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**Student Loans in an International Perspective:
The World Bank Experience**

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Introduction

In the late 1940s, a Colombian youth by the name of Gabriel Betancourt dreamt of going to the university even though he came from a relatively poor family. He convinced the manager of the company for which he worked to give him a loan to pay for his studies abroad. After he obtained his degree, he was so thankful for the opportunity he had benefited from that he decided to promote a way to institutionalize this type of loan. He successfully lobbied the Government of Colombia and, in 1950, helped to establish the Colombian Student Loan Institute, ICETEX, the first institution of that kind not only in Latin America but in the entire world. Today, student loan schemes are operating in more than sixty countries across all continents, making student loans an increasingly important financing mechanism for higher education.

This document presents a panorama of international experiences and recent trends. After evoking the rationale for student loans, it discusses the development of this form of student finance from a global perspective. It then summarizes the most salient lessons which can be drawn from on-going World Bank projects and activities in support of student loans schemes in developing and transition economies.

Students Loans in an International Perspective

In a growing number of countries throughout the world, public resources are proving increasingly insufficient to finance tertiary education. In these countries, cost-sharing between government and the students is becoming the norm. But cost-sharing cannot be implemented equitably without adequate student support mechanisms for academically qualified but needy students. There are two ways of offering financial support: through targeted scholarship schemes and through student loan programs that make funds available to all students who wish to borrow for their education. A great number of institutions and countries have introduced loan schemes which are repaid from subsequent earnings after graduation.

Although there is a great variety of lending schemes from an organizational viewpoint, the basic principles remain the same. Students receive loans to cover the direct cost of

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education (tuition fees, education supplies, including computers) and, in some cases, living expenses until they finish their studies. Then, after a short grace period to find a job, usually from six to twelve months, the graduate starts repaying the loan on a monthly basis.

Table 1 presents the different categories of student loan programs classified along two dimensions: (1) type of ownership and purpose of the institution managing the program, and (2) scope of the program in terms of geographical or institutional eligibility. Specific country and institutional examples are given for illustration purposes.

Table 1 - Scope and Ownership of Student Loan Schemes

	Public	Mixed	For-Profit Private	Non-Profit Private
Multi-National		EBRD / ABN (Eastern Europe)		
Nation-Wide	ICETEX (Colombia) FUNDAYACUC HO (Venezuela) SLB (Jamaica)	COLFUTURO (Colombia)	Intermediary Agencies (USA) Commercial Banks (many countries)	FUNDAPEC (Dom. Rep.) EDUCREDITO (Venezuela)
Region / Province / State	ICEES (Mexico) Quebec			Agency in Massachusetts (USA), SACEV (Venezuela)
Association- Based				SOFES (Mexico) FUNDAPLUB (Brazil) Grameen Bank (Bangladesh)
Institution- Based	Universities in China			Universities in USA, Mexico

In most countries, student loan institutions have traditionally been run by public agencies, with the exception of programs administered directly by well-endowed private universities in the United States. In recent years, new forms of ownership have appeared: commercial banks offering loans to students on their own initiative, for-profit private agencies in the US, as well as a number of non-profit institutions in developing countries, such as EDUCREDITO in Venezuela. FUNDAPEC, in the Dominican Republic, was established as a private foundation in the early 1980s with a one-time donation from Government, after a failed attempt, by the Ministry of Education, at running its own student loan program. In

Colombia, COLFUTURO was created in the early 1990s as a foundation with capital contributions from both the public and private sectors, with the purpose of offering loans for studies abroad in areas of national priority. In Eastern Europe, the European Bank for Reconstruction and Development (EBRD) formed an alliance with a private banking group, ABN AMRO, to offer a loan program to students from Central and Eastern Europe and Central Asia admitted to study for an MBA at three top Western European management schools (INSEAD, IESE and LSE). In Bangladesh, the Grameen Bank offers a student loan program for the children of poor families who are already the beneficiaries of small loans for productive activities.

Many student loan schemes have a national scope but there are important exceptions. Mexico does not have a national student loan program, but a very effective public student loan agency has been operating in the Northern State of Sonora since 1981. In Brazil, in the State of Rio Grande do Sul, a group of alumni created a successful student loan foundation in the late 1970s (FUNDAPLUB). SACEV is a non-profit student loan foundation serving the needs of students in Eastern Venezuela.

A third analytical dimension of student loan schemes is their organizational setup. Table 2 offers a categorization of programs encountered throughout the world, again with some country and institution examples.

Table 2 - Types of Organizational Structure of Student Loan Schemes

Type of Organizational Setup	Example
Department within University	United States, Mexico, China,
Specialized Agency	ICETEX (Colombia)
Universities with Agency	SOFES (Mexico)
Commercial Bank	Many Countries
Agency with Commercial Bank	FUNDAYACUCHO (Venezuela) SLB (Jamaica)
Government with Agency	United States
Government with Commercial Banks	Canada, Poland, Hungary
Multilateral Agency with Commercial Bank	EBRD / ABN

Differences in organizational setup reflect the variety of administrative arrangements and institutional forms of division of labor with respect to the functions and processes involved in the management of a student loan scheme: program design, promotion activities, selection of beneficiaries, disbursements, academic supervision, loan collection, investment of cash flow and reserves, monitoring and reporting. FUNDAYACUCHO, in Venezuela, works in

partnership with a commercial bank responsible for the financial evaluation of applicants, loan disbursement and collection. A similar arrangement operates in Jamaica, involving a larger number of domestic and foreign banks. In Canada and Poland, the government is only responsible for program design, interest rate subsidy, and provision of guarantees against default. The capital used to offer loans to the students is raised by the commercial banks themselves.

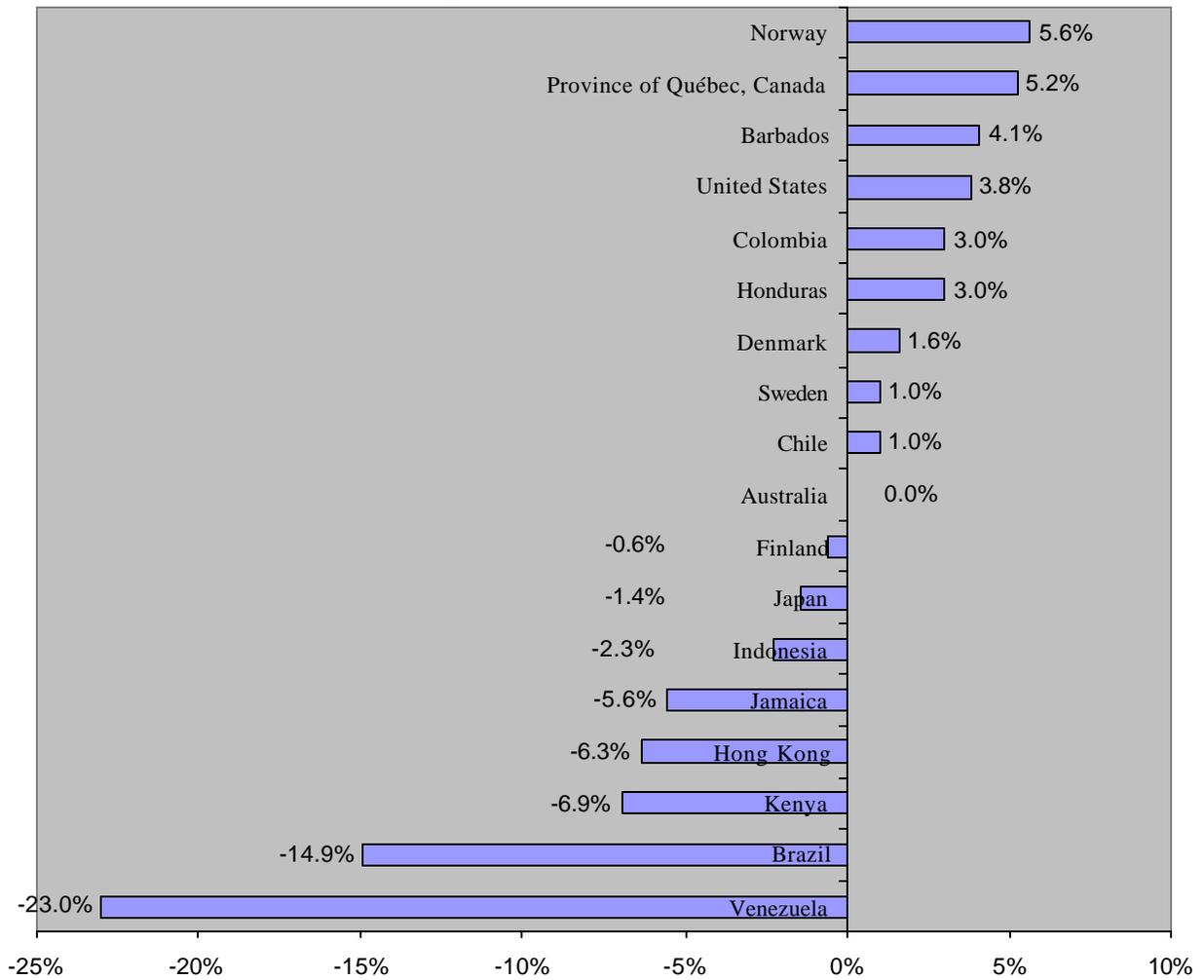
Student loan programs are funded from any one of the following sources: government, the students, companies in the productive sectors, alumni and philanthropists, and international agencies (see Table 3 below). In addition to the scheduled repayments by loan beneficiaries and the income generated through their own financial investments, public agencies often receive budgetary contributions on an annual basis, either from the national government or from a provincial government. These budgetary transfers are used to finance their operating costs and to grant additional student loans. In Brazil, the Caixa Econômica Federal receives a set percentage of proceeds from the National Lottery. IFARE in Panama is funded through a payroll tax. CONAPE in Costa Rica gets its resources in the form of a five percent tax on the profits of commercial banks. In Hong Kong, a percentage of the gambling tax levied on horse races is used to finance the student loan scheme. In some countries, the student loan agencies manage trust funds on behalf of public or private companies, and even on behalf of philanthropists willing to fund student loans according to strict targeting criteria (Sonora Institute). ICETEX in Colombia issues educational bonds to mobilize additional resources. In the Dominican Republic, FUNDAPEC has recently been able to increase its coverage thanks to a loan from the Inter-American Development Bank. FUNDAPEC has also established a savings plan available to the families of future beneficiaries.

Table 3 - Funding Sources Matrix

	Government	Graduates & Families	Industry & Services	Alumni & Philanthropists	International Cooperation
Budgetary Contributions	X				
Dedicated Resources					
Lottery proceeds	X	X			
Gambling tax	X	X			
Payroll tax	X		X		
Banking tax	X				
Trust Funds	X	X	X	X	X
Repayments					
Regular loans		X	X		
Waived tuition		X	X		

Self-generated Income				
...Savings plans	X			
...Educational bonds	X	X		
Credit cards			X	
Consulting		X		
Investment Income		X		
Donations		X	X	
Loans	X	X		X

A 1992 review of international experience with student loan schemes in both industrialized and developing countries, over half of them in Latin America and the Caribbean, found mixed results¹. Because of heavily subsidized interest rates, high default rates, and high administrative costs, the repayment proportion of loans has not been very significant in most cases. Whenever the interest rate is lower than inflation, the loan is subsidized. Loan programs have traditionally been heavily subsidized to minimize the burden to the students, but this has meant that the student loan agencies have been losing part of their assets as long as they have given out subsidized loans. The longer the repayment period, the higher the subsidy. Graph 1 presents data on the real interest rate in a number of student loan programs.

Graph 1 - Real Interest Rates

Source: Albrecht, D. and A. Ziderman (1992). Deferred Cost-Recovery for Higher Education: Student Loan Programs in Developing Countries. World Bank paper No. 137. Washington D.C., p. 15.

The second difficulty encountered by student loan institutions has been the high level of default due to a combination of external factors such as unemployment and internal factors like poor management of the loan recovery function. In Kenya, for instance, the large majority of loan beneficiaries (81 percent) did not repay. In the United States and Canada, the rate of default was about 17 percent in the federal programs throughout the 80s. The lowest default rates have been observed in Sweden, Hong Kong and the Canadian Province of Quebec where students are protected by a system of income-contingent payments in the form of a maximum proportion of income which can be applied towards repayment of a student loan (between ten and 15 percent).

The third element which contributes to the lack of financial viability of student loan programs is the low level of managerial efficiency, especially in public agencies, which results in high administrative costs. Whereas in industrialized countries the most efficient institutions have operating expenditures representing no more than one percent of their portfolio, the average administrative cost in Latin American student loan institutions ranged from 15 to 25 percent in the 1980s. The net effect of these factors on the overall financial performance of loan schemes has been so detrimental that, in many cases, it would have been cheaper to substitute loans with outright grants or scholarships, as illustrated by the following examples (Table 4).

**Table 4 - Proportion of the Original Value of the Loan Recovered
(in real terms)**

Country	Without default & administrative costs	With default & administrative costs
<i>Mortgage Loans</i>		
Venezuela	77	8
Kenya	30	8
Chile	52	18
Honduras	49	27
Indonesia	43	29
Brazil	38	29
Jamaica	44	30
Denmark	48	38
Japan	50	40
United States	71	47
Finland	65	48
Norway	67	52
Colombia	71	53
Hong Kong	57	53
Province of Quebec, Canada	69	63
Barbados	87	67
<i>Income-Contingent Loans</i>		
Australia	52	43
Sweden	72	67

Source: Albrecht, D. and A. Ziderman (1992). Financing Universities in Developing Countries. Document PHREE/92/61. The World Bank: Washington D.C, p. 79.

Even those loan programs which have functioned reasonably well in developing countries, such as ICETEX in Colombia, CONAPE in Costa Rica or FUNDAPEC in the Dominican Republic are relatively small in scale, covering no more than ten percent of the country's student population. It is unclear whether efficient administration could be maintained if the programs were expanded substantially.

A growing number of countries are adopting income-contingent loan systems, sometimes referred to as graduate tax, in which loan repayments are a fixed proportion of a graduate's annual income. Although experience to date is limited, such systems can, in theory, achieve a better balance between effective cost recovery and risk to the borrower. Administration is generally simpler and cheaper under such schemes because loan recovery is handled through existing collection mechanisms, such as the income tax administration or the

social security system. Income-contingent loans are also more equitable and satisfy more fully the ability-to-pay principle, since graduates' payments are in direct proportion to their income. For example, the student support system in Sweden minimizes the risk of student default by limiting repayments to four percent of income after graduation. Ghana has adopted a similar program which collects payments through the national social security system. In Australia, income-linked loan payments are made through the tax system. The rate of repayment is two, three or four percent of taxable income, depending on how much a graduate earns. The existence of a comprehensive student loan scheme has enabled Australia to introduce cost-sharing in public higher education, representing up to 20 percent of unit costs, and achieve a 30 percent expansion in enrollment in a few years without a significant increase in public subsidies. A similar system has been established in New Zealand. In Singapore, the National Social Security and Pension Fund offers educational loans to parents who can then repay at the same time as they make their regular out-of-salary contributions to the Fund.

Income-contingent loans offer considerable promise. However their feasibility depends heavily on the existence of a reliable income tax or social security system with access to accurate income information and the administrative capacity to handle loan collection in an efficient and effective manner.

Finally, it is worth mentioning an innovative approach tried at Yale University between 1971 and 1978, which illustrates painfully how the implementation of a theoretically sensible and generous concept turned into a nightmarish adventure for many beneficiaries of these loans. The Tuition Postponement Option (TPO), as the program was called, combined features of traditional mortgage loans and income-contingent loans in an original mannerⁱⁱ. Designed by Nobel Prize winner James Tobin with the purpose of helping needy students to afford studying at an elite university while pursuing low-paying careers, the plan was organized so that each graduate from a given class would pay into a pool her/his contribution to the whole cohort's debt. Each loan beneficiary was supposed to pay every year 0.4 percent of his/her income for each \$1,000 borrowed, for as many years as it took for the total debt of the entire cohort to be extinguished. Worry about the program started when a number of high-earning graduates realized that their accumulated repayments far exceeded in real terms the amount borrowed, and that there seemed to be no end to the repayment period. What has happened, in essence, is that the wealthiest graduates have been subsidizing not only those colleagues who earn less than them—as established by design in the scheme--but also, unexpectedly, the 15 percent "deadbeat" graduates who defaulted on their loans.

World Bank Experience with Student Loan Programs

Until the mid-1990s, World Bank experience in the area of student loans had been very limited because student loans usually go hand in hand with the existence of cost-sharing arrangements. In many developing countries, national authorities had been generally reluctant to start charging tuition fees or to transform their generous scholarship programs into student loans. In Kenya, for example, a recent World Bank-financed project in support of higher education failed to bring about significant change in the existing student loan scheme because the students successfully fought attempts to raise tuition fees. In Argentina, where a World Bank loan is currently supporting a reform of the public budget allocation process for higher education, there is no talk of a student loan scheme because the subject of tuition fees remains taboo, even though, in practice, all public universities charge hefty fees for postgraduate education.

However, in recent years, the Bank has been able to make some inroads in the field of student loans, starting in 1992 with the preparation of a project to assist in the conversion of the Venezuelan Scholarship Foundation, FUNDAYACUCHO, into a student loan institution. In the past three years, the number of World Bank student loan projects and activities has soared rapidly, as reflected in the table below.

Table 5 - World Bank Group Support for Student Loan Programs

Country	Bank Activity	Institutional Setup
Venezuela (1991-1999)	Loan	Government Agency with Commercial Bank
Kenya (1995)	Study of SL reform	Government Agency
Jamaica (1996-)	Loan	Government Agency with Commercial Banks
Namibia (1996)	Study	Government and Social Security Commission
Hungary (1998-)	Loan	Government Agency with Commercial Banks
China (1998-)	Grant	University-based
Mexico(1998-)	Loan	Association of Private Universities & Provincial Public Agency
Malaysia (1998)	Technical Advice	Government Agency
Bulgaria (1999-)	Technical Advice	Under study
Poland (1999)	Technical Advice	Government with Commercial Banks
Ethiopia (1999-)	Study	Graduate Tax (under study)
Lebanon (1999-)	IFC Loan	Under preparation
Brazil (1999-)	Loan	Under preparation

World Bank support is usually sought to achieve any one of three objectives. In some instances, the main purpose is to establish a student loan scheme from scratch, as has been the case in Hungary, Bulgaria, Namibia, Ethiopia and Mexico (SOFES). In other cases, the intervention aims at improving the performance of an existing scheme (Venezuela, Jamaica, Brazil, China) or expanding coverage (Mexico / ICEES).

The rest of this section presents a review of the principal challenges encountered in the course of developing or strengthening student loan schemes, some suggestions on successful strategies to address these challenges, and observations on some unanticipated benefits of student loan programs.

Problems, Crises and Challenges

The design and implementation of student loan schemes can face bottlenecks along any one of the following dimensions:

- demand
- funding and coverage
- financial viability
- targeting

Demand problems occur when, for any reason, the availability of loans is not sufficiently known to students or when the financial products offered by the student loan agency are not attractive. Knowledge about student loans has two dimensions. First, students need to be aware of the existence and availability of the program. Second, they must understand clearly what is involved in a loan (eligibility criteria, grace period, repayment obligations, interest rate, etc) in terms of responsibilities and obligations. The attractiveness of any student loan scheme is determined by cultural factors such as attitudes towards borrowing and risk aversion, by the economic terms of the loans, and by the credibility of the student loan agency.

Funding problems reflect constraints on the availability of financial resources to offer new loans and expand coverage. Funding from the public budget is usually affected by the fiscal health of the country. The more enterprising student loan agencies are able to tap funds from private sources. ICETEX in Colombia, FUNDAPEC in the Dominican Republic and the Sonora State Student Loan Institute in Mexico, for example, have been successful in attracting private resources from companies and philanthropists which are administered as trust funds.

As mentioned earlier, the financial viability of any student loan scheme is affected by the degree of interest rate subsidy, the default rate, and the level of administrative costs. The default rate, in turn, is a function of the income situation of the graduates, the effectiveness of the collection mechanisms, and the type of repayment schedule applied (fixed payments versus graduated payments, length of the grace period). Some student loan institutions have a complicated system of exemptions which contribute further to the lack of financial viability. In Venezuela, for example, FUNDAYACUCHO offers three types of exemptions. Students with a high academic performance can have up to 15 percent of their total debt reduced. Graduates who decide to work in the public service or in a public higher education institution are entitled to a 35 percent discount. Finally, graduates who are never late on their loan payments can benefit from a 20 percent discount after a certain period of time.

Targeting is the last category of potential problems. Targeting can become an issue if there is leakage, that is when the social characteristics of the selected beneficiaries do not correspond to the planned distribution of recipients. The Student Loan Bureau of Jamaica,

supported by a World Bank loan, has been faced with this issue. It would appear that the income categories and ceilings used as eligibility criteria in the selection process have not been discriminatory enough. As a result, a higher than expected proportion of students from the richest quintiles have received a loan, as illustrated by Table 6.

Table 6 - Distribution of Loan Recipients by Income Quintile (1996)

Quintile	Proportion of loan recipients	Share of total student population
Quintile 1 (poorest)	7.7%	2.6%
Quintile 2	5.2%	7.7%
Quintile 3	9.0%	15.4%
Quintile 4	15.7%	38.5%
Quintile 5 (richest)	62.3%	35.9%
Total	100.0%	100.0%

Source: Jamaica Student Loan Bureau, 1997.

Another potential cause of targeting problems is the guarantee system. Overly stringent guarantee conditions can discourage or eliminate applicants from the least affluent families. In Poland for example, where the Government established in 1998 a nation-wide student loan scheme managed through commercial banks, a good number of eligible students were turned down because they were unable to satisfy the guarantee conditions imposed by the banks. The same problem arose in the earlier years of the FUNDAYACUCHO project in Venezuela.

Recent developments in China, where student loan schemes have emerged as part of the student aid package associated with the introduction of tuition fees in all public universities in 1997, can illustrate some of the demand and funding difficulties mentioned above. Students are now expected to pay fees representing from ten to 25 percent of unit costs, depending on the university. Paradoxically, the richer universities, that is the universities in the wealthier provinces, charge the lowest fees because they have more opportunities to generate additional revenues through research and service contracts. Many universities administer their own interest-free loan scheme with funds coming from the central government as well as, in some cases, funds from the local authorities. The loans are designed to help cover living expenditures and students are supposed to repay at the time of graduation, unless they can find a guarantor. Parallel to these university-based schemes, some experiences are under way in Shanghai where universities are associated with commercial banks in running a student loan program.

Field visits in several Chinese universities in 1998 have revealed that these nascent student loan schemes are faced with serious difficulties. First, there is a cultural reluctance to borrow money from outside the circle of relatives. Second, the salary differentials between

university graduates and non-graduates are still very small, at least in the socialist part of the economy, which makes it more arduous to envisage repaying a loan. Third, in the university-based scheme, the burden to do the follow up of debtors after graduation is on the universities and most of them feel that they do not have the capacity to do this follow up. This is why students are required to pay back their loan in full by the time they graduate, which somehow defeats the purpose of offering resources to help them finance their studies until they have enough income to repay. Finally, even in those universities which view student loans as a valuable mechanism, it appears that coverage is insufficient for lack of funding. Basically, the existing student loan schemes still function as pilot programs whose long term viability and equity impact have not been thoroughly assessed.

Successful Approaches

Improving the efficiency and financial viability of existing student loan programs while broadening their coverage is a major challenge. Despite the poor performance of many of the existing schemes, the recent experience of the World Bank in support of student loan schemes reveals that it is possible to design and administer financially sustainable programs if a number of basic conditions are respected. The following features have been identified as critical:

- a good information and marketing strategy to promote the student loan program and ensure widespread awareness among eligible students and institutions;
- transparent eligibility criteria to ensure that any subsidy element be targeted to the most deserving students (academically and socially);
- a close supervision of the academic performance of the student loan beneficiaries;
- a carefully designed interest rate and subsidy policy to protect the long term financial viability of the scheme;
- efficient collection mechanisms, including an appropriate legal framework, to minimize default;
- efficient institutional management of all key processes (evaluation and selection of beneficiaries, academic monitoring, loan collection, financial management), based on an adequate computerized management information system; and
- a stable management teamⁱⁱⁱ.

To address targeting issues, there is a need for rigorous selection and screening criteria. The most straightforward approach consists of requiring official income tax data to check the family background of applicants. Unfortunately, in many countries, the absence of reliable income tax data makes it difficult to screen applicants in a precise way. Student loan institutions often have no choice but to use indirect parameters instead, such as data on family assets and educational background collected through questionnaires and / or visits by social workers.

Promotion campaigns can help to attract students from the poorer groups and regions. The Sonora Institute has maintained excellent regional coverage because of its regular promotion campaigns which reach all secondary school students. Another purpose of promotion campaigns and activities is to develop a positive credit culture. The relative success of the Sonora Institute in maintaining a low default rate is directly linked to the personalized interviews and careful explanation work extended to first-time beneficiaries of a student loan. Instilling a sense of responsibility among student loan beneficiaries is usually more difficult in large nationwide programs, especially when the intermediaries (commercial banks, etc.) know that they are backed up by a generous Government guarantee system. The negative experience of the Canadian federal student loan program in the early 1990s shows that it is too late to change negative attitudes after default occurs and forceful collection steps are undertaken. It is therefore important to build this feature into public awareness campaigns and to supplement it by a mandatory exit interview, as is now the case in the US system.

To get around the issue of financial guarantees, student loan agencies can establish a Guarantee Fund to help students from the lower income groups, who usually find it difficult to secure adequate collateral. Such a Guarantee Fund was built into the design of SOFES, the new student loan agency in Mexico set up by the Federation of Private Universities. The Sonora Institute does not require a financial guarantee but relies exclusively on a moral guarantee from a sponsor who signs the loan contract together with the student. In Lebanon, the new student loan scheme which the World Bank's International Financing Corporation is considering to finance is targeting the students' families rather than the students themselves to be more in line with prevailing cultural customs and values.

Students from the lowest income groups can also be protected by imposing a ceiling on repayments, expressed as the maximum proportion of monthly payment to income that the graduate is expected to maintain. In Venezuela, for example, FUNDAYACUCHO has established 15 percent as the ceiling for monthly repayments. Experience shows that no repayment schedule can be sustainable when the monthly debt exceeds 18 percent of income.

If loan programs are to be financially viable in the long run, interest rates must be raised to be positive in real terms. Fundapec in the Dominican Republic is one of the few non-public student loan agencies operating successfully with a positive interest rate. As part of the reform supported by the World Bank, the Sonora Institute has raised the interest rate to eliminate the 20 percent subsidy introduced in the aftermath of the Peso crisis. The Venezuela project with FUNDAYACUCHO has aimed at reducing the level of interest rate subsidy, from about 80 percent in the early 90s to around 33 percent today. The difficulties encountered in that project argue for keeping exemptions for good academic results or satisfactory payment record to a minimum.

For students from the lowest income groups who may not be able to afford to pay a positive interest rate, loans can be combined with scholarships, as the Mexican private universities promoting the SOFES student loan initiative are planning to do. This approach has the merit of supporting the neediest students while protecting the financial viability of the loan scheme.

Loan programs require effective collection mechanisms. The Sonora Student Loan Institute has managed to keep defaults at acceptable levels, no higher than 12 percent on average, thanks to an efficient management information system and a philosophy of personalized relations with the loan beneficiaries. The Institute has been instrumental in creating, in the State of Sonora, a culture of responsible students in a country where cost-sharing and student loans are still foreign notions. By contrast, FUNDAYACUCHO in Venezuela was regarded for a long period as a lenient institution which did not care about loan collection. In recent years, however, a new management team has reorganized the collection department and enforced stricter standards, with notable results.

Upstream interventions are important to reduce default. Close supervision of the academic results of student loan beneficiaries, regular contact to reinforce their sense of responsibility, and up-to-date information on labor market outcomes all have a critical influence on the success of later collection efforts.

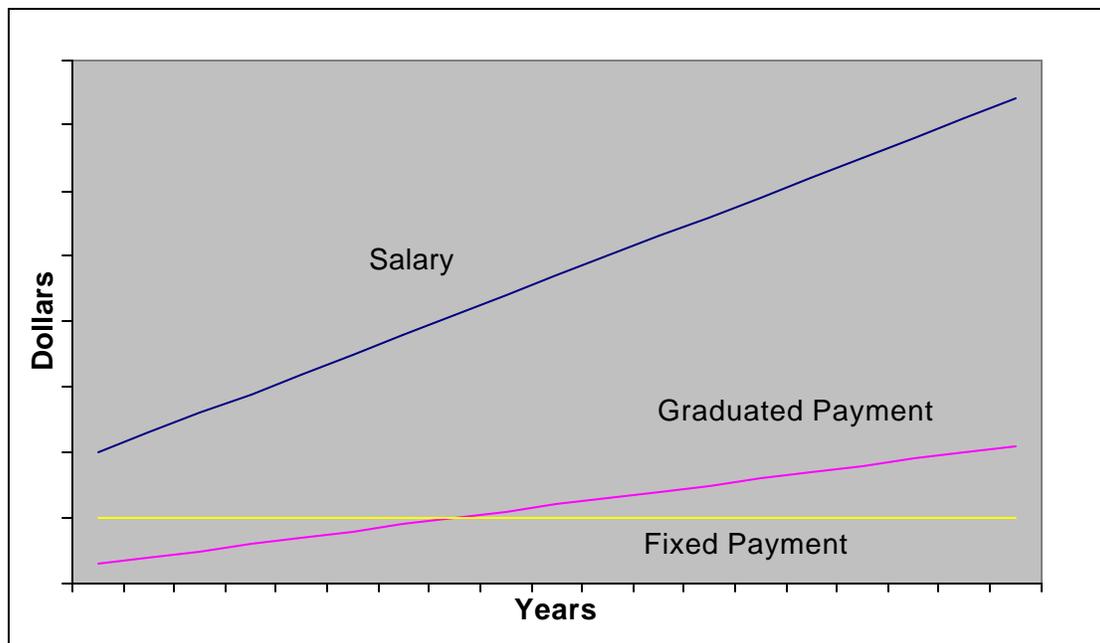
The collection of delinquent loans can be enforced through moral persuasion, legal suits, credit blacklisting, the publication of a “shame” list or the seizure of collateral assets. The feasibility and effectiveness of each approach varies a lot, depending on each country’s cultural norms and legal practices. In Jamaica, where arrears are very high because students perceive that the loans are financed by the Government and need not be repaid, the Student Loan Bureau has recently launched a radio and newspaper campaign combining positive messages to appeal to the students’ civic duty and negative adds with the name and picture of delinquent students. In Colombia, one of the better private universities (Universidad de los Andes) works closely with ICETEX to encourage its graduates to keep current with their loan repayment obligations.

When intermediary agencies such as commercial banks are used for student loan disbursement and collection, it is essential to build adequate incentives into the contractual arrangements between the Student Loan Institution and the Intermediaries, in order to minimize evasion and default. The Student Loan Bureau of Jamaica has experienced serious default and repayment delay problems in 1998 and 1999 (close to 68 percent of all outstanding loans), partly because of the deteriorating economic situation and partly because the commercial banks responsible for loan collection to have found it easier to invoke the Government guarantee rather than making sustained collection efforts. The banks have also claimed that the one-time 3.5 percent administrative fee they are paid for each new student loan is insufficient to cover their expenses.

The design of the SOFES student loan agency in Mexico presents interesting and innovative features introduced to minimize the financial impact of default. Each of the 32 private universities who own SOFES is directly responsible for on-time repayment of the loans contracted by its individual students. This has two practical implications. First there is a provision for an automatic financial transfer from the universities to SOFES as soon as one of their students is in default. Second, each university is in charge of loan collection for its own students. This ingenious setup should, in theory, put all the risks on the universities, thereby protecting the overall financial health of the student loan agency. As the project has just become effective, it is too early to tell how well it is going to operate in real life.

Student loan schemes need to be designed in such a way as to program a repayment schedule in line with the natural evolution of salaries. Relying on graduated payments instead of fixed payments helps minimize the burden on graduates and improve loan recovery, as illustrated by the following graph.

Graph 2 – Effect of Repayment Type



Abandoning the original fixed payment system and shifting to a graduated payment scheme significantly improved the viability of the Venezuela program, as the following real life data show (Table 7). The calculations are made for a loan of 2 million bolivars equivalent to \$4,000, with an annual inflation rate of 30 percent, a 28 percent interest rate and a 50 percent subsidy.

Table 7 - Fixed vs. Graduated Payments

Year	Salary	Fixed Payments	Proportion of Salary	Graduated Payments	Proportion of Salary
1	1080000	0.0		0.0	
2	1843452	754227	40.9%	216992	11.8%
3	2420452	754227	31.2%	286430	11.8%
4	3178054	754227	23.7%	378088	11.9%
5	4172785	754227	18.1%	499076	12.0%
6	5478866	754227	13.8%	658780	12.0%
7	7193752	754227	10.5%	869590	12.1%
8	9445396	754227	8.0%	1147859	12.2%
9	12401805	754227	6.1%	1515174	12.2%
10	16283570	754227	4.6%	2000030	12.3%
11	21380328	754227	3.5%	2640040	12.3%
12	28072371	754227	2.7%	3484853	12.4%
13	36859023	754227	2.0%	4600007	12.5%
14	48395897	754227	1.6%	6072009	12.5%
15	63543813	754227	1.2%	8015052	12.6%

Three key observations can be made with respect to the possible improvement strategies which can be pursued to overcome the bottlenecks reviewed earlier. First of all, the four categories of issues--demand, coverage, financial viability and targeting--are not mutually exclusive. In many instances they are closely intertwined and tend to amplify one another. As illustrated by the FUNDAYACUCHO story, the unsatisfactory targeting results were partly due to the fact that there was a vast untapped demand outside the capital city. As soon as FUNDAYACUCHO started to run an active marketing campaign to attract more students from the interior of the country, the number of applicants rose, the proportion of beneficiaries from Caracas decreased from 58 to 42 percent (between 1995 and 1997) and the overall socio-economic distribution of the beneficiaries improved dramatically (see Table 8).

**Table 8 - Socio-Economic Origin of New Beneficiaries
(Postgraduate Students)**

Social Class	Postgraduate Students % (1995)	Postgraduate Students % (1997)
High	13.5	1.0
Medium High	67.5	10.7
Medium	16.9	40.7
Medium Low	1.5	33.7
Low	0.4	13.6
Total	100.0	100.0

Source: FUNDAYACUCHO, 1998.

Second, it is important to recognize that the state of the economy bears heavily upon all four categories of problems reviewed above. More than many other activities, student loan programs are extremely sensitive to sudden shifts in economic conditions. The Peso crisis which hit Mexico in December 1994, and the resulting rise in unemployment, forced the Sonora Student Loan Institute to change its interest rate policy to protect students from high inflation, to the detriment of the Institute's financial viability. Some Mexican universities which operate their own student loan scheme calculate repayments in constant tuition fee units to protect themselves against inflation. The Argentinean student loan body, INCE, went into bankruptcy in the late 1980s, a direct casualty of the hyperinflation period. The 1998 downturn in the Colombian economy, combined with ill-advised financial investments, has forced ICETEX to reduce its coverage, down from 12 to eight percent of the student population. For institutions offering loans to students wanting to study abroad, any sharp movement in the foreign exchange value, such as a significant devaluation, can negatively affect the students' capacity to repay their loans, as happened to FUNDAYACUCHO in Venezuela in the early 1990s (Table 9).

Table 9 - Impact of the Devaluation in Venezuela

Year	Exchange Rate (Bv/US\$)	Average Payment US\$	Value in Bv	Salary	Proportion Payment/ Salary
1991	60	10,000	600,000	1,200,000	50.0%
1994	170	11,500	1,995,000	2,640,000	75.6%
1997	495	13,400	6,633,000	3,600,000	184.3%

Source: FUNDAYACUCHO, 1998.

Even income-contingent loan schemes are not immune to economic fluctuations. In Ghana, the student loan program has run into serious difficulties because a number of graduates were not able to find jobs. As a result, the responsibility for loan payments had to be taken over by their guarantors, some of whom had already retired from active life. In many cases, the net amount left after subtracting the loan payment from their meager pension proved insufficient to cover their living expenses. This has compromised the future of an otherwise theoretically sound system.

The third and final observation is that the degree of stability and commitment of the management team is a crucial determinant of success or failure for any student loan institution, as it is in many private sector firms. The experience of several Latin American countries demonstrates unequivocally the power of this factor. The four agencies recognized by the Pan-American Association of Student Loan Institutions (APICE) as models for other institutions in the region, FUNDAPLUB in Brazil, FUNDAPEC in the Dominican Republic, CONAPE in Costa Rica and ICEES in Mexico have all operated with the same management team for at least ten years. By contrast, FUNDAYACUCHO in Venezuela has known four presidents in the past four years and ICETEX in Colombia has had eight general directors in seven years. This rapid turnover has undeniably played a role in the recent difficulties experienced by the latter institutions. Very often, frequent management changes are also associated with undue political interference which may compromise the targeting focus and financial viability of the student loan scheme. It should be emphasized that the economic vulnerability factor makes it even more important for student loan institutions to enjoy continuity in their leadership.

To conclude this presentation of common problems and strategic options to overcome them, the following matrix summarizes the various categories of potential issues, cross-referenced with the key factors at the heart of these issues: design of the student loan scheme, quality of management practices, and state of the economy (Table 10).

Table 10 - Diagnosis Matrix

	Design	Management	Economic Situation
Demand			
Knowledge			
Awareness		X	
Understanding	X	X	
Attractiveness			
Culture		X	
Credibility	X	X	X
Terms	X	X	X
Coverage / Funding			
Public Sources	X	X	X
Private Sources	X	X	X
Financial Viability			
Interest Rate Subsidy	X		
Default Rate			
Repayment Schedule	X		X
Income of Graduates			X
Collection Mechanisms	X	X	
Exemptions	X		
Administrative Costs	X	X	
Returns on Investment		X	X
Targeting			
Leaking	X	X	
Guarantees	X		X

Experience to date seems to indicate that, in addition to the design factors mentioned earlier, the most significant elements explaining the relative success or failure of any student loan scheme are the strength of its leadership, the quality of management practices and systems, and the ability to react rapidly and flexibly whenever problems arise. Sometimes it is sufficient to take actions at the management level, by making sure that procedures are properly followed. But it is also often necessary to revisit the design of the scheme and to make significant adjustments to improve the situation.

To monitor effectively its management performance and development impact, and to be able to take appropriate measures whenever problems arise, every student loan institution needs to develop and apply a set of comprehensive indicators. At a minimum, monitoring indicators should include the following elements:

- *Demand and Targeting Indicators*
 - ⇒ Evolution of higher education enrollment rate
 - ⇒ Coverage (number of beneficiaries over student population)
 - ⇒ Proportion of new beneficiaries accepted over the number of applicants
 - ⇒ Proportion of beneficiaries from low and medium income families
 - ⇒ Gender distribution of students and beneficiaries
 - ⇒ Geographical distribution of students and beneficiaries
 - ⇒ Distribution of students and beneficiaries by academic program
 - ⇒ Academic results of beneficiaries (compared to general student population)

- *Financial Indicators*
 - ⇒ Arrears and default rates (by socioeconomic group, gender, tertiary institution, academic discipline, and amount of loan)
 - ⇒ Affected portfolio as a proportion of total portfolio
 - ⇒ Delayed payments as a proportion of affected portfolio
 - ⇒ Actual interest rate and subsidy level
 - ⇒ Loan recovery ratio
 - ⇒ Administrative costs compared to overall portfolio (and distribution of main expense categories)
 - ⇒ Cash flow projections
 - ⇒ Evolution of real value of assets
 - ⇒ Distribution of funding sources
 - ⇒ Dependency on government resources
 - ⇒ Mobilization of non-government resource
 - ⇒ Return on investment (return on capital, return on assets)

- *Institutional Operation Indicators*
 - ⇒ Management indicators (measuring the efficiency and quality of internal processes)
 - ⇒ Satisfaction of beneficiaries
 - ⇒ Turnover of personnel
 - ⇒ Indicators of promotion of the student loan program (awareness of the program and understanding of the terms and obligations)

The Sonora Student Loan Institute, for example, has been able to monitor closely the socio-economic profile of its beneficiaries thanks to the regular collection of data on family background in the student population at large as well as among the beneficiaries of its loans (Table 11).

Table 11 - Socio-Economic Profile of Students in the State of Sonora

Income Levels	<i>Public Universities</i>		<i>Private Universities</i>	
	Student Population	Loan Beneficiaries	Student Population	Loan Beneficiaries
High	0.5%	0.8%	10.2%	6.3%
Medium	23.6%	22.2%	61.1%	55.2%
Low	75.9%	79.7%	28.7%	38.5%
Total	100%	100.0%	100.0%	100.0%

Source: ICEES data, 1998.

In Jamaica, data on the socio-economic and academic distribution of the graduates who did not pay back generated interesting results. Contrary to what could have been expected, it is not the poorest students who are the worst payers. The highest default rates have been found among lawyers and medical doctors. By contrast, teachers, who tend to come from the lowest income groups, have been very disciplined in their payments.

Side Effects

Beyond their primary social vocation of providing financial aid to needy students, loan programs can also have a positive impact on the quality of higher education through the eligibility criteria imposed on beneficiaries and beneficiary institutions. In Mexico, for instance, the Association of Private Universities requires its members to be accredited by a US accreditation agency. The Student Loan Institute of the State of Sonora gives loans only to students attending a higher education institution recognized by the State Ministry of Education. Similarly, in Costa Rica, loan beneficiaries must be enrolled in institutions approved by the National Council for Private Universities. CONAPE, the Costa Rican student loan agency, is even planning to work exclusively with universities having volunteered for the program accreditation offered by the newly created Accreditation Body. In the United States, it has been observed that, while the default rate was as high as 33 percent for student loan beneficiaries attending a proprietary institution, it was only seven percent for students enrolled in accredited universities.

In the long run, student loan schemes can help develop national postgraduate capacities. In Venezuela, for example, the cost of postgraduate studies abroad has dramatically increased as a consequence of the devaluation of the bolivar. Faced with this evolution, FUNDAYACUCHO has started to support the establishment of new postgraduate programs in priority areas for the country, such as applied engineering.

Because they are more aware of the price and value of their education, student loan beneficiaries tend to achieve much better academic results than their peers who do not receive a loan. Recent data published by the Institute indicate that, while not more than 53 percent of the students actually finish their tertiary level studies in the State of Sonora, the proportion who graduates among the beneficiaries of a student loan is much higher, at about 85 percent. Similarly, in Venezuela, during the years of transition when FUNDAYACUCHO was moving from scholarships to loans, it became clear that the beneficiaries of loans had better academic results than the recipients of scholarships.

The side effects of student loan schemes are not all positive. In the case of programs designed to finance studies overseas, the danger of brain drain is not negligible. COLFUTURO in Colombia reports a 30 percent proportion of loan beneficiaries staying behind in the United States at the end of their studies.

Conclusion

By their very nature, student loan institutions are faced with a perpetual dilemma. As instruments of equity promotion, they have an important social responsibility and need to be designed in such a way as to serve the funding needs of students from the low income groups. As financial institutions, they are required to respect basic principles of financial viability to be able to continue to operate in a sustainable fashion. These two inherently antagonistic objectives are difficult to reconcile and represent the fundamental challenge faced by any student loan scheme.

The task of promoting and maintaining the financial viability of student loan schemes is made even more complex by their high vulnerability to economic fluctuations. The demand for new student loans and the capacity of graduates to repay their loans are influenced to a large extent by changes in the prevailing economic conditions, especially the levels of employment and inflation. Continuity in leadership, rigorous management practices, effective monitoring systems and, above all, the capacity to react rapidly and flexibly are crucial to overcome economic shocks and crises.

Finally, it is important to acknowledge the positive effects of student loans on the quality of higher education programs. Through the eligibility criteria imposed in terms of academic achievement of the beneficiaries and accreditation of the participating institutions, student loan programs play an invaluable quality assurance role which goes beyond their primary purpose as instrument of financial aid.

Endnotes

ⁱ Albrecht, D. and A. Ziderman (1992). *Deferred Cost-Recovery for Higher Education: Student Loan Programs in Developing Countries*. World Bank paper No. 137. Washington D.C.

ⁱⁱ Bulkeley, W. (1999). "Ivy League Blues: Some Yale Alumni Realize They Owe College Lasting Debt", Wall Street Journal, 26 February 1999.

ⁱⁱⁱ Adapted from Woodhall, M. (1997). "The Reform of Higher Education in Developing Countries: Some Implementation Issues." Unpublished paper prepared for Human Development week. Washington, D.C., The World Bank.