, accounting for an estimated 9 percent of the additional enrollees (Canton and Blom 2004). The SOFES clientele was comprised of 28 percent low-income and 78 percent middle income students.²⁶

Other private college and university student loan programs: The International Finance Corporation (IFC) in partnership with local banks, private universities, and foundations has begun, or has in planning, a number of other student loan schemes. For example, IFC, with Omnix International Group and Cairo Amman Bank has announced intentions to launch a new student loan program in Jordan for university students to cover tuition fees. The program is expected to benefit 3,000 students and will consist of a portfolio of loans in Jordanian dinars equivalent to \$12.5 million. Loans will have a maximum maturity of 8 years. Omnix International will contribute the funds to establish the program and cover the initial risk. IFC will bear a portion of the senior risk. Cairo Amman Bank will share the risk as well as originate and administer the loans and manage the overall program.

IFC, the Bank of Palestine, and the Palestine Education Fund have announced the intention of establishing a new student loan program for university students in the West Bank and Gaza. The Bank of Palestine will fund and administer the loans and manage the program. The Palestine Education fund will cover costs during studies and for up to one year after graduate. IFC will structure the deal to reduce risk. The plan is to provide loans to about 8,000 students per year, contemplating a total portfolio of loans of up to \$10 million.³³

In Egypt, the IFC, Credit Agricole, and three Egyptian foundations have announced intentions to establish a student loan program for tuition fees in private universities. The goal is a student loan portfolio \$39 million equivalent. IFC will structure a risk sharing facility with the bank.

These and other small, essentially private, student loan programs are valuable reminders that the underlying appropriateness of student loans rests on the presumption that higher education is in some measure a legitimate private investment. Borrowing and investing is an expression of the time preference for money: Students borrow because they need money now that they do not have, but will be able to repay a loan at a later time, most likely with enhanced earning capacities due in large part to the higher education that was procured with the assistance of governments, parents, and their own investments. At the same time, student loans—at least loans that are generally available to students who may not be deemed to be otherwise credit worthy—need governmental participation to assure fair and reasonable access to the loans that may well be the only means of accessing higher education. For this reason, we remain predominantly concerned with official, large-scale, governmentally-sponsored student loan schemes. To that end, we offer the following summary.

³³ See <http://www.ifc.org/ifcext/media.nsf/content/SelectedPressRelease?OpenDocument&UNID=CF8DF1F148C90F3985257471005472C5> accessed on November 20, 2009.

VI

Summary: Making Student Loan Schemes Work in Low and Middle-Income Countries

Clearly there are many models of student loan schemes with different combinations of interest subsidization, lender practices, originating entities, guarantors, and sources of capital. Many countries will need more than one, and the best model or models will depend on many variables, such as the stage and trajectory of economic development, the size and financial strength of the in-country banks and other parts of the private capital market, the level and likely trajectory of cost-sharing, the size and academic significance of the private college and university sector, the acceptance of credit and the responsibilities that accompany a modern credit economy, and the history of attempts at student loans.

In general, the story of student loans in low and middle-income countries is a mixed one, with notable failures. Many of these failures come from loan schemes that were devised with insufficient planning to accomplish the divergent aims of putting money in the hands of students, while implementing a scheme that would look like the introduction of cost-sharing, at least to some observers, even if it had an unnecessarily greatly subsidized rate of interest, insufficient guarantees, and inadequate lending practices.

This paper has examined student loan schemes, particularly in low- and middle-income countries, from the perspective of their asset values. The immediate problem in many loan schemes in these countries—as different from one another as the countries and their loan schemes may be—is the limitation on available loan capital, which then requires stringent and frequently inefficient and sometimes inequitable rationing. As student loans are, in theory, assets, then *good* student loans—that is, loans that add productivity and that are generally repaid, like other investments—should be good assets and should find plenty of private capital looking for a return. The problem, which is especially acute in low- and middle-income countries, is that student loans are too frequently *bad assets*, with insufficient interest rates, high administration and collection costs, and high rates of default. Because of this low asset value, new student lending becomes dependent on governmental appropriations that compete with all other socially and politically compelling claims on the current operating budget. And because of this low asset value, if the government should provide a sufficiently solid guarantee to induce banks to originate the loans, the governmental guarantees, by international accounting standards, must be expensed on the government's operating budget—just as though the budget, rather than the bank, was supplying the loan capital.

The solution to this dilemma, then, lies not simply in providing governmental guarantees, which ministers of finance will resist anyway, but to enhance the asset value of student loans with sufficient interest rates, good lender practices, and to enlist other parties—family co-signatories, universities, university consortia, philanthropies, international donor agencies, and even a public lending agency through interest premiums—to share the risk of default and supplement the government as a guarantor. As long as student loans, *properly recovered*, constitute a viable supplement to government and family contributions to the high and rising costs of higher education, attention to

enhancing the asset value of loans, and enlisting the private capital market in student loan schemes, can add to the accessibility and quality of higher education.

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